Record of Decision
IRP Site OT001/White Alice Site

Kalakaket Creek Radio Relay Station, Alaska

Prepared By

United States Air Force
Pacific Air Forces Command
Elmendorf AFB AK 99506-2270

July 2009

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Final

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Attachments

Attachment 1 – Notice of Document Availability

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Acronyms

°F	degrees Fahrenheit
AAC	*Alaska Administrative Code*
ADEC	Alaska Department of Environmental Conservation
AF	Department of the Air Force
AFB	Air Force Base
AFH	Antenna Feeder Horns (Subarea)
AFS	Air Force Station
AFS	Antenna Fuel System (Subarea)
ARAR	applicable or relevant and appropriate requirement
AWH	Airstrip Warehouse (Subarea)
BLM	Bureau of Land Management
BTEX	benzene, toluene, ethylbenzene, and xylenes
CEM	conceptual exposure model
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CES	Civil Engineer Squadron
CFR	*Code of Federal Regulations*
COC	chemical of concern
COEC	chemical of ecological concern
COPC	chemical of potential concern
COPEC	chemical of potential ecological concern
DDT	dichlorodiphenyltrichloroethane
DERP	Defense Environmental Restoration Program
DoD	Department of Defense
DRO	diesel-range organics
DS1	Drum Storage Area No. 1 (Subarea)
DS2	Drum Storage Area No. 2 (Subarea)
DS3	Drum Storage Area No. 3 (Subarea)
EcoSSL	ecological soil screening level
EPA	U.S. Environmental Protection Agency
EPH	Fire Pump House (Subarea)
EQB	Equipment Building (Subarea)
EQT	Equipment Building Transformer (Subarea)
ERBSC	ecological risk-based screening concentration
FS	Feasibility Study
GRO	gasoline-range organics
HI	hazard index
HMTC	Hazardous Materials Testing Center
HQ	hazard quotient
IRP	Installation Restoration Program
Kalakaket RRS	Kalakaket Creek Radio Relay Station
kg	Kilogram
LF1	Landfill 1

LF2	Landfill 2
LOAEL	lowest observed adverse effect level
mg/kg	milligrams per kilogram
NCP	National Contingency Plan
NEPA	National Environmental Policy Act
NOAEL	no observed adverse effect level
NPV	net present value
O&M	operations and maintenance
P23	POL Tanks 2 and 3 (Subarea)
PA	Preliminary Assessment
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PLO	Public Land Order
PSB	Paint Storage Building (Subarea)
PT1	POL Tank No. 1 (Subarea)
RAO	remedial action objective
RCRA	Resource Conservation and Recovery Act
RDC	Remote Drum Cache (Subarea)
RfD	reference dose
RI	Remedial Investigation
ROD	Record of Decision
RRO	residual-range organics
RRS	Radio Relay Station
SARA	Superfund Amendments and Reauthorization Act
SI	Site Inspection
SSI	Supplemental Site Investigation
STO	Septic Tank Outfall (Subarea)
TCP	trichloropropane
TRV	toxicity reference value
TSCA	Toxic Substances Control Act
USAF	United States Air Force
USC	*United States Code*
VMG	Vehicle Maintenance Garage (Subarea)
VOC	volatile organic compound
WPH	Water Pump House (Subarea)

1.0 Declaration

1.1 Site Name and Location

Facility Name: Kalakaket Creek Radio Relay Station (Kalakaket RRS), Alaska

Site Location: Sections 22, 23, 26, and 27, of Township 12 South, Range 10 East, Kateel Meridian

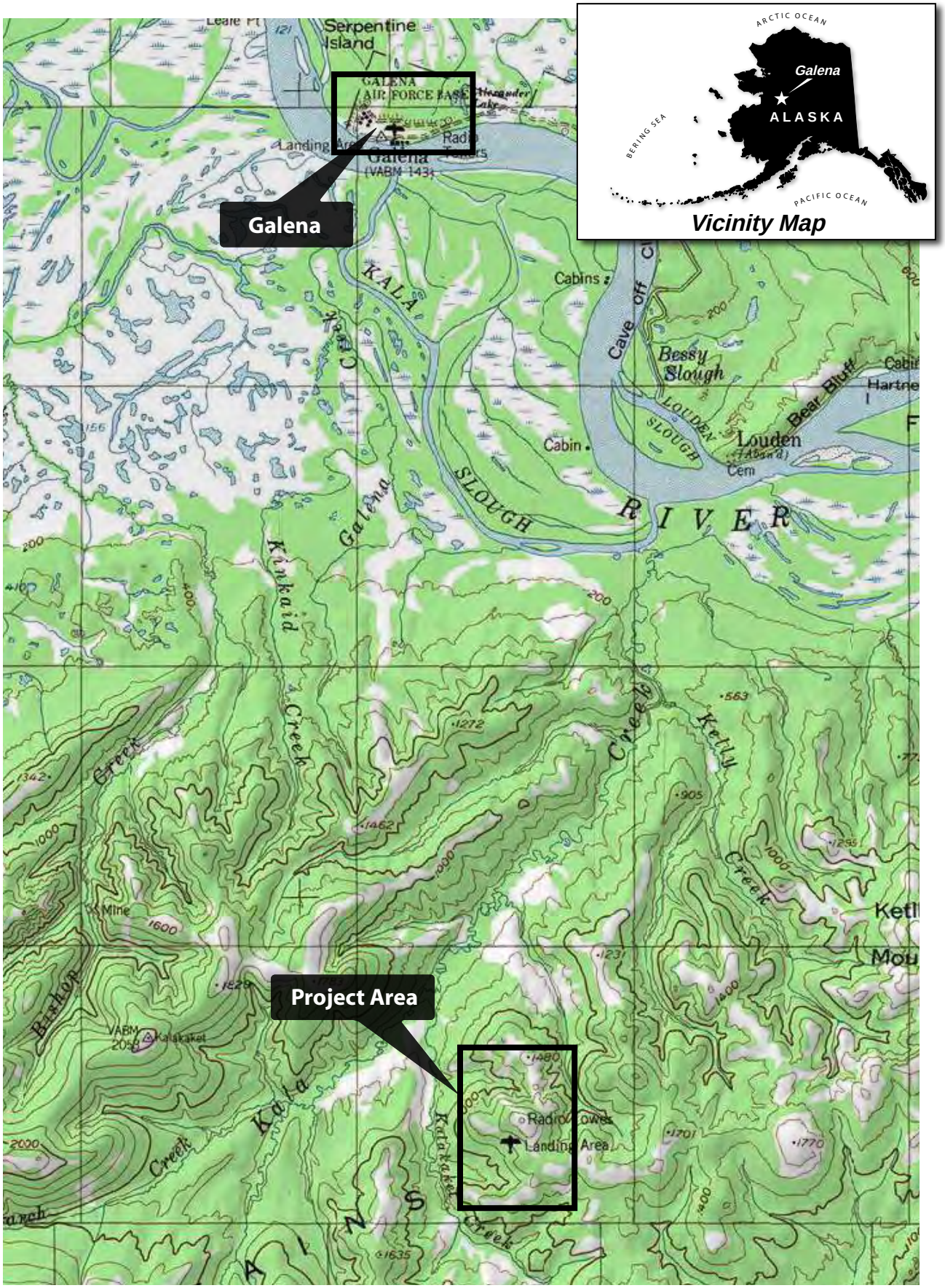
Latitude and Longitude: 64°25'38.14"North, 156°50'9.29"West (NAD83, Alaska State Plane Zone 6)

Comprehensive Environmental Response, Compensation, and Liability Information System ID Number: None, Kalakaket is not listed on the National Priorities List (NPL).

Operable Unit/Site: Installation Restoration Program (IRP) Site OT001/White Alice Site

The Kalakaket RRS IRP Site OT001/White Alice Site is located near Kalakaket Creek. The location of the Kalakaket RRS, shown in Figure 1-1, is approximately 20 miles south of Galena, 270 miles west of Fairbanks, and 310 miles northwest of Anchorage. The Kalakaket RRS covers 302 acres on a low, relatively flat-topped mountain near the northern edge of the Yukon Kuskokwim uplands. The White Alice Site consists of antennas, support buildings, and two water tanks and two fuel storage tanks on top of the mountain. A 4,000-foot-long airstrip is located 1 mile southwest of the mountain top and is connected to the main station area by a gravel road. A warehouse, a third fuel storage tank, and a landfill adjacent to the airstrip are also parts of IRP Site OT001.

IRP Site OT001 was divided into 3 geographic investigation areas and 16 investigation subareas. Figure 1-2 shows the three geographic areas identified as: Upper Camp Area, Airstrip Area, and Miscellaneous Area, and the subareas assigned to each geographic area. Section 2.1 of the Decision Summary contains additional description information of IRP Site OT001.

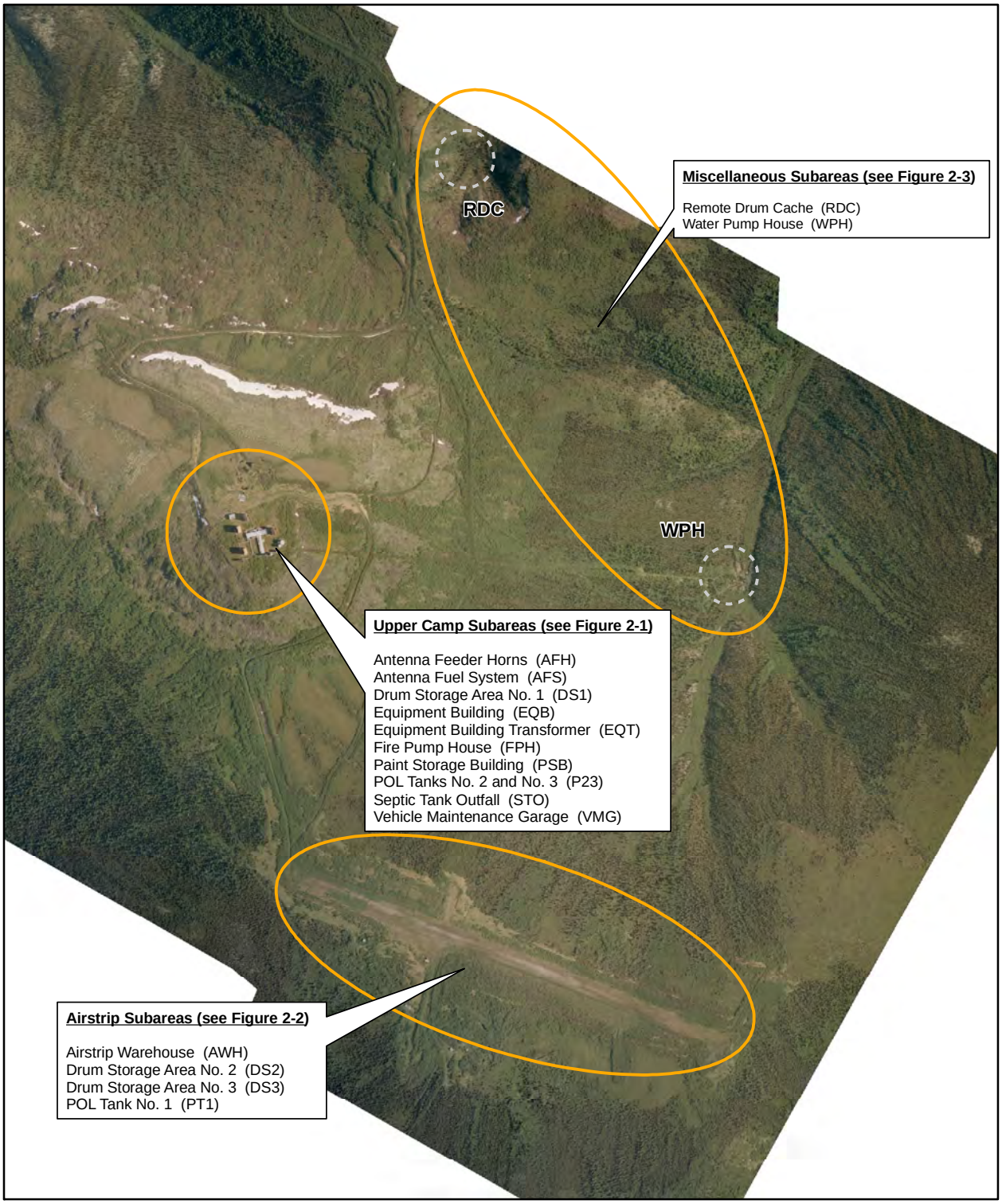


North

0 3 6

scale in miles

FIGURE 1-1
Vicinity Map
Kalakaket RRS, IRP Site OT001



Notes:
1. Imagery by Aero-Metric flown on 6-14-2000, processed as 1-foot pixels.
2. Projection: Alaska State Plane Zone 6, NAD83, Feet

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- - - - RDC and WPH

IRP Site OT001 Subareas

N

0 700 1,400
Feet

FIGURE 1-2
Geographic Areas
Kalakaket RRS, IRP Site OT001

1.2 Statement of Basis and Purpose

This Record of Decision (ROD) presents the Final Selected Remedy for IRP Site OT001/White Alice Site (IRP Site OT001), located at the Kalakaket RRS. The selected remedy was chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986, and to the extent practicable, the National Contingency Plan (NCP). This decision is based on the Administrative Record for this site.

This document is issued by the Department of the Air Force (AF), as the lead agency. The AF is managing remediation of contamination at IRP Site OT001 in accordance with CERCLA and as required by the Defense Environmental Restoration Program (DERP).

This decision document is issued by the AF in accordance with and satisfying the requirements of the DERP; 10 *United States Code* [USC] 2701 et seq.; Executive Order 125080; *Federal Register* 2923 (January 23, 1987); and the NCP (40 *Code of Federal Regulations* [CFR] 300).

As the lead agency, the AF has selected the remedy. By signing this declaration, the Alaska Department of Environmental Conservation (ADEC) concurs that proper implementation of the selected remedy will comply with State and environmental laws. The U.S. Environmental Protection Agency (EPA) has chosen to defer to ADEC for regulatory oversight of the Environmental Restoration Program at the Kalakaket RRS.

There are some subareas at IRP Site OT001 contaminated with petroleum hydrocarbons. Petroleum is excluded as a CERCLA hazardous substance pursuant to 42 USC 9601(14). The remedies for the petroleum hydrocarbons are not selected in this ROD, but will be addressed in a separate decision document consistent with ADEC regulations.

There are two permitted landfills associated with the Kalakaket RRS. These landfills are a part of IRP Site LF002/Landfills and will not be addressed under this ROD. The remedies for IRP Site LF002/Landfills will be issued under a separate ROD.

1.3 Assessment of Site

Past activities at Kalakaket RRS, such as chemical storage, building and mechanical equipment maintenance, use of transformers, sewage disposal, and application of herbicides and pesticides, may have generated hazardous substances and releases into the environment during facility operation. The past practices have led to contamination of the soil with the chemicals of concern (COCs) polychlorinated biphenyls (PCBs), dieldrin, and 1,2,3-trichloropropane (TCP) above State of Alaska cleanup levels protective of unrestricted use. The soil cleanup levels area shown in Table 1-1.

The response actions are necessary under CERCLA and State of Alaska regulations to meet soil cleanup levels promulgated in ADEC regulation 18 *Alaska Administrative Code* (AAC) 75.341, Table B1, “under 40 inch zone.” The response actions selected in this ROD are necessary to protect the public health or welfare or the environment from actual or threatened releases of hazardous substances into the environment.

The AF is committed to implementing, monitoring, maintaining, and enforcing all components of the selected remedy to ensure that it remains protective of human health and the environment.

Table 1-1
Soil Cleanup Levels

Chemical	Cleanup Level (mg/kg)
1, 2, 3-Trichloropropane	0.17
Dieldrin	0.32
Polychlorinated biphenyls	1.0

Source of cleanup levels: 18 *Alaska Administrative Code* (AAC) 75.341, Table B1 (direct contact, ingestion or inhalation), under 40inch zone

The response action selected in this Final Record of Decision (Final ROD) is necessary to protect the public health or welfare or the environment from actual or threatened releases of hazardous substances into the environment.

1.4 Description of Selected Remedy

Remedial alternatives for IRP Site OT001 were developed and evaluated in a Feasibility Study (FS) (CH2M HILL, 2009). IRP Site OT001 consists of sixteen subareas grouped into three larger, geographic areas: Upper Camp, Airstrip, and Miscellaneous. Five of the sixteen subareas contain CERCLA hazardous substances in soil at concentrations above State of Alaska cleanup levels. Eleven of the remaining subareas did not have concentrations of CERCLA hazardous substances above State of Alaska cleanup levels for unrestricted use (18 AAC 75.341, Table B1) and were determined to require no further action under CERCLA. However five of the eleven subareas requiring no further action under CERCLA do contain petroleum hydrocarbon contamination above State of Alaska cleanup levels (18 AAC 75.341, Table B2) and will be addressed in a separate decision document.

The five subareas in IRP Site OT001 that require remedial action under CERCLA are:

- Equipment Building (EQB)
- Equipment Building Transformer (EQT)
- Septic Tank Outfall (STO)
- Airstrip Warehouse (AWH)
- Drum Storage Area No. 2 (DS2)

The remedial alternatives considered for IRP Site OT001 soil were presented in the FS (CH2M HILL, 2009) and are as follows:

- Alternative 1, No action
- Alternative 2, Source removal and offsite disposal of PCB-, dieldrin-, and 1,2,3-TCP-contaminated soil
- Alternative 3, Onsite thermal desorption of PCB-, dieldrin-, and 1,2,3-TCP-contaminated soil

The selected remedy is Alternative 2 for soil contaminated with PCBs, dieldrin, and 1,2,3-TCP at concentrations above State of Alaska cleanup levels (18 AAC 75.341, Table B1) protective of unrestricted use. Under this alternative, the contaminated soil will be excavated, staged, manifested, and transported to a CERCLA-approved disposal site certified for the permanent disposal of solid Resource Conservation and Recovery Act (RCRA) hazardous, industrial, and Toxic Substances Control Act (TSCA) regulated wastes.

The remedial action is anticipated to progress until soil attains clean-up levels in Table 1-1. The selected remedy is also consistent with several of the goals identified in the EPA *Draft Framework for Green Cleanup Standards at Contaminated Sites* (2009). Because of the remote location of IRP Site OT001 and its lack of human habitation, the selected remedy minimizes energy consumption that would otherwise be needed for transportation, operations, and waste handling. The selected remedy also minimizes unnecessary soil and ecological habitat disturbances. The cleanup selected for IRP Site OT001 protects human health and the environment and meets applicable regulatory requirements while optimizing sustainable management practices during the AF's stewardship of the Kalakaket RRS.

1.5 Statutory Determinations

The selected remedy for IRP Site OT001 is protective of human health and the environment, complies with promulgated requirements that are applicable or relevant and appropriate to the remedial action, and is cost-effective.

Response actions at the IRP Site OT001 selected in this ROD are necessary under CERCLA 42 USC Sections 9601-9628, to protect the public health or welfare or the environment. The selected remedy was chosen in accordance with Alaska State laws and regulations and in accordance with CERCLA, as amended by SARA and, to the extent practicable, the NCP.

The selected remedy represents the maximum extent to which permanent solutions can be used in a practicable manner at IRP Site OT001. It provides the best balance of trade-offs in terms of the balancing criteria.

The NCP establishes the expectation that treatment will be used to address the principal threats posed by a site whenever practicable [40 CFR, Section 300.430(a)(1)(iii)(A)]. No source materials constituting principal threats exist at IRP Site OT001.

The remedy provided in this Final ROD is intended to minimize exposure of receptors to potential contamination.

Because this remedy will not result in CERCLA hazardous substances, pollutants, or contaminants remaining on the site above levels that allow for unlimited use and unrestricted exposure, a statutory review will not be required at IRP Site OT001 within 5 years after initiation of the remedial action to verify that the remedy is, or will be, protective of human health and the environment.

1.6 Data Certification Checklist

The following information is included in the Decision Summary section of this ROD (Section 2). Additional information can be found in the Administrative Record file for IRP Site OT001, Kalakaket RRS, Alaska, which is available at the office of the 611th Civil Engineer Squadron (CES), Elmendorf Air Force Base (AFB), in Anchorage, Alaska. The Administrative Record file is also available on the Internet at http://www.adminrec.com.

- List of COCs and their respective concentrations (Table 2-3)
- ADEC Method 2 human health cumulative risk calculation and ecological risk assessment (Section 2.9)
- Cleanup levels established for COCs and the basis for these levels (Table 2-13)
- How source materials constituting principal threats will be addressed (Section 2.13)
- Current and reasonably anticipated future land use assumptions and current and potential future beneficial uses of ground water used in the ADEC Method 2 human health cumulative risk calculation and ecological risk assessment and ROD (Section 2.8)
- Potential land and ground water use that will be available at the site as a result of the selected remedy (Table 2-9)
- Estimated capital, annual operations and maintenance (O&M), total present worth costs, discount rate, and the number of years over which the remedy cost estimates are projected (Section 2.14.3, Table 2-11)
- Key factor(s) that led to selecting the remedy (description of how the selected remedy provides the best balance of tradeoffs with respect to the balancing and modifying criteria, highlighting criteria key to the decision) (Section 2.14.1)

1.7 Authorizing Signatures

This signature sheet documents the decision made for CERCLA hazardous substances at IRP Site OT001, Kalakaket Radio Relay Station, and that proper implantation of the selected remedy will comply with State of Alaska environmental laws.

By signing this declaration, the ADEC concurs with the Air Force's selected remedy.

This decision will be reviewed and may be modified in the future if new information becomes available that indicates the presence of contaminants or exposures that may cause unacceptable risk to human health or the environment. If additional contaminants are discovered, USAF and ADEC will determine the compliance levels for soil and groundwater cleanup actions.

ROBYN M. BURK, Colonel USAF Commander, 611th Air Support Group	Date
JOHN HALVERSON, Environmental Program Manager Federal Facilities Section, Contaminated Sites Program Alaska Department of Environmental Conservation	Date

2.0 Decision Summary

The Decision Summary identifies the Selected Remedy, explains how the remedy fulfills statutory and regulatory requirements, and provides a substantive summary of the Administrative Record file that supports the remedy selection decision. Section 2 also provides background information about IRP Site OT001, including its operational history and natural features, and describes remedial action objectives (RAOs) and risk information relative to the subareas that were determined to require further actions.

2.1 Site Name, Location, and Description

2.1.1 Site Name and Location

Facility Name: Kalakaket Creek Radio Relay Station (Kalakaket RRS), Alaska

Site Location: Sections 22, 23, 26, and 27, of Township 12 South, Range 10 East, Kateel Meridian

Latitude and Longitude: 64°25'38.14"North, 156°50'9.29"West (North American Datum of 1983 [NAD83]; projected coordinate system for map figures: NAD83, Alaska State Plane Zone 6, US Foot)

Facility Owner and Point of Contact: The facility owner is the 611th Air Support Group and the Point of Contact is Mr. Charley Peyton, 611th Civil Engineer Squadron, 10471 20th Street, Suite 302, Elmendorf Air Force Base, Alaska, 99506; phone number: 907-552-9765.

The IRP Site OT001/White Alice Site is located at the Kalakaket RRS near Kalakaket Creek. The location of the Kalakaket RRS as shown in Figure 1-1 is approximately 20 miles south of Galena, 270 miles west of Fairbanks, and 310 miles northwest of Anchorage. The Kalakaket RRS covers 302 acres on a low, relatively flat-topped mountain near the northern edge of the Yukon Kuskokwim uplands. The station consists of antennas, support buildings, and two water tanks and two fuel storage tanks on top of the mountain. A 4,000-foot-long airstrip is located 1 mile southwest of the mountain top and connected to the main station area by a gravel road. A warehouse, a third fuel storage tank, and a landfill located adjacent to the airstrip are also parts of IRP Site OT001.

During the SSI/RI, IRP Site OT001 was divided into 3 geographic investigation areas and 16 investigation subareas. Figure 1-2 shows the three geographic areas: Upper Camp Area, Airstrip Area, and Miscellaneous Area. The subareas assigned to each geographic area are as follows:

- Upper Camp subareas
  - Antenna Feeder Horns (AFH)
  - Antenna Fuel System (AFS)
  - Drum Storage Area No. 1 (DS1)
  - Equipment Building (EQB)
  - Equipment Building Transformer (EQT)
  - Fire Pump House (FPH)

  - Paint Storage Building (PSB)
  - POL Tanks 2 and 3 (P23)
  - Septic Tank Outfall (STO)
  - Vehicle Maintenance Garage (VMG)

- Airstrip subareas
  - Airstrip Warehouse (AWH)
  - Drum Storage Area No. 2 (DS2)
  - Drum Storage Area No. 3 (DS3)
  - POL Tank No. 1 (PT1)

- Miscellaneous subareas
  - Remote Drum Cache (RDC)
  - Water Pump House (WPH)

Locations of the subareas associated with the Upper Camp, Airstrip, and Miscellaneous areas are shown in Figures 2-1, 2-2, and 2-3.

There are no residents at the Kalakaket RRS. Galena, the closest community located approximately 20 miles to the north, has a population of 610 (State of Alaska, 2007). The Kalakaket RRS has been unoccupied since the late 1970s. Although recreational cabins are present 500 feet south of the airstrip, they are probably not in use because of limited access as a result of the airstrip becoming overgrown with vegetation. The cabins are scheduled for demolition in 2009.

As the lead agency for remedial activities, the AF has conducted environmental restoration at IRP Site OT001 in accordance with CERCLA and as required by the DERP, which was established by Section 211 of SARA.

As the support agency, ADEC provides primary oversight of the environmental restoration actions, in accordance with the Defense/State Memorandum of Agreement (DSMOA).

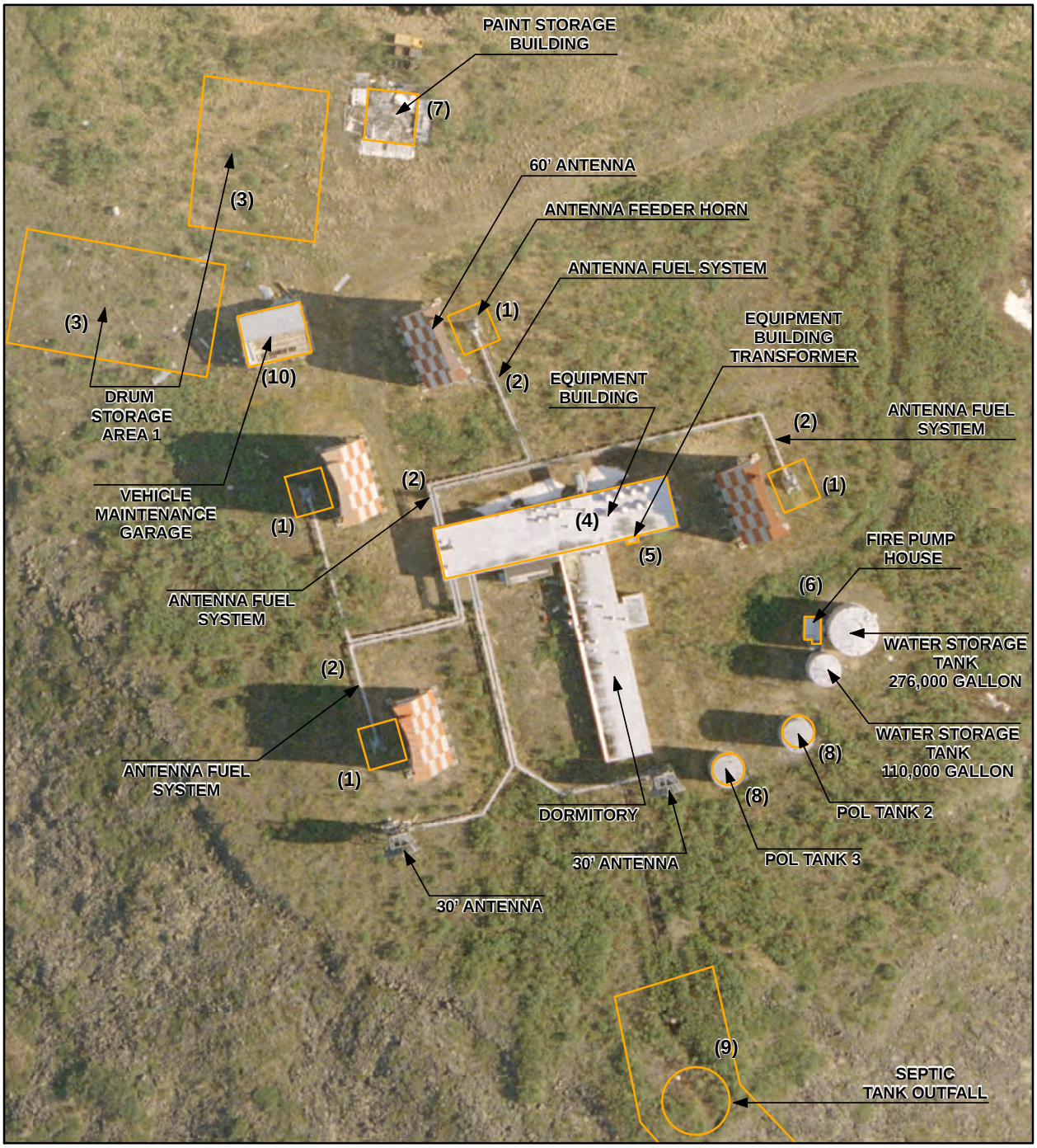
Funding is provided by the Defense Environmental Restoration Account; a funding source approved by Congress to clean up contaminated sites on U.S. Department of Defense (DoD) installations.

2.1.2 Site Description

This section describes the five subareas with soil contaminated with the COCs PCB, dieldrin, and 1,2,3-TCP at concentrations above State of Alaska cleanup levels protective of unrestricted use (18 AAC 75.341, Table B1), which are addressed in this ROD.

Equipment Building (EQB): The equipment building is where all power generation equipment and radio electronics for Kalakaket was located. PCB liquids were used in the equipment and discharges of PCB liquids impacted the surface soil in five areas near the building doorways.

Equipment Building Transformer (EQT): Three transformers were located in a small tin shed, on a 6-foot by 8-foot concrete pad on the south side of the equipment building. PCB liquids were used in the transformers and leaked, were spilled, or were disposed of on to the ground near the transformers.



Key to Subareas:
(1) Antenna Feeder Horns (AFH)
(2) Antenna Fuel System (AFS)
(3) Drum Storage Area No. 1 (DS1)
(4) Equipment Building (EQB)
(5) Equipment Building Transformer (EQT)
(6) Fire Pump House (FPH)
(7) Paint Storage Building (PSB)
(8) POL Tanks 2 and 3 (P23)
(9) Septic Tank Outfall (STO)
(10) Vehicle Maintenance Garage (VMG)

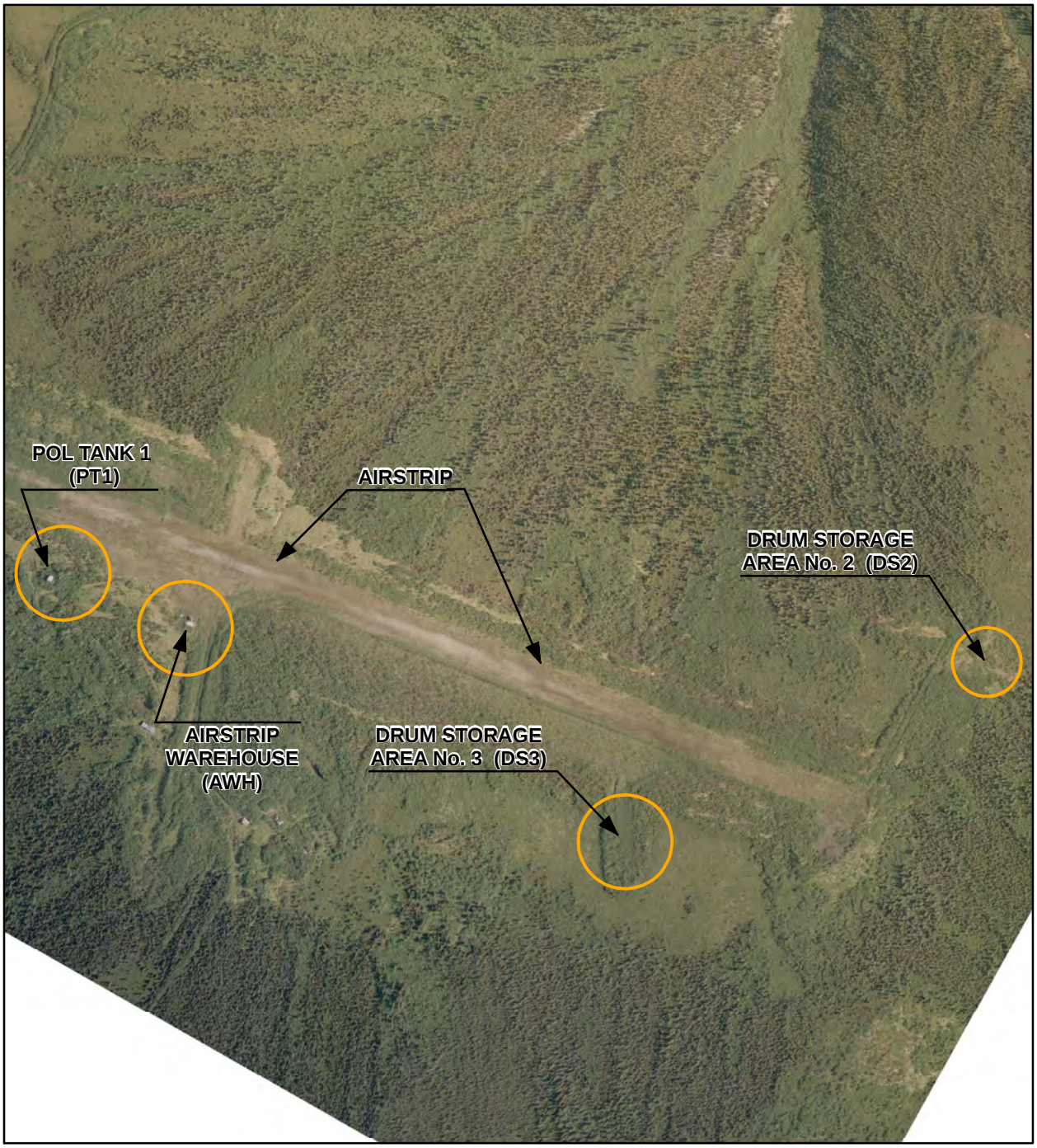
Notes:
1. Imagery by Aero-Metric flown on 6-14-2000, processed as 1-foot pixels.
2. Projection: Alaska State Plane Zone 6, NAD83, Feet

N

LEGEND
IRP Site OT001 (White Alice Site)

0 62.5 125
Feet

FIGURE 2-1
Upper Camp Subareas
Kalakaket RRS, IRP Site OT001



Notes:
1. Imagery by Aero-Metric flown on 6-14-2000, processed as 1-foot pixels.
2. Projection: Alaska State Plane Zone 6, NAD83, Feet

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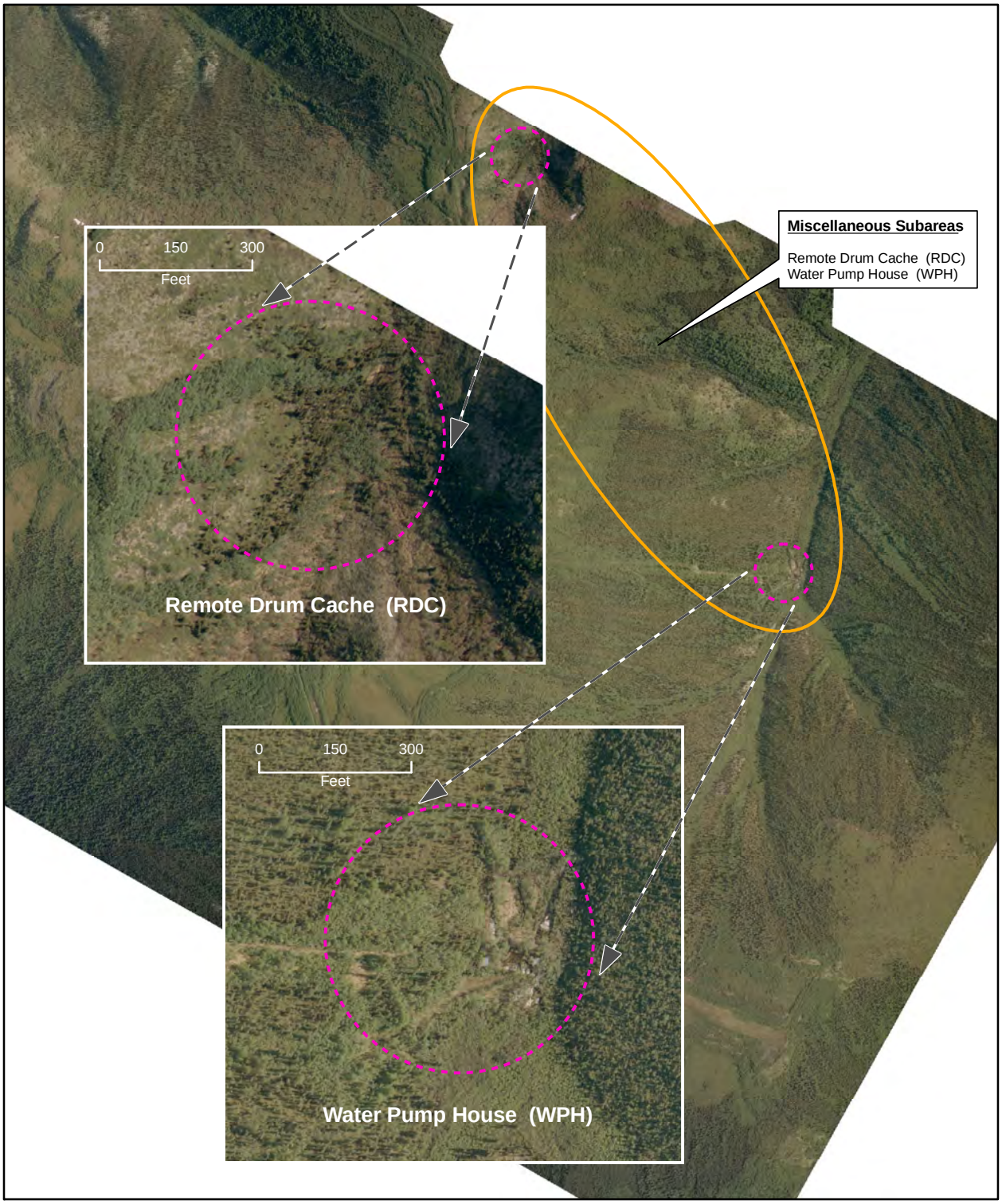
IRP Site OT001 Subareas

N

0 325 650
Feet

FIGURE 2-2
Airstrip Subareas
Kalakaket RRS, IRP Site OT001



Notes:
1. Imagery by Aero-Metric flown on 6-14-2000, processed as 1-foot pixels.
2. Projection: Alaska State Plane Zone 6, NAD83, Feet

LEGEND

- RDC and WPH
- IRP Site OT001 Subareas

N

0 700 1,400
Feet

FIGURE 2-3
Miscellaneous Subareas
Kalakaket RRS, IRP Site OT001

Septic Tank Outfall (STO): The sewer system at Kalakaket RRS consisted of a septic tank approximately 200 feet south of the equipment building with an outfall extending an additional 50 feet down the mountain from the tank. The septic tank outfall is considered the sewer system discharge point. PCBs, pesticides, and petroleum were detected in the surface soil near the outfall possibly from historic disposal practices.

Airstrip Warehouse (AWH): The airstrip warehouse, also historically referred to as "the temporary garage" is located midway along the airstrip and is believed to have temporarily stored supplies off loaded from the airstrip. An as-built drawing indicates that a transformer may also have been located at the warehouse. Surface soil is impacted from leaks and/or spills from transformer PCBs and disposal of solvents. The AWH subarea includes a small structure 20 feet to the northwest, identified in the 1994 PA/SI as the fire trailer shelter, where fire-suppression equipment was believed to have been stored for aircraft operations.

Drum Storage Area No.2 (DS2): DS2 is an area north of the east end of the airstrip used to store 55-gallon drums at Kalakaket RRS. In 1984, the drums from DS2 were placed into a landfill constructed by the USAF. Surface soil shows evidence of leaks and spills from drums.

2.2 Site History and Enforcement Activities

This section provides background information and summarizes the series of investigations that led to the ROD. It describes the CERCLA response actions undertaken at IRP Site OT001.

The Kalakaket RRS was a combined tropospheric scatter and microwave relay station initially constructed in the 1950s as part of the White Alice Communications System. The station provided links to North River Radio Relay Station (RRS) (Unalakleet) and Bear Creek RRS (Tanana) by using two pairs of 60-foot tropospheric scatter billboard antennas and to Tatalina RRS (McGrath) by using a pair of 30-foot dish antennas. Communications between Campion Air Force Station (AFS) and later Galena AFS were established by a microwave link.

The White Alice era began to end in 1967, when the Alaska Communications Disposal Act initiated the process of transferring U.S. government-owned, long-haul communications to private industry. The Kalakaket RRS operated continuously until 1973, when it was deactivated and replaced by a satellite communication system.

No enforcement activities have taken place at IRP Site OT001. In accordance with AF policy, to the extent practicable, National Environmental Policy Act (NEPA) values have been incorporated throughout the CERCLA process culminating in this ROD. Separate NEPA documentation will not be issued.

2.3 Community Participation

NCP Section 300.430(f)(3) establishes a number of public participation activities that the lead agency must conduct following preparation of the Proposed Plan and review by the support agency. Components of these items and documentation of how each component was satisfied for IRP Site OT001 are described in Tables 2-1 and 2-2.

AF responses to comments received during the public comment period are included in the Responsiveness Summary, which is provided as Section 3 of the Final ROD.

Table 2-1

Public Notification of Document Availability

Requirement:	Satisfied by:
Notice of availability of the Proposed Plan and Remedial Investigation/Feasibility Study must be made in a widely read section of a major local newspaper.	Notice of availability was published in the Legal Section (page C6) of the *Fairbanks Daily News Miner*.
Notice of availability should occur at least 2 weeks prior to the beginning of the public comment period.	Notice of availability was published on May 7, 2009. The public comment period began on May 11, 2009.
Notice of availability must include a brief abstract of the Proposed Plan that describes the alternatives evaluated and identifies the preferred alternative [National Contingency Plan Section 300.430(f)(3)(i)(A)]	Notice of availability included all of these components and is included for reference as Attachment 1 to this ROD.
Notice of availability should consist of the following information: • Site name and location • Date and location of public meeting • Identification of lead and support agencies • Alternatives evaluated in the detailed analysis • Identification of preferred alternative • Request for public comments • Public participation opportunities including: – Location of information repositories and Administrative Record file – Methods by which the public may submit written and oral comments, including a contact person – Dates of public comment period – Contact person for the community advisory group (for example, Restoration Advisory Board) if applicable	

Table 2-2
Public Comment Period Requirements

Requirement:	Satisfied by:
Lead agency should make document available to public for review on same date as newspaper notification.	Document was made available to the public on May 7, 2009. The notification of availability was made on May 7, 2009, in the *Fairbanks Daily News Miner*.
Lead agency must ensure that all information that forms the basis for selecting the response action is included as part of the Administrative Record file and made available to the public during the public comment period.	The 611th Civil Engineer Squadron (CES) at Elmendorf Air Force Base (AFB) maintains the Administrative Record file for Kalakaket RRS IRP Site OT001. All data collected and all CERCLA primary documents produced for IRP Site OT001 are maintained as part of this file at Elmendorf AFB and the Charles Evans Community Library in Galena and online at www.adminrec.com, which is available to the public.
CERCLA Section 177(a)(2) requires the lead agency to provide the public with a reasonable opportunity to submit written and oral comments on the Proposed Plan. NCP Section 300.430(f)(3)(i) requires the lead agency to allow the public a minimum of 30 days to comment on the Remedial Investigation/Feasibility Study (RI/FS) and the Proposed Plan.	The Department of the Air Force (AF) provided a public comment period for the RI/FS and the Proposed Plan from May 11, 2009, to June 9, 2009
The lead agency must extend the public comment period by at least 30 additional days upon timely request.	*Select one of the two following statements and delete the other one.* An extension to the public comment period was requested. As a result, it was extended to July 9, 2009.
The lead agency must provide the opportunity for a public meeting to be held at or near the site during the public comment period. A transcript of this meeting must be made available to the public and be maintained in the Administrative Record for the site [pursuant to NCP Section 300.430(f)(3)(i)(E)].	A public meeting was held on June 2, 2009, at the Community Hall in Galena, Alaska. A transcript of this meeting has been added to the Administrative Record file.

CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act
NCP = National Contingency Plan

2.4 Scope and Role of Operable Unit or Response Action

Soil in 5 subareas of IRP Site OT001 at Kalakaket RRS is contaminated with PCBs, dieldrin, and 1, 2, 3-TCP. Remediation of these five subareas will results in IRP Site OT001 being acceptable for unrestricted use under CERCLA (petroleum hydrocarbon contamination is addressed in a separate decision document). Cleanup of the soil under this final CERCLA action will constitute final action at IRP Site OT001.

2.5 Site Characteristics

2.5.1 Physiography and Climate

The Kalakaket RRS is approximately 20 miles south of Galena, 270 miles west of Fairbanks, and 310 miles northwest of Anchorage, as shown in Figure 2-1. The facility is located within Sections 22, 26, and 27 of Township 12 South, Range 10 East, of the Kateel River Meridian. The RRS has an approximate latitude and longitude of 156 degrees 50.0 minutes west by 64 degrees 25.7 minutes north.

The Kalakaket RRS is located on a mountain near the northern edge of the Yukon Kuskokwim uplands. To the south, the topography consists of low rolling mountains extending to the Kuskokwim River. To the north lies the broad Yukon River lowland. The Upper Camp Area is located on a plateau (flat top of the mountain), which drops away sharply in all directions. The airstrip area is located on a relatively flat shoulder of the mountain running east to west. The arm of the mountain gradually tapers off to the north, south, and eventually east into the adjacent river valleys.

The climate of the Kalakaket RRS vicinity may be described as subarctic. Climatological data from Galena for the period 1949 through 1993 show average monthly temperatures ranging from a low of about 18 degrees Fahrenheit (°F) in January to a high of about 68°F in July (USAF, 1989). Average annual precipitation at Galena is 13.21 inches. The average annual snowfall is 63.4 inches, and the average total for the month of December is 12.1 inches (USAF, 1989). The prevailing wind direction is from the north. The average wind speed at Galena Airport is 5.4 knots. Because the Kalakaket RRS is approximately 1,900 feet higher in elevation than Galena, it is likely that annual precipitation amounts are higher at the Kalakaket RRS than those on record for the Galena Airport.

2.5.2 Geology

The Kalakaket RRS is underlain by a greenish-colored greywacke and greenstone bedrock. The bedrock is dense and massive (not extensively fractured), and mantled with overburden material consisting of silt- to cobble-sized material. Test pits excavated at the Upper Camp Area before construction of the RRS in 1956 and during the 2007 SSI/RI (CH2M HILL, 2009) indicate that the overburden material is 2.5 to 7 feet thick. SSI/RI field observations indicate that the overburden thickness at the lower elevations of the mountain, including the airstrip vicinity, ranges up to 20 feet.

2.5.3 Hydrogeology

Groundwater data for the Kalakaket RRS area is limited; however, some general assumptions can be made on the basis of the nature of the soils and geology of the area. Shallow groundwater at the RRS occurs within the silt- to cobble-sized overburden material overlying the bedrock, within the limited fracture system of the bedrock, or both. The presence of groundwater above bedrock appears to be seasonal and present during periods of snowmelt and significant rainfall, but absent during the winter and dry periods. Where groundwater is present, the shallow groundwater flow is thought to follow the bedrock topography. Most of the shallow groundwater at the summit plateau is interpreted to flow radially away from the hilltop. In the airstrip vicinity, groundwater flow is interpreted to travel to the northeast and southwest, generally following the topography that slopes away from the airstrip.

No water supply wells are known to have been installed in the vicinity of the Kalakaket RRS. However, a water intake gallery was constructed and used as the water supply source for the Kalakaket RRS. The intake gallery is not in working condition and its water pump house is scheduled for demolition in 2009.

2.5.4 Surface Water Hydrology

Several streams and the Yukon River are located in the vicinity of the Kalakaket RRS (Figure 2-1). The RRS is located near the top of a low mountain above any significant surface water features. The closest surface water is a small and unnamed creek located approximately 4,000 feet east of the Kalakaket RRS. Another surface water, Kalakaket Creek, is located approximately 2 miles west of the RRS. Both the unnamed creek and Kalakaket Creek flow north into Kala Creek, located about 3 miles northwest of the Kalakaket RRS. The unnamed creek previously served as the source for the drinking water intake gallery. Several small, ephemeral tributaries to the unnamed creek and to Kalakaket Creek extend from the valley bottoms up the side slopes toward the RRS for a short distance. Kala Creek flows northeastward toward the Yukon River and has a low gradient and a meandering course. Kala Creek enters the Yukon about 14 miles north-northeast of the Kalakaket RRS.

Indigenous fish and wildlife represent the only known users of surface water in the vicinity of the Kalakaket RRS. Surface water is not believed to be a significant pathway to transfer contaminants from the RRS to consumers. The amount of surface drainage that originates from the facility and flows into the local creeks is believed to be a very small percentage of the total surface water discharge of the watershed.

2.5.5 Ecology

There are no endangered or threatened species of flora or fauna within a 1-mile radius of the RRS, according to the U.S. Fish and Wildlife Service, Alaska Division. Further, there are no federal- or state-designated critical habitats or wilderness areas within a 1-mile radius of the RRS. Several wetlands lie within a 1-mile radius of the site. Local vegetation consists of grasses, shrubs, and trees, including cottonwood, dwarf willow, blueberry, crowberry, sphagnum moss, and lichens. Wildlife species observed at the Kalakaket RRS during the 2007 SSI/RI included moose, black bear, marten, spruce grouse, hawks, and voles (CH2M HILL, 2009).

2.6 Summary of Previous Site Characterization and Remediation Activities

Five environmental investigations or cleanup actions have occurred at the Kalakaket RRS since 1984:

- Limited cleanup action in 1984
- Two Preliminary Assessments(PAs) one in 1988 and one in 1993 that were based on records reviews and did not include fieldwork
- Preliminary Assessment/Site Inspection (PA/SI) completed in 1994 that consisted of a field investigation with sampling.
- SSI/RI in 2007

Brief summaries of these characterizations and actions are provided in the following subsections.

2.6.1 1984 Kalakaket RRS Cleanup Action

The 5099th Civil Engineering Operations Squadron from Elmendorf AFB performed cleanup activities from September 28 through November 9, 1984. The following actions were accomplished:

- Non-hazardous materials found at the Kalakaket RRS were buried in two one-time-use permitted landfills (Landfill 1 [LF1] and Landfill 2 [LF2]). Materials buried included carbon dioxide fire extinguisher bottles; three empty and cleaned 1,000-gallon fuel tanks; two International Carryall trucks; one International pickup truck; one Ford cargo truck; two Oshkosh snowplow beds; old dump truck beds; and 3,250 cleaned, crushed, and empty 55-gallon drums.
- Containers found at the RRS were tested for liquid PCB before disposal. PCB wastes were removed from the site and disposed of through Elmendorf AFB (Hazardous Materials Testing Center [HMTC], 1989).
- Soil contaminated with PCBs at concentrations greater than 50 mg/kg was removed, containerized, and disposed of off site through Elmendorf AFB (HMTC, 1989).

2.6.2 1988 PA

This PA consisted of a records review of Kalakaket RRS activities and locations.

2.6.3 1993 PA

A second PA of RRS records (USAF, 1994) was conducted for the Kalakaket RRS in 1993 and provided a summary of historical cleanup and sampling actions. The PA findings were recorded and submitted to EPA and ADEC. Based on the PA results, EPA determined that the RRS did not score high enough to be proposed for inclusion on the National Priority List (NPL) (Ader, 1994). ADEC agreed with the conclusion of the PA that the priority for further action is low to moderate, but recommended that verification samples be collected at identified source areas to establish no further action or state closure (Noland, 1994).

2.6.4 1994 Preliminary Assessment/Site Inspection

A PA/SI was conducted at Kalakaket RRS in 1994. Surface soil screening samples and laboratory analytical samples were collected from surface soil at many locations throughout the Kalakaket RRS. The sample results identified contaminants, including petroleum hydrocarbons, PCBs, and pesticides (USAF, 1995).

2.6.5 2007 Supplemental Site Investigation/Remedial Investigation

In 2007, a SSI/RI of IRP Site 0T001 was completed to verify the presence of contamination, assess the nature and extent of the contamination, and evaluate whether the contamination could possibly harm people, plants, and animals. The SSI/RI included collection and laboratory analysis of surface and subsurface soil, surface water, and groundwater at locations in and near previously identified areas of contamination. Additional locations not addressed during previous investigations were also sampled. Soil and water samples collected during the 2007 SSI/RI were analyzed for petroleum hydrocarbons, solvents, PCBs, pesticides, and metals.

2.7 Nature and Extent of Contamination

Five investigations have been conducted to determine the nature and extent of contamination at IRP Site OT001, as described in Section 2.6. A detailed discussion of previous investigation results is included in the SSI/RI (CH2M HILL, 2009). Of the sixteen subareas of IRP Site OT001 investigated in the SSI/RI, only five had detections of CERCLA hazardous substances above State of Alaska cleanup levels protective of unrestricted use (18 AAC 75, Table B1 & C)(ADEC 2008c). Table B1 and C cleanup levels are considered protective of human health. As presented in the risk assessment portion of the SSI/RI, Tables B1 and C cleanup levels were also shown to be protective of the environment at IRP Site OT001.

The following subsections summarize the nature and extent of contamination in the five subareas of IRP Site OT001 addressed in this ROD. Laboratory test results for the subareas are compared to the project screening levels, which are defined as the lowest ADEC Method 2 cleanup levels (18 AAC 75, Tables B1 and C).

2.7.1 Upper Camp Subareas

The nature and extent of contamination for Upper Camp subareas based on the 2007 SSI/RI findings is summarized below. Subarea locations are identified in Figures 2-1 and 2-2.

- Equipment Building (EQB) – The 1994 PA/SI confirmed the presence of PCBs, pesticides, and petroleum hydrocarbons along the eastern end of the building (adjacent to the east doorway). During the SSI/RI, surface and subsurface soil samples were collected from areas around the equipment building and submitted for laboratory analysis. Five areas of PCB-contaminated soil with concentrations above ADEC Method 2 cleanup levels were also identified at the EQB.
- Equipment Building Transformer (EQT) – Results from samples collected during the 1994 PA/SI indicated PCB soil contamination remaining adjacent to the transformer pad, even after PCB-contaminated soil was removed by the AF in 1984. Discrete surface and subsurface soil samples were collected in this subarea during the SSI/RI to delineate the remaining contamination. The results from these samples detected PCBs and the

chlorinated pesticide dieldrin at concentrations above ADEC Method 2 cleanup levels in the surface and subsurface soil.

- Septic Tank Outfall (STO) – High concentrations of PCBs, pesticides, and petroleum were detected in a surface soil sample collected at the outfall during the 1994 PA/SI. A total of 32 surface soil samples were collected from the STO subarea during the SSI/RI. High concentrations of PCBs and dieldrin exceeding the ADEC Method 2 cleanup levels were delineated from the septic discharge point down the mountain side. A sample of the sludge remaining inside the septic tank indicated concentrations of PCBs and petroleum hydrocarbons exceed ADEC Method 2 cleanup levels.

2.7.2 Airstrip Subareas

The nature and extent of contamination identified by the SSI/RI for the four Airstrip subareas is summarized below. Subarea locations are identified in Figure 2-2.

- Airstrip Warehouse (AWH) –No contamination was identified during the 1994 PA/SI. During the 2007 SSI/RI, three MI samples were collected in front of the eastern and western doorways of the airstrip warehouse and the northern door of the fire trailer shelter. Results from the MI sampling revealed the presence of PCBs in tiny area west of the warehouse and one soil sample of the volatile organic compound (VOC) 1,2,3-TCP at concentrations above ADEC Method 2 cleanup levels. Some petroleum was detected in soil southeast of the warehouse, but these detections are all at concentrations below the ADEC Method 2 cleanup levels.
- Drum Storage Area No. 2 (DS2) – Drums that historically had been stored at DS2 (located northeast of the airstrip) were removed in 1984 and placed in a landfill constructed by the USAF. The 1994 PA/SI identified petroleum hydrocarbon contamination in five of the six surface samples collected. One surface sample also indicated a PCB concentration above the ADEC Method 2 cleanup level. SSI/RI sampling included the collection of three MI surface soil samples from across the subarea, surface and subsurface soil samples from previous spill locations (when they could be relocated), and groundwater samples. Concentrations for all contaminants except diesel-range organics (DRO) were found to be below ADEC Method 2 cleanup levels. DRO contamination within DS2 appears to be limited to three areas of surface soil staining. The PCB contamination identified during the 1994 PA/SI could not be located during the SSI/RI. Additional sampling is scheduled for 2009 to attempt to confirm the presence of PCBs previously reported. If 2009 efforts cannot verify the 1994 sample result, it can be assumed the sample location was removed, the impacted area very small, or the previous sample result was in error and no further action will be taken. If results indicate the presence of PCBs at concentrations above ADEC Method 2 cleanup levels, the affected soil will be remediated accordingly.

Table 2-3 is a summary of contamination identified at each of the subareas including maximum concentrations detected and associated ADEC cleanup levels.

TABLE 2-3
SUMMARY OF SUBAREAS WITH CERCLA HAZARDOUS SUBSTANCES

Subarea	COC	Maximum Concentration	ADEC Cleanup Level[a]
Aircraft Warehouse	Polychlorinated Biphenyls 1,2,3-Trichloroprpane	9.08 mg/kg 1.50 mg/kg	1.0 0.17
Equipment Building	Polychlorinated Biphenyls	1,041 mg/kg	1.0
Equipment Building Transformer	Polychlorinated Biphenyls Dieldrin	3,971 mg/kg 0.68 mg/kg	1.0 0.32
Septic Tank Outfall	Polychlorinated Biphenyls Dieldrin	744.3 mg/kg 5.8 mg/kg	1 0.32
Drum Storage Area 2	Polychlorinated Biphenyls	6,824 mg/kg	1

[a] Source of cleanup levels for soil is 18 AAC 75.341, Table B1, "under 40 inch zone"
mg/kg = milligrams per kilogram

2.7.3 Conceptual Exposure Model

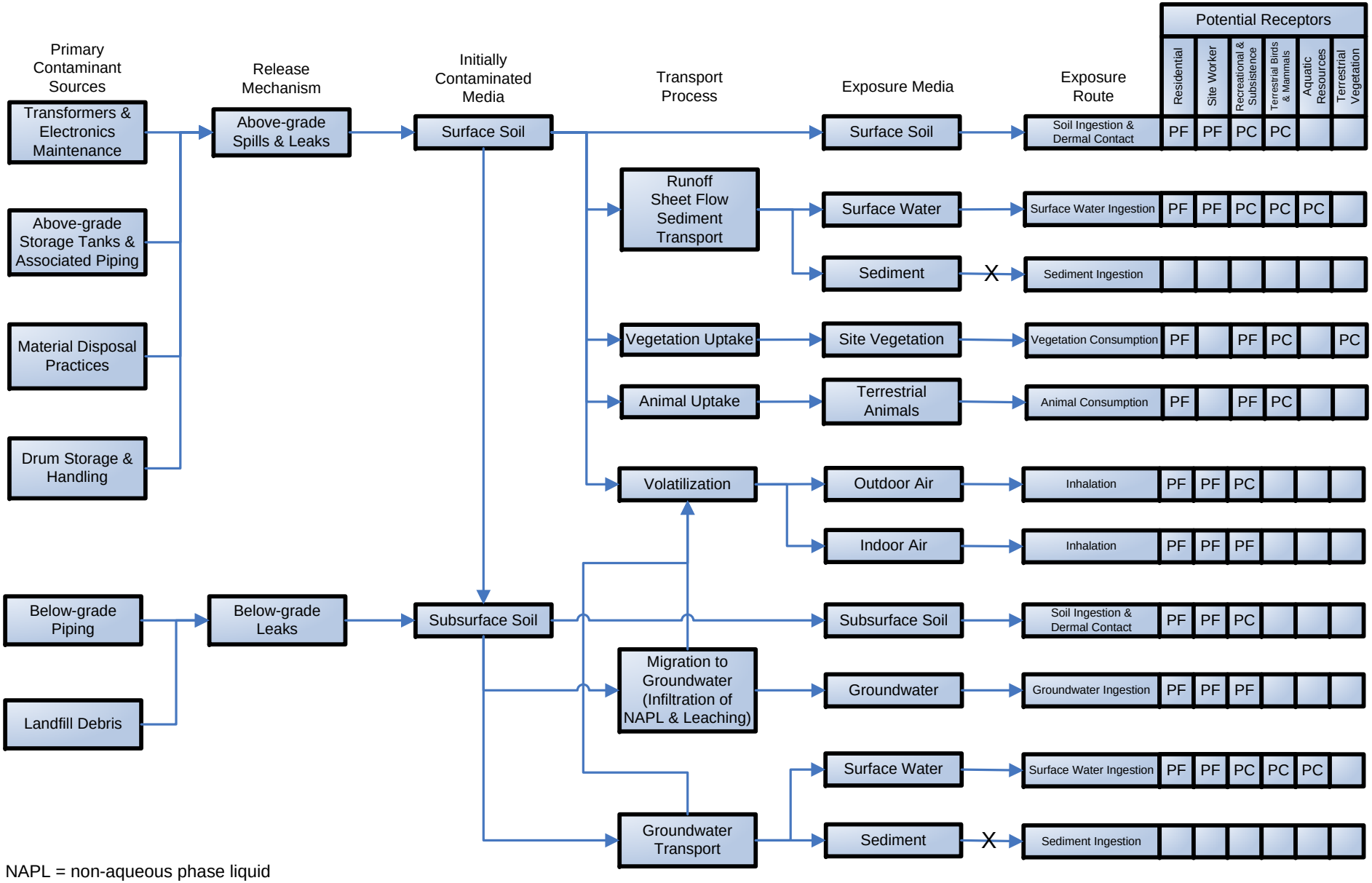
A conceptual exposure model (CEM) of IRP Site OT001 was developed to depict the potential relationship or exposure pathway between chemical sources and receptors. An exposure pathway describes the means by which a receptor can be exposed to contaminants in environmental media. These pathways, presented in Figure 2-4, are based on current and reasonably likely future land uses and the potential beneficial use of groundwater and surface water at IRP Site OT001.

2.8 Current and Potential Future Land and Resource Uses

2.8.1 Land Use

The Kalakaket RRS is located in a remote and mountainous area of west-central Alaska. The area surrounding the site is undeveloped and naturally pristine. Access by foot, all-terrain vehicle, or snowmobile is unrestricted. The closest residents live near Galena, approximately 20 miles to the north. Small, non-residential cabins are situated 500 feet south of the airstrip and recreational, and subsistence hunters and miners may occupy the cabins for seasonal use on an intermittent basis. Use of the cabins is limited because the airstrip has become unusable from the overgrowth of vegetation. The cabins are scheduled for demolition in 2009. The current land use of the surrounding land is recreational. The current use of adjacent/surrounding land is expected to remain the same over the foreseeable future.

As the lead agency and as the agency with authority to control the future land use at IRP Site OT001, the AF has determined that the future land use of IRP Site OT001 will continue to be recreational until it releases the land as indicated by Public Land Order (PLO) 1740.



NAPL = non-aqueous phase liquid
PC = potential complete pathway at this time
PF = potential future pathway (not complete at this time)
X = incomplete pathway

FIGURE 2-4
Conceptual Exposure Model
Kalakaket RRS, Site OT001

PLO 1740[1] was signed in 1958 (*Federal Register*, Volume 23, page 7893) by the U.S. Department of Interior, Bureau of Land Management (BLM), and the AF for the purpose of withdrawing public lands in Alaska (including Kalakaket RRS) for military purposes. When the AF decides to return the RRS from PLO 1740 back into public domain, Kalakaket RRS will return to BLM management. There are currently no claims for this land, either by the State of Alaska or through the Alaska Native Claims Settlement (ANCSA, USC, Title 43, Chapter 33).

2.8.2 Ground and Surface Water Uses

Groundwater beneath and in the vicinity of the Kalakaket RRS is described in Section 2.5.3. No drinking water wells are installed at the Kalakaket RRS. Groundwater at the WPH subarea (Figure 2-3) was used to supply water for Kalakaket RRS operations. The groundwater was collected through an intake gallery located along an unnamed creek. The water pump house that provided protection to pumps and piping for the gallery is scheduled for demolition in 2009.

Surface water at and near the Kalakaket RRS is described in Section 2.5.4. Surface waters at the RRS are not used as a drinking water source. However, people come in contact with local surface waters during recreational activities. Surface water also provides habitat for aquatic insects and small fish and drinking water for wildlife.

2.9 Summary of Site Risks

This section summarizes the human health and ecological risk assessment that have been performed at IRP Site OT001. The overall conclusion from the risk assessment is the individual risk posed by each chemical and cumulative risk posed by all chemicals detected in 5 of the 16 subareas are greater than acceptable risk levels and cleanup is required.

The risk evaluation methodology is discussed below, followed by subarea-specific results.

2.9.1 Summary of Human Health Risk Assessment

As part of the Triad process, the need for a human health risk assessment was discussed. The Triad approach integrates systematic planning, dynamic work strategies, and real-time measurement technologies to streamline environmental site investigations and cleanups. The Triad team included representatives from the USAF 611th CES, Air Force Center for Environmental Excellence, U.S. Army Corps of Engineers, ADEC, and BLM who decided that a an ADEC Method 3 or Method 4 site-specific human health risk assessment was not needed based on the understanding that the USAF will implement remedial actions at Kalakaket RRS for contaminated soil and groundwater with concentrations above ADEC Method 2 cleanup levels and that Method 2 cleanup levels are assumed protective of human health. However, cumulative risk must be calculated under 18 AAC 75.325(g) to ensure that, after cleanup has been completed, the risk from residual hazardous substances remaining following implementation of selected remedial actions does not exceed a cumulative carcinogenic risk standard of 1 in

[1] Public Land Orders (PLOs) implement the authority granted to the Secretary of the Interior by the Federal Land Policy and Management Act of 1976 to make, modify, extend, or revoke land withdrawals. A withdrawal removes an area of federal land from settlement, sale, location, or entry under some or all of the general land laws, for the purpose of limiting activities under those laws to maintain other public values in the area or reserving the area for a particular public purpose or program. Withdrawals are also used to transfer jurisdiction over an area of federal land from one department, bureau, or agency to another.

100,000 (1 x 10^{-5}) across all exposure pathways and a cumulative noncarcinogenic risk standard at a hazard index (HI) of 1 across all exposure pathways.

The cumulative human health risks have been calculated in accordance with the ADEC *Cumulative Risk Guidance* (2008a). The initial cumulative risk calculation is based on current conditions and estimates of what risks the site poses if no action were taken. It provides the basis for taking action and identifies the contaminants and exposure pathways that need to be addressed by the remedial action.

Identification of Chemicals of Concern: This subsection identifies those chemicals associated with unacceptable risk at IRP Site OT001 and that are the basis for the selected remedial actions. COPCs were identified for each of the 16 subareas of OT001 in accordance with ADEC *Cumulative Risk Guidance* (2008a). Per the guidance, all analytes detected in soil at concentrations greater than 1/10th of 18 AAC 75.341, Table B1 (under 40-inch zone) cleanup levels for the inhalation or ingestion pathway and all analytes detected in groundwater at concentrations greater than 1/10th 18 AAC 75.345, Table C cleanup levels are considered chemicals of potential concern and must be included in cumulative risk calculations. COPCs contributing to unacceptable risk were identified as COCs.

COCs for 5 subareas and their maximum concentrations are listed in Table 2-3.

Exposure Assessment: As part of the exposure assessment, a Conceptual Exposure Model (CEM) was developed for Kalakaket RRS to aid in determining reasonable exposure scenarios and pathways of concern. This CEM is shown in Figure 2-4 and illustrates the release sources and the fate and transport processes at Kalakaket RRS that could cause chemicals to move through the environment to potential receptor locations as summarized below.
The significant pathways for transport and exposure at Kalakaket RRS include direct contact, volatilization, plant/animal uptake, and migration to groundwater.

The potential receptors, exposure routes, and exposure media are also presented in Figure 2-4. Residential exposure pathways were evaluated as the most conservative scenario and are considered hypothetical for potential future routes only.

Table 2-4 summarizes the completed exposure routes to potential human or ecological receptors at each subarea of IRP Site OT001 where COCs exist.

Toxicity Assessment: The cumulative risk calculation used default toxicity data from the ADEC *Cumulative Risk Guidance* (2008a). Therefore, risk estimated using these toxicity values is assumed to be protective of the receptors.

Risk Characterization: This section combines the results of the exposure assessment with the toxicity criteria identified for the COPCs. Carcinogenic risks and noncarcinogenic impacts for each COPC are presented for current and hypothetical future receptors. Cumulative risk calculations for all relevant pathways and populations are also described.

Table 2-4
Completed Exposure Routes for IRP Site OT001

Site	Soil Ingestion and Dermal Contact	Outdoor Air Inhalation	Indoor Air Inhalation	Animal Uptake and Consumption	Vegetation Uptake and Consumption	Groundwater Ingestion
Upper Camp Subareas						
EQB	X	X	X	X	X	– –
EQT	X	X	X	X	X	– –
STO	X	X	X	X	X	– –
Airstrip Subareas						
AWH	X	X	X	X	X	– –
DS2	X	X	X	X	X	X

– – = incomplete pathway
X = potentially complete current or future pathway

Carcinogenic Risk: Carcinogenic risks are generally expressed as the incremental probability of an individual's likelihood of developing cancer over a lifetime as a result of exposure to the carcinogen. Excess lifetime cancer risk is calculated from the following equation:

$$\text{Risk} = \text{CDI} \times \text{SF}$$

where:

Risk = a unitless probability (for example, 2×10^{-5}) of an individual's likelihood of developing cancer
CDI = chronic daily intake averaged over 70 years (mg/kg-day)
SF = slope factor, expressed as $(\text{mg/kg-day})^{-1}$

The EPA generally acceptable risk range for site-related exposure is 10^{-4} to 10^{-6}. The acceptable ADEC risk standard is a cumulative carcinogenic risk standard of 1 in 100,000 (10^{-5}) across all exposure pathways.

Noncarcinogenic Risk: Noncarcinogenic health effects are evaluated by comparing an exposure level over a specified time period (70-year lifetime) with a reference dose (RfD) derived for a similar exposure period. An RfD represents a daily individual intake that an individual may be exposed to that is not expected to cause any deleterious effect. The ratio of site-related daily intake to the RfD is called a hazard quotient (HQ).

The HQ is calculated as follows:

$$\text{Non-cancer HQ} = \text{CDI}/\text{RfD}$$

where:

CDI = chronic daily intake
RfD = reference dose

CDI and RfD are expressed in the same units and represent the same exposure period (chronic, subchronic, or short-term).

An HQ of less than 1 indicates that a receptor's dose of a single contaminant is less than the RfD, and that toxic noncarcinogenic effects from that chemical are unlikely. Under 18 AAC 75.325(h) acceptable noncancerous effects are considers to be those that do not exceed an HI of 1.0 for all exposure pathways.

Current Conditions Cumulative Human Health Risk Calculation Results

The before-remediation cumulative risk calculations are summarized in Tables 2-5 and 2-6. As demonstrated in these tables, the cumulative risk calculated from the current conditions is greater than cumulative carcinogenic risk standard of 1 in 100,000 (1×10^{-5}) across all exposure pathways and a cumulative noncarcinogenic risk standard at a hazard index (HI) of 1 across all exposure pathways. The risk calculation results are briefly discussed for the five subareas of IRP Site OT001 addressed in this ROD.

- Equipment Building (EQB) – Three COPCs: 4, 4′-dichlorodiphenyltrichloroethane (DDT); dieldrin; and total PCBs were identified in EQB soil. As shown in Tables 2-5 and 2-6, individual carcinogenic risks and noncarcinogenic hazard estimations for 4,4′-DDT and dieldrin were each below the risk standard and are not COCs in this subarea. The individual and cumulative carcinogenic risks for PCBs exceed the risk standard of 1×10^{-5} and represent a potential for unacceptable human health risk if not remediated. PCB is a COC in this subarea. Groundwater risk was not calculated because there is no complete groundwater pathway.
- Equipment Building Transformer (EQT) – Two COPCs: dieldrin and total PCBs, were identified in EQT soil and determined to pose individual carcinogenic risks for direct contact; therefore, both are considered COCs. The individual carcinogenic risk estimate for total PCBs for the inhalation pathway also exceeds the risk standard of 1×10^{-5}. As a result, the estimated cumulative carcinogenic risk is three orders of magnitude greater than the estimated incremental lifetime cancer risk (ILCR) standard of 1×10^{-5}. These concentrations represent a potential for unacceptable human health risk if not remediated. Groundwater risk was not calculated because there is no complete groundwater pathway.
- Septic Tank Outfall (STO) – Six COPCs: 4,4′-DDT; benzo(a)pyrene; benzo(b)fluoranthene; dieldrin; heptachlor epoxide; and total PCBs were detected in STO soil. As shown in Tables 2-5 and 2-6, only dieldrin and total PCBs represent COCs. For dieldrin, both the estimated individual noncarcinogenic hazard and carcinogenic risk from direct contact exceed ADEC risk standards. For total PCBs, the estimated individual carcinogenic risk from both direct contact and inhalation exceed ADEC risk standards. Cumulative carcinogenic risk and noncarcinogenic hazard estimations also exceed the ADEC risk values. Groundwater risk was not calculated because there is no complete groundwater pathway at STO.
- Airstrip Warehouse (AWH) – 1,2,3-TCP; benzo(a)anthracene; benzo(a)pyrene; benzo(b)-fluoranthene; dibenzo(a,h)anthracene; and total PCBs were identified as COPCs in AWH soil. The multi-incremental sample results adjusted for the 95 percent upper confidence level were used in identification of COPCs and the cumulative risk calculation for benzo(a) anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene. Only 1,2,3-TCP and total PCBs are considered COCs for this subarea. As shown in

Table 2-5, individual and cumulative carcinogenic risks estimates for 1,2,3-TCP and total PCBs exceed the ADEC risk standard of 1 x 10^{-5}. Benzo(a)pyrene was detected above the ADEC Method 2 cleanup level in an MI sample collected from the surface soil at AWH; however, the individual carcinogenic risk estimation for this benzo(a)pyrene detection did not exceed the risk standard of 1 x 10^{-5}. Therefore, it was agreed by all parties that no further action is required for this constituent in the AWH surface soil. Groundwater risk was not calculated because there is no complete groundwater pathway.

- Drum Storage Area No. 2 (DS2) – 1,2,4-trichlorobenzene, benzo(a)anthracene, and total PCBs were identified as COPCs in DS2 soil. As shown in Table 2-5, the individual carcinogenic risk estimation for benzo(a)anthracene concentrations in existing soil is below the ADEC risk standard. However, the individual noncarcinogenic hazard estimation for the soil inhalation pathway for 1,2,4-trichlorobenzene and the carcinogenic risk estimation for both direct contact and inhalation pathways for total PCBs exceed ADEC risk standards. Because the cumulative HI for DS2 is not greater than the risk standard of 1, 1,2,4-trichlorobenzene is not considered a COC; the only COC in DS2 is PCBs. Cumulative carcinogenic risk and noncarcinogenic hazard estimations are also above ADEC risk standards. Groundwater risk was not calculated because COCs were not detected.

Uncertainties: The major uncertainties affecting the risk calculations are related to sampling and analysis, environmental fate and transport modeling, the use of default exposure assumptions, and the toxicity criteria. These uncertainties are described in more detail in the RI report.

In general, potential risks may be overestimated or overestimated in the cumulative risk calculation. Comparison to the ADEC Method 2 cleanup levels generally overestimates risks because of the assumptions about conservative exposure scenarios, effects of contaminants, and risk characterization used to derive these values. Analytical quality and control issues such as elevated detection limits may result in underestimation of risks.

2.9.2 Summary of Ecological Risk Assessment

This section summarizes the approaches and findings of the ecological risk assessment performed at IRP Site OT001. Surface soil is contaminated with PCB and the ecological toxicity of PCBs is high; any detection of PCB created potential ecological risk and there fore all areas with PCB contamination pose a potential risk to wildlife. In addition, the pesticide dieldrin, which is collocated with PCBs at the Septic Tank Outfall and the Equipment Building, also has a very highly toxicity to wildlife and poses a potential risk to wildlife at the site.

The ecological assessment was based on the understanding that AF will remediate all known contaminated soil at Kalakaket RRS with concentrations above ADEC Method 2 cleanup levels. The overall strategy used for the ecological risk assessment consisted of two general steps:

1. The first step compared investigation data with ADEC Method 2 cleanup levels, to identify locations with high concentrations.

2. The ecological risk assessment considered whether residual concentrations (after potential remedial action to reduce them below ADEC Method 2 levels) would pose a risk to ecological receptors after the remedial actions are completed.

Table 2-5
Risk Characterization Summary for IRP Site OT001 – Carcinogens (Before Remedial Actions)

Scenario Time Frame: 70 years
Receptor Population: Potential residents
Receptor Age: 0 to 70

Exposure Point	Medium	Chemical of Potential Concern	Carcinogenic Risk		
			Direct Contact (Ingestion and Dermal)[a]	Inhalation	Cumulative Risk
Upper Camp Subareas					
EQB	Surface soil	4,4′-DDT	1.6E-06	2.3E-08	2E-06
		Dieldrin	4.0E-06	1.9E-07	4E-06
		PCBs (total)	**3.7E-03**	**6.1E-04**	**4E-03**
				Soil risk total =	**4E-03**
	Groundwater	--	--	--	--
EQT	Surface soil	Dieldrin	**2.1E-05**	1.0E-06	**2E-05**
		PCBs (total)	**1.4E-02**	**2.3E-03**	**2E-02**
				Soil risk total =	**2E-02**
	Groundwater	--	--	--	--
STO	Surface soil	4,4′-DDT	4.8E-06	6.7E-08	5E-06
		Benzo(a)pyrene	2.2E-06	2.1E-09	2E-06
		Benzo(b)fluoranthene	2.0E-06	1.5E-09	2E-06
		Dieldrin	**1.8E-04**	8.7E-06	**2E-04**
		Heptachlor epoxide	8.6E-06	9.3E-07	9E-06
		PCBs (total)	**2.7E-03**	**4.4E-04**	**3E-03**
				Soil risk total =	**3E-03**
Airstrip Subareas					
AWH	Surface soil	1,2,3-Trichloropropane	**1.3E-05**	**8.8E-05**	**1E-04**
		Benzo(a)anthracene	1.5E-06	9.5E-09	1E-06
		Benzo(a)pyrene	1.0E-05	9.4E-09	1E-05
		Benzo(b)fluoranthene	1.6E-06	1.2E-09	2E-06
		Dibenzo(a,h)anthracene	2.4E-06	8.0E-10	2E-06
		PCBs (total)	**2.3E-05**	3.8E-06	**3E-05**
				Soil risk total =	**1E-04**
DS2	Surface soil	1,2,4-Trichlorobenzene	NA	NA	NA

Table 2-5
Risk Characterization Summary for IRP Site OT001 – Carcinogens (Before Remedial Actions)

Scenario Time Frame: 70 years
Receptor Population: Potential residents
Receptor Age: 0 to 70

Exposure Point	Medium	Chemical of Potential Concern	Carcinogenic Risk		
			Direct Contact (Ingestion and Dermal)[a]	Inhalation	Cumulative Risk
		Benzo(a)anthracene	7.9E-06	5.1E-08	8E-06
		PCBs (total)	**2.4E-02**	**4.0E-03**	**3E-02**
				Soil risk total =	**3E-02**
	Groundwater	No COPCs	NA	NA	NA

[a] Only exposure from ingestion was evaluated for direct contact pathway for groundwater.
[b] No COPCs in addition to petroleum hydrocarbon-related compounds.
Bold = greater than 1 in 10,000 cancer risk, chemical of concern (COC)
-- indicates incomplete exposure pathway
COPC = chemical of potential concern
DDT = dichlorodiphenyltrichloroethane
NA = not applicable
PCB = polychlorinated biphenyl

Table 2-6
Hazard Characterization Summary for IRP Site OT001 – Noncarcinogens (Before Remediation)

Scenario Time Frame: 30 years
Receptor Population: Potential residents
Receptor Age: 0 to 70

Exposure Point	Medium	Chemical of Potential Concern	Noncarcinogenic Hazard		
			Direct Contact (Ingestion and Dermal)[a]	Inhalation	Cumulative Hazard
Upper Camp Subareas					
EQB	Surface soil	4,4′-DDT	7.6E-02	NA	8E-02
		Dieldrin	4.0E-02	NA	4E-02
		PCBs (total)	NA	NA	NA
				Soil hazard total =	1E-01
	Groundwater	--	--	--	--
EQT	Surface soil	Dieldrin	2.1E-01	NA	2E-01
		PCBs (total)	NA	NA	NA
				Soil hazard total =	2E-01
	Groundwater	--	--	--	--
STO	Surface soil	4,4′-DDT	2.2E-01	NA	2E-01
		Benzo(a)pyrene	NA	NA	NA
		Benzo(b)fluoranthene	NA	NA	NA
		Dieldrin	**1.8E+00**	NA	**2E+00**
		Heptachlor epoxide	5.7E-01	NA	6E-01
		PCBs (total)	NA	NA	NA
				Soil hazard total =	**3E+00**
	Groundwater	--	--	--	--
Airstrip Subareas					
AWH	Surface soil	1,2,3-Trichloropropane	2.5E-03	NA	2E-03
		Benzo(a)anthracene	NA	NA	NA
		Benzo(a)pyrene	NA	NA	NA
		Benzo(b)fluoranthene	NA	NA	NA
		Dibenzo(a,h)anthracene	NA	NA	NA
		PCBs (total)	NA	NA	NA
				Soil hazard total =	2E-03

Table 2-6
Hazard Characterization Summary for IRP Site OT001 – Noncarcinogens (Before Remediation)

Scenario Time Frame: 30 years
Receptor Population: Potential residents
Receptor Age: 0 to 70

Exposure Point	Medium	Chemical of Potential Concern	Noncarcinogenic Hazard		
			Direct Contact (Ingestion and Dermal)[a]	Inhalation	Cumulative Hazard
	Groundwater	--	--	--	--
DS2	Surface soil	1,2,4-Trichlorobenzene	1.1E-01	**1.3E+00**	1E+00
		Benzo(a)anthracene	NA	NA	NA
		PCBs (total)	NA	NA	NA
				Soil hazard total =	1E+00
	Groundwater	No COPCs	NA	NA	NA

[a] Only exposure from ingestion was evaluated for direct contact pathway for groundwater.
[b] No COPCs in addition to petroleum hydrocarbon-related compounds.
Bold = greater than 1 in 10,000 cancer risk, chemical of concern (COC)
-- indicates incomplete exposure pathway
COPC = chemical of potential concern
DDT = dichlorodiphenyltrichloroethane
NA = not applicable
PCB = polychlorinated biphenyl

The ecological risk assessment was conducted by using a tiered framework in accordance with ADEC (2005) and EPA (1992, 1998) guidance. When remedial action of soil to meet ADEC Method 2 levels is considered, the risk to terrestrial wildlife potentially exposed to the residual constituent concentrations is expected to be low. This conclusion was drawn based on the finding that all residual constituent concentrations were below levels known to be protective of wildlife, under the assumption that surface soil concentrations above ADEC Method 2 cleanup levels are remediated.

Detailed screening results and constituent concentrations are included in the RI (CH2M HILL, 2009). All chemicals of potential ecological concern (COPECs) indentified in the Tier 1 screening assessment were carried forward into the site-specific Tier 2 evaluation.

Moose, snowshoe hare, and red fox are representative examples of the large herbivorous, small herbivorous, and carnivorous mammals, respectively, that are observed in the vicinity of the Kalakaket RRS. Semiaquatic mammals were not observed during visits and are not likely to frequent the RRS because of the general lack of permanent surface water. Representative avian groups that may be present include raptors and upland songbirds (passerines). Common raptors (such as the northern harrier and short-eared owl) and songbirds (such as savannah sparrow, white-crowned sparrow, and common raven) are the more conspicuous members of the avian wildlife. Detailed description of these endpoint species,

HQs were derived for ecological areas of concern by comparing maximum concentrations of constituents detected in surface soil with ERBSCs identified to be protective of the endpoint species selected. Tier 2 ERBSCs and risk estimates for each subarea are summarized in the RI (CH2M HILL, 2009). Table 2-7 summarizes the results of the Tier 2 ecological risk characterization for the geographically defines exposure areas of the Upper Camp, Airstrip, and Miscellaneous areas.

The Tier II ecological risk assessment concluded that the risk to terrestrial wildlife potentially exposed to the residual constituent concentrations at IRP Site OT001 is expected to be low. Specifically, no COECs were identified because all residual constituent concentrations of COPECs were below levels known to be protective of wildlife when surface soil concentrations above ADEC Method 2 Table B1 cleanup levels are assumed to be remediated.

Uncertainties: Uncertainty associated with sampling and analysis includes the inherent variability (standard error) in the analysis, representativeness of the samples, sampling errors, and heterogeneity of the sample matrix. The degree to which sample collection and analyses reflect real exposure levels partly determines the reliability of the risk estimates. For this ecological risk assessment, sampling was targeted for potential source areas and does not include all areas within a receptor's home range. Therefore, the risk estimates are likely to be biased high. This ecological risk-screening assessment used the maximum detected concentrations, which are likely to overstate the actual risk to potential ecological receptors.

Table 2-7
Ecological Risk Assessment Hazard Quotient Summary

Subarea	Endpoint Species	Hazard Quotient
Upper Camp	Snowshoe hare	0.01
	Northern harrier	0.06
	Red fox	0.01
	Moose	<0.01
Airstrip	Snowshoe hare	0.01
	Northern harrier	0.27
	Red fox	0.04
	Moose	<0.01
Miscellaneous	Snowshoe hare	<0.01
	Northern harrier	<0.01
	Red fox	<0.01
	Moose	<0.01

2.9.3 Basis for Action

From findings of the human health and ecological risk assessments completed, it was determined that action was needed to protect human health as a result of exposure to soil contamination at the Kalakaket RRS.

2.10 Remedial Action Objectives

The RAOs define what the remedial actions should accomplish to protect potential receptors. Consistent with EPA guidance and the NCP [40 CFR part 300.430(e)(2)(i)], these objectives consider COCs, exposure routes and receptors, and cleanup goals.

The RAOs for IRP Site OT001 at Kalakaket RRS have been developed to meet the requirements of state and federal regulations. The RAOs are the specific goals that the remedial action is designed to achieve.

The soil RAOs were developed based on unrestricted future land use. These RAOs will eliminate site risks through the removal of the COCs from the environment.

The RAOs for soil at IRP Site OT001 are as follows:

- Remedial actions will reduce the level of onsite contamination to concentrations at or below ADEC Method 2, Table B1 cleanup levels, which are 1.0 mg/kg for PCB, 0.32 mg/kg for dieldrin, and 0.17 mg/kg for 1,2,3-TCP.
- Remedial actions will comply with the CERCLA Off-Site Rule (40 CFR 300.440).

- Remedial actions will result in remaining cumulative risk meeting two criteria:
  - Cumulative carcinogenic risk standard of 1 in 100,000 across all exposure pathways is not exceeded.
  - Cumulative noncarcinogenic risk standard at a HI of 1 across all exposure pathways is not exceeded.
- Remedial actions will maintain the integrity of wetlands areas by minimizing disruption of wetland vegetation and water flow features.

These RAOs anticipate that AF goals for the Kalakaket RRS are to obtain CERCLA site closure and to ultimately transfer the property to BLM.

2.11 Description of Alternatives

The remedial alternatives considered for IRP Site OT001 soil were presented in the FS completed for the Kalakaket RRS (CH2M HILL, 2009) and are as follows:

- Alternative 1, No action
- Alternative 2, Source removal and offsite disposal of PCB-, dieldrin-, and 1,2,3-TCP-contaminated soil
- Alternative 3, Onsite thermal desorption of PCB-, dieldrin-, and 1,2,3-TCP-contaminated soil

Each alternative evaluated is described in more detail, including remedy components, common elements and distinguishing features, and expected outcomes, in the following sections.

2.11.1 Description of Remedy Components

A range of remedial alternatives was developed for IRP Site OT001, depending on the affected media and COCs. This section provides a summary overview of the components of those alternatives.

2.11.1.1 Alternative 1, No Action

This alternative, required under the NCP for inclusion in the detailed evaluation of alternatives, includes no specific response actions for environmental monitoring, controlling the migration of contaminants, reducing their concentrations, or preventing exposure to them. Under Alternative 1, contaminated soil would be left in place and no further action would be taken.

2.11.1.2 Alternative 2, Source Removal and Offsite Disposal of PCB-, Dieldrin-, and 1,2,3-TCP-contaminated Soil

Under Alternative 2, soil contaminated with PCBs, dieldrin, and 1,2,3-TCP above cleanup levels would be excavated, staged, manifested, and transported to an approved disposal site, tentatively identified as Chemical Waste Management Northwest in Arlington, Oregon, for disposal in a landfill cell certified for the permanent disposal of solid RCRA hazardous, industrial, and TSCA regulated wastes.

2.11.1.3 Alternative 3, Onsite Thermal Desorption of PCB-, Dieldrin-, and 1,2,3-TCP-contaminated Soil

Alternative 3 would include mobilization of a low-temperature thermal desorption unit to the Kalakaket RRS to remove contaminants above ADEC Method 2 cleanup levels in soil through destruction. Residues of site contaminants would be collected in the unit and disposed of offsite at an approved location. All soil would be excavated and treated. Alternative 3 would required an estimated 3 weeks for onsite excavation work, 2 weeks of treatment, and 1 week of additional work to place treated soils back in excavations. Additional fill material may be needed to backfill excavations.

2.11.2 Common Elements and Distinguishing Features of Each Alternative

Table 2-8 provides a summary of the elements common to each alternative and features that distinguish one alternative from another.

2.11.3 Expected Outcome of Each Alternative

Table 2-9 provides summaries of the outcomes of each alternative for soil.

2.12 Summary of Comparative Analysis of Alternatives

In accordance with the NCP, the alternatives for IRP Site OT001 at the Kalakaket RRS were evaluated by using the nine criteria described in Section 121(b) of CERCLA and the NCP Section 300.430(f)(5)(i). These criteria are classified as threshold criteria, balancing criteria, and modifying criteria.

Threshold criteria are standards that an alternative must meet to be eligible for selection as a remedial action. There is little flexibility in meeting the threshold criteria—the alternative must meet them or it is unacceptable. The following are classified as threshold criteria:

- Overall protection of human health and the environment
- Compliance with applicable or relevant and appropriate requirements (ARARs)

Balancing criteria weigh the tradeoffs between alternatives. These criteria represent the standards upon which the detailed evaluation and comparative analysis of alternatives are based. In general, a high rating on one criterion can offset a low rating on another balancing criterion. Five of the nine criteria are considered balancing criteria:

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

Modifying criteria are as follows:

- Community acceptance
- State/support agency acceptance

The FS considered the seven threshold and balancing criteria for the soil contamination at IRP Site OT001.

Table 2-8
Common Elements and Distinguishing Features of Alternatives for Soil

	Alternative 1	Alternative 2	Alternative 3
Key ARARs associated with alternative	Alaska Oil and Other Hazardous Substance Pollution Control (18 AAC 75); Alaska Water Quality Standards (18 AAC 70)	Alaska Oil and Other Hazardous Substance Pollution Control (18 AAC 75), CERCLA Off-Site Rule (40 CFR 300.440), TSCA regulations for PCB Storage and Disposal (40 CFR 761.50 and 761.60)	Alaska Oil and Other Hazardous Substance Pollution Control (18 AAC 75); Alaska Solid Waste Management; General Standards (18 AAC 60.005–60.265 and 18 AAC 60.800–60.860); Air Quality Control regulations (18 AAC 50); Ambient Air Quality Management (18 AAC 50.005–50.110); TSCA regulations for PCB Storage and Disposal (40 CFR 761.50 and 761.60)
Long-term reliability of remedy	None	Reliability: Contaminated soil exceeding the ADEC ingestion cleanup level would be removed.	Reliability: Soil would be treated by using a proven technology. Treatment residuals would be removed from the Kalakaket RRS.
Quantity of untreated waste and treatment residuals to be disposed off-site or managed on-site in a containment system and the degree of hazard remaining in such material	None	An estimated 154 cubic yards of soil would be sent to an offsite disposal site. Low hazard in offside landfill that is approved for accepting PCBs and other hazardous contaminants.	Only (liquid) residuals from onsite treatment operations remain for off-site disposal (estimate quantity = 300 gallons). Low hazard for treated soil remaining on site.
Estimated time for design and construction	No design or construction would be required.	**Year 1**: Planning and Implementation, 4 to 6 months, includes mobilization **Year 2:** Excavation, stockpiling, 4 months **Year 3**: Demobilization and offsite disposal, 6 months	**Year 1:** Planning and Implementation, 4 to 6 months, includes mobilization **Year 2**: Treatment**,** residuals management and disposal, 2 months **Year 3**: Demobilization, 6 months
Estimated time to reach remediation goals	Unknown	Up to 12 months to send soil to offsite disposal site from date of excavation	Up to 2 months once equipment is operational in the field

Table 2-8
Common Elements and Distinguishing Features of Alternatives for Soil

	Alternative 1	Alternative 2	Alternative 3
Estimated capital cost	$0	$3,585,818	$4,965,898
Estimated annual O&M cost	$0	$0	$0
Estimated total present worth	$0	$3,585,818	$4,965,898
Discount rate	Not applicable.	7%	7%
Number of years over which cost is projected	Not applicable.	3 years	4 to 6 months
Use of presumptive remedies and/or innovative technologies	None	Section 300.430(a)(iii)(B) of the National Contingency Plan contains the expectation that engineering controls, such as containment, will be used for waste that poses a relatively low long-term threat where treatment is impracticable. Remote location of IRP Site OT001 underscores such impracticability.	Thermal desorption is an innovative remedy for the removal of PCBs from soil. This technology could also be applied to petroleum-contaminated soil present at Kalakaket RRS, if approved.
ARAR = applicable or relevant and appropriate requirement			

Table 2-9
Expected Outcome of Each Alternative for Soil

	Alternative 1	Alternative 2	Alternative 3
Available uses of land upon achieving cleanup levels	Land would be not available for unrestricted use.	Land would be available for unrestricted use; suitable for return to BLM	Land would be available for unrestricted use; suitable for return to BLM
Time frame to achieve available land use	Unknown. Mobility, toxicity, and volume of contamination would not be reduced by natural processes within a reasonable timeframe.	2 years for subareas where soil would be excavated and removed to meet cleanup levels.	1 to 2 years for subareas where soil would be excavated and treated to meet cleanup levels.
Available uses of groundwater upon achieving cleanup levels	Groundwater use would not be restricted; exposure to contamination would be possible	Restricted, until groundwater remedial action objectives for petroleum hydrocarbons (discussed in a separate decision document) are achieved.	Restricted, until groundwater remedial action objectives for petroleum hydrocarbons (in a separate decision document) are achieved.
Time frame to achieve available groundwater use	Unknown	Unknown (discussed in a separate decision document).	Unknown (discussed in separate decision document).
Other impacts or benefits associated with alternative	Zero cost	Source removal would reduce cross-media contamination potential. Intrusive High long-term effectivness Medium cost More sustainable	Source removal would reduce cross-media contamination potential Intrusive High long-term effectivness High cost Less sustainable because of high energy requirements

The modifying criterion of state/support agency acceptance was implemented through discussions and coordination with ADEC. Comments from ADEC are presented in the Responsiveness Summary (Section 3).

The modifying criterion community acceptance was implemented through a community relations program coordinated by the AF. A Proposed Plan for IRP Site OT001 at the Kalakaket RRS was released on May 7, 2009, and the 30-day comment period was initiated on May 11, 2009. Concurrent with the comment period, a public meeting was held in Galena, Alaska, on June 2, 2009, to accept verbal comments on the Proposed Plan. A total of 11 respondents commented on the Proposed Plan, either verbally or in writing, during the public comment period.

Responses were prepared to all comments received on the Proposed Plan. The comments and responses are provided in the Responsiveness Summary (Section 3).

The AF is responsible for weighing all information and selecting the best alternative. The overall score for each alternative provides the AF with a semi-quantitative means to use for comparisons of alternatives. Criteria, overall scores, and comparative analyses among alternatives for soil are presented in Table 2-10.

The remainder of this section describes how selected alternatives satisfy each threshold criteria and balancing factor and indicates how they compare to the other alternatives considered in the FS.

2.12.1 Overall Protection of Human Health and the Environment

Overall protection of human health and the environment addresses whether an alternative provides adequate protection of human health and the environment and describes how risks posed through each exposure pathway are eliminated, reduced, or controlled, through treatment, engineering controls, and/or institutional controls.

2.12.1.1 Soil

Alternative 1 would not be protective of human health and the environment, because contaminated soil would be left exposed on the site at levels above ADEC cleanup standards. Alternative 2 would be protective because contaminated soil would be removed from Kalakaket RRS. Alternative 3 would be protective because contaminated soil would be treated to remove contamination.

2.12.2 Compliance with Applicable or Relevant and Appropriate Requirements

Section 121(d) of CERCLA and NCP Section 300.430(f)(1)(ii)(B) require that remedial actions at CERCLA sites at least attain legally applicable or relevant and appropriate federal and state requirements, standards, criteria, and limitations that are collectively referred to as “ARARs,” unless such ARARs are waived under CERCLA Section 121(d)(4).

Applicable requirements are those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal environmental or state environmental or facility citing laws that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance found at a CERCLA site. State standards that are identified by a state in a timely manner and that are more stringent than federal requirements may be applicable.

Table 2-10
Comparison of Remedial Alternatives for Contaminated Soil

Evaluation Criterion	Alternative		
	1[a]	2[b]	3[c]
Overall protectiveness	○	●	●
Compliance with ARARs	○	●	●
Long-term effectiveness and permanence	○	●	●
Reduction of toxicity, mobility, and volume through treatment	○	○	●
Short-term effectiveness	○	◖	◖
Implementability	●	◖	○
Estimated cost ($ millions)	$0	$3.59	$4.97

[a]No action
[b]Source removal and offsite disposal of PCB-, dieldrin-, and 1,2,3-trichloropropane-contaminated soil
[c]Onsite thermal desorption of petroleum-, PCB-, dieldrin-, and 1,2,3-trichloropropane-contaminated soil

Rating
○ Low: The alternative is least favorable.
◖ Medium: The alternative is moderately favorable. (Other alternatives are more or less favorable.)
● High: The alternative is most favorable.
ARAR = applicable or relevant and appropriate requirement

Relevant and appropriate requirements are those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal environmental or state environmental or facility citing laws that, although not "applicable" to a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site, address problems or situations sufficiently similar to those encountered at the CERCLA site (relevant) that their use is well-suited (appropriate) to the particular site. Only those state standards that are identified in a timely manner and that are more stringent than federal requirements may be relevant and appropriate.

Compliance with ARARs addresses whether a remedy will meet all of the applicable or relevant and appropriate requirements of other federal and state environmental statutes or provides a basis for invoking a waiver.

Alternative 1 would not comply with state and federal regulations because soil contaminated at unacceptable levels would remain on site and unrestricted. Alternatives 2 and 3 are expected to comply with all state and federal regulations.

2.12.3 Long-Term Effectiveness and Permanence

Long-term effectiveness and permanence refers to expected residual risk and the ability of a remedy to maintain reliable protection of human health and the environment over time, once

cleanup levels have been met. This criterion includes the consideration of residual risk that would remain onsite following remediation and the adequacy and reliability of controls.

Alternative 1 has a high long-term risk because there would be no cleanup and no restrictions to contaminant exposure by humans, animals, and plants.

Alternatives 2 and 3 are expected to have a high degree of long-term effectiveness because the contaminated soil would be either removed from Kalakaket RRS and buried and covered in a CERCLA-approved landfill or completely destroyed.

2.12.4 Reduction of Toxicity, Mobility, or Volume Through Treatment

Reduction of toxicity, mobility, or volume through treatment refers to the anticipated performance of the treatment technologies that may be included as part of a remedy.

Alternative 1 provides no reduction of toxicity, mobility, or volume of the contaminants. Alternative 2 does not reduce the toxicity, mobility and volume through treatment because the contaminated soil would be simply shipped offsite and buried in a CERCLA-approved landfill. Alternative 3 would reduce toxicity, mobility, and volume of contaminated soil through low-temperature desorption efforts.

2.12.5 Short-Term Effectiveness

Short-term effectiveness addresses the period of time needed to implement the remedy and any adverse impacts that may be posed to workers, the community and the environment during construction and operation of the remedy until cleanup levels are achieved.

Alternative 1 does not provide any short-term effectiveness because it does not involve remedy implementation.

Both Alternatives 2 and 3 would be effective in a relatively short period of time. Both alternatives also would need to account for possible delays because of seasonal limitations common to Alaska. Alternative 2 disposal activities would require about 2 years to implement. Alternative 3 would be expected to be completed in 1 to 2 years. Risks to workers involved with implementing either Alternative 2 or 3 are considered to be minimal and would be controlled by standard worker health and safety requirements associated with specific activities (such as excavation, equipment operation, and thermal treatment operation). There are no community risks from either alternative because of the remoteness of IRP Site OT001. Risks to the environment are also not considered to be significant because best management practices would be utilized during remedy implementation.

2.12.6 Implementability

Implementability addresses the technical and administrative feasibility of a remedy from design through construction and operation. Factors such as availability of services and materials, administrative feasibility, and coordination with other governmental entities are also considered.

Alternative 1 does not require any implementation.

Alternatives 2 and 3 would involve significant logistical efforts to move personnel, supplies, equipment, and soil to and from Kalakaket RRS. Alternative 3 would require additional

equipment and fuel-intensive complex processes making it more difficult to implement than Alternative 2.

2.12.7 Cost

The estimated present-worth costs include capital costs and O&M costs over an assumed period of 2 years using a 7% discount rate. Cost summaries for each alterative are provided in Table 2-11.

As indicated in Table 2-11, Alternative 2 is estimated to cost approximately $3.59 million. Alternative 3 is estimated to cost $4.97 million. There is no cost associated with Alternative 1 because no remedial action would be implemented.

Table 2-11
Soil Alternative Cost Estimates

Alternative	Capital Cost	Net Present Value (NPV) of O&M[a]	Total Estimated NPV Cost of Alternative
1. No action	$0	$0	$0
2. Source removal and offsite disposal of PCB-, dieldrin-, and 1,2,3-TCP-contaminated soil	$3,585,818	$0	$3,585,818
3. Onsite thermal desorption of PCB-, dieldrin-, and 1,2,3-TCP-contaminated soil	$4,965,898	$0	$4,965,898

[a] NPV assumes 7% discount rate and O&M period of 2 years.
PCB = polychlorinated biphenyls TCP = trichloropropane

2.12.8 State/Support Agency Acceptance

ADEC has expressed its support for the selected alternatives.

ADEC final concurrence will be demonstrated by the signing of this ROD.

2.12.9 Community Acceptance

During the public comment period, the community expressed its support for Alternative 1 because it appeared to them that a large amount of money was being expended to clean up an area where people did not visit. However, during the public meeting there was a discussion of the bioaccumulation effects of hazardous substances and the need to remove them from the site. The community comments and questions are included in the Responsiveness Summary (Section3).

2.13 Principal Threat Wastes

IRP Site OT001 does not contain any principal threat wastes.

2.14 Selected Remedy

The selected remedy is Alternative 2 for soil contaminated with PCBs, dieldrin, and 1,2,3-TCP above State of Alaska cleanup levels (18 AAC 75.341, Table B1) protective of unrestricted use.

Under this alternative, the contaminated soil will be excavated, staged, manifested, and transported to a CERCLA-approved disposal site certified for the permanent disposal of RCRA hazardous, industrial, and TSCA regulated solid wastes.

The primary indicator of remedial action performance will be satisfying the RAOs for IRP Site OT001 and protecting human health and the environment. Performance measures are defined herein as the RAOs (see Section 2.10, Remedial Action Objectives) and the required actions selected to achieve the objectives, as defined in this section. It is anticipated that successful implementation and completion of the performance measures will achieve a protective and legally compliant remedy for IRP Site OT001.

The remedy has been selected for the contamination conditions present at IRP Site OT001. The selected remedy, by subareas, and the basis for remedy selection are summarized in Table 2-12.

This section describes the selected remedy identified in Table 2-12 and provides its performance measures.

The AF is responsible for implementing, maintaining, and monitoring the remedial action selected and identified in this ROD for the duration of the remedy. The AF will exercise this responsibility in accordance with CERCLA and the NCP. Concurrence by ADEC is required for any modification of the remedy inconsistent with the objectives of this ROD.

Table 2-12
Summary of Selected Remedy for IRP Site OT001 Subareas

Contamination Condition	Affected Areas and Subareas	Selected Remedy and Basis for Selection
Soil contaminated with comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) hazardous substances	• Equipment Building (EQB) • Equipment Building Transformer (EQT) • Septic Tank Outfall (STO) • Airstrip Warehouse (AWH) • Drum Storage Area No. 2 (DS2)	Alternative 2: Source removal and offsite disposal of PCB-, dieldrin-, and 1,2,3-trichloropropane-contaminated soil Basis: The remedy protects human health and the environment through excavation and containment of the contaminated soil in an offsite landfill; has a high degree of implementability and permanence; and is cost-effective.

2.14.1 Summary of the Rationale for the Selected Remedy

The selected remedial alternative for IRP Site OT001 soil is presented in Table 2-12. The AF and ADEC believe that the selected remedy meets the threshold criteria and provides the best balance of tradeoffs among the other alternatives with respect to the balancing and modifying criteria. The remedy is expected to satisfy the following statutory requirements of CERCLA Section 121(b):

- Threshold criteria
  - Protection of human health and the environment
  - Compliance with ARARs

- Balancing criteria
  - Long-term effectiveness and permanence
  - Toxicity, mobility or volume reduction through treatment
  - Short-term effectiveness
  - Implementability
  - Cost
- Modifying criteria
  - State agency acceptance
  - Community acceptance

As discussed in Section 2.10, the RAOs for IRP Site OT001 at the Kalakaket RRS are as follows:

- Remedial actions will reduce the level of onsite contamination below ADEC Method 2, Table B1, cleanup levels.
- Remedial actions will result in a cumulative risk remaining after action that meets two criteria:
  - Cumulative carcinogenic risk standard of 1 in 100,000 across all exposure pathways is not exceeded.
  - Cumulative noncarcinogenic risk standard at a HI of 1 across all exposure pathways is not exceeded.
- Remedial actions will maintain the integrity of wetlands areas by minimizing disruption of ecological and water flow features.

2.14.2 Description of the Selected Remedy

The remedy selected for IRP Site OT001 soil at the Kalakaket RRS is described below. Significant changes, if they occur, to the remedy as described in this ROD would be documented using a technical memorandum in the Administrative Record, an Explanation of Significant Differences, or ROD amendment.

Alternative 2, Source removal and offsite disposal of PCB-, dieldrin-, and 1,2,3-TCP-contaminated soil

Under Alternative 2, soil contaminated with PCBs, dieldrin, and 1,2,3-TCP above State of Alaska cleanup levels (18 AAC 75.341, Table B1) protective of unrestricted use will be excavated, staged, manifested, and transported to an offsite CERCLA-approved disposal site.

2.14.3 Summary of Estimated Remedy Costs

The Kalakaket RRS FS (CH2M HILL, 2009, Appendix A) provided detailed cost estimate summaries for the three selected remedies. Table 2-11 presents the capital costs and annual O&M costs from the FS.

The information provided in the cost estimate summary tables is based on the best available information about the anticipated scope of the remedial alternative. These are order-of-magnitude engineering cost estimates expected to be within +50 to -30 percent of actual project costs. Cost estimate revisions may occur as new information becomes available and the remedial

design process proceeds. Major changes may be documented in the form of a memorandum in the Administrative Record file, an Explanation of Significant Differences, or a ROD amendment.

2.14.4 Expected Outcomes of Selected Remedy

The Kalakaket RRS and immediately adjacent land have no permanent human inhabitants. The RRS and surrounding area are expected to remain uninhabited for the foreseeable future. Current land use is recreation, hunting, and fishing. Land use is not expected to change in the foreseeable future.

The performance standards (cleanup levels) for CERCLA hazardous substances in soil at IRP Site OT001 are identified in Table 2-13.

Environmental restoration of contaminated soil and at the Kalakaket RRS, including excavation of soil contaminated above cleanup levels, is expected to achieve the performance standards and allow unrestricted use of the five subareas at IRP Site OT001 addressed in this ROD.

Table 2-13
Proposed Cleanup Levels For Kalakaket RRS

Chemicals of Concern	Soil (mg/kg)
Polychlorinated biphenyls	1.0
Dieldrin	0.32
1,2,3-trichlorpropane	0.17

Cleanup levels listed in 18 AAC 75.341, Table B1, under 40-inch zone
mg/kg = milligrams per kilogram

2.15 Statutory Determinations

Under CERCLA Section 121 (as required by NCP Section 300.430(f)(5)(ii)), the lead agency must select a remedy that is protective of human health and the environment, complies with ARARs, is cost-effective, and uses permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. In addition, CERCLA includes (1) a preference for remedies that employ treatment which permanently and significantly reduces the volume, toxicity, or mobility of hazardous wastes as a principal element; and (2) a bias against offsite disposal of untreated wastes. The following sections discuss how the selected remedy meets these statutory requirements.

2.15.1 Protection of Human Health and the Environment

The selected remedy will protect human health and the environment by removing soils containing PCBs, dieldrin, and 1,2,3-TCP at concentrations exceeding ADEC cleanup levels (18 AAC 75, Oil and Hazardous Substances Pollution Control Regulations), which are protective of unrestricted use, and containing these soils in a CERCLA-approved offsite landfill. The CERCLA-approved landfill will reduce and control human and environmental exposure to the CERCLA hazardous substances.

2.15.2 Compliance with ARARs

NCP Sections 300.430(f)(5)(ii)(B) and (C) require that the ROD describe the federal and state ARARs that the remedy will attain. Remedial actions must comply with both federal and state ARARs.

The selected remedy for IRP Site OT001 complies with the chemical-specific, location-specific, and action-specific ARARs. Table 2-14 summarizes the ARARs and criteria to be considered for the selected remedy at IRP Site OT001 by media and describes how selected remedies address each requirement.

2.15.3 Cost Effectiveness

In the AF's judgment, the selected remedies for soil are cost-effective and represent a reasonable value for the money to be spent. In making this determination, the following definition was used: "A remedy shall be cost-effective if its costs are proportional to its overall effectiveness" [40 CFR 300.430(f)(1)(ii)(D)]. This determination was accomplished by evaluating the "overall effectiveness" of those alternatives that satisfy the threshold criteria (that is, is protective of human health and the environment and ARAR-compliant). The selected remedy is the least expensive alternative that meets the ARARs and protects human health and the environment.

The overall effectiveness of the selected remedy for IRP Site OT001 was demonstrated in the comparative analysis of alternatives (Section 2.12, Summary of Comparative Analysis of Alternatives). The estimated present-worth cost of the selected remedies (in 2009 dollars) is $3,585,818.

2.15.4 Utilization of Permanent Solutions and Alternative Treatment Technologies

The AF has determined that the selected remedy represents the maximum extent to which permanent solutions and treatment technologies can be used in a practicable manner at site OT001, given its remote location and absence of residents. Of those alternatives that are protective of human health and the environment and comply with ARARs, the AF has determined that the selected remedy provides the best balance of trade-offs in terms of the five balancing criteria, while also considering (1) the statutory preference for treatment as a principal element and bias against offsite treatment and disposal and (2) state and community acceptance.

2.15.5 Preference for Treatment as a Principal Element

The NCP establishes the expectation that treatment will be used to address the principal threats posed by a site whenever practicable [40 CFR 300.430(a)(1)(iii)(A)]. The COCs at Site OT001 are generally immobile in air or groundwater and are of moderate to low toxicity. Therefore, there are no principal threat wastes associated with IRP Site OT001 at the Kalakaket RRS.

2.15.6 Five-Year Review Requirements

Pursuant to CERCLA Section 121(c) and NCP Section 300.430(f)(5)(iii)(C), because the selected remedy will not result in CERCLA hazardous substances, pollutants, or contaminants remaining on site above levels that allow for unlimited use and unrestricted exposure, a statutory review will not be required at IRP Site OT001 within 5 years after initiation of the remedial action to verify that the remedy is, or will be, protective of human health and the environment. Documentation of Significant Changes

The Proposed Plan for IRP Site OT001 at the Kalakaket RRS was released for public comment on May 11, 2009. The Proposed Plan identified the following preferred alternatives (USAF, 2009b):

- Soil – Alternative 2, Source removal and natural attenuation of petroleum-contaminated soil with land use controls and onsite/offsite disposal of PCB-, dieldrin-, and 1,2,3,-TCP-contaminated soil
- Groundwater – Alternative 2, Land use controls with monitored natural attenuation for petroleum hydrocarbon-contaminated groundwater

Alternative 2 has been modified so that it no longer addresses petroleum hydrocarbons in the soil and groundwater. The petroleum hydrocarbons in soil and groundwater are addressed in separate documentation as required by ADEC.

Alternative 2 has been revised to delete the option of onsite landfill disposal of PCB-contaminated soil. The Proposed Plan stated that soil contaminated only with PCB at concentrations below 10 mg/kg could be either buried within the proposed onsite landfill or shipped off site for disposal (USAF, 2009b).

The AF has reviewed all written comments submitted during the public comment period and determined that the above differences are the only changes made to the preferred alternatives identified in the Proposed Plan.

The Proposed Plan incorrectly stated that the 3,971 mg/kg was the maximum PCB concentration detected in the soil at the equipment building transformer subarea. The correct maximum PCB concentration is 3,820 mg/kg. This correction does not change the preferred alternative.

Table 2-14
Description of ARARs and Criteria to Be Considered

Type	Authority	Medium	Requirement	Status	Synopsis of Requirement	Remedial Action to be Taken to Attain Requirement
Chemical and Action Specific	State	Soil	Alaska Oil and Other Hazardous Substance Pollution Control Regulations (18 AAC 75.340–341)	Applicable	Establishes cleanup levels for PCB-, dieldrin-, and 1,2,3-TCP-contaminated soil	Excavate contaminated soil and dispose of the soil in offsite landfill
Location Specific	Federal	Surface water	40 CFR 6.302(a) Executive Order 11990	Relevant and appropriate	Protection of wetlands	Prevent adverse impacts to wetlands
Action and Chemical	Federal	Soil	Toxic Substances Control Act (TSCA) PCB Disposal Requirements (40 CFR 761.60–761.79)	Applicable	Cleanup of PCBs in soil	Excavate soil containing contaminants at concentrations greater than 50 parts per million "as found." Onsite/offsite disposal at location that that meets TSCA treatment and disposal requirements.
Action Specific	Federal	Soil; PPE; waste treatment residuals	RCRA Subtitle C—Hazardous Waste Characteristics (40 CFR 261.20)	Applicable	Generators of solid waste must determine if the waste is hazardous.	Characterize remediation wastes
Action Specific	Federal	Contaminated-soil	CERCLA Off-Site Rule (40 CFR 300.440)	Applicable	Offsite shipment of wastes must verify disposal site meets established requirements.	Ship contaminated soil to offsite disposal locations

Table 2-14
Description of ARARs and Criteria to Be Considered

Type	Authority	Medium	Requirement	Status	Synopsis of Requirement	Remedial Action to be Taken to Attain Requirement
Location Specific	Federal	Ecological habitat	Migratory Bird Treaty Act (16 USC 703 et seq.)	Relevant and appropriate	Protects all migratory bird species, including nests and eggs, and prevents "take" without a permit or by unauthorized methods.	Prevent injury to migratory nesting birds
Location Specific	Federal	Surface water	Fish and Wildlife Coordination Act of 1980 [16 USC 661 et seq.; 40 CFR 6.302 (g)]	Applicable	Requires consultation with USFWS when any modification of streams or other water bodies exceeds 10 hectares	Prevent impacts on surface water
Location Specific	Federal	Ecological habitat in soil and surface water	Fish and Wildlife Conservation Act of 1980 (16 USC 2901 et seq.; 50 CFR 83)	Applicable	Requires preservation of non-game fish and wildlife and their habitats	Prevent impacts on non-game fish and wildlife and their habitats

AAC = Alaska Administrative Code
ARAR = applicable or relevant and appropriate requirement
CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act
CFR = Code of Federal Regulations
PCB = polychlorinated biphenyl
PPE = personnel protective equipment
RCRA = Resource Conservation and Recovery Act
TCP = trichloropropane
USC = U.S. Code
USFWS = U.S. Fish and Wildlife Service

3.0 Responsiveness Summary

This section summarizes the public and regulatory agency questions and comments received regarding the Proposed Plan for remedial action at Kalakaket RRS. The public comment period was held from May 11, 2009 to July 9, 2009. Approximately 25 people attended the AF sponsored public meeting held at the Galena Community Center on June 2, 2009. Verbal and written comments and questions were received from the public during the public meeting and/or public comment period. The meeting presentation slides, transcript, attendance roster, and copies of written comments are included in the Administrative Record.

3.1 Public Comments and Lead Agency Responses

This section documents comments and questions from the public received during the public meeting on June 2, 2009. Mr. Tommie Baker, 611th CES Community Relations Coordinator, and Ms. Vivian Tokar, CH2M HILL, represented the AF at the public meeting. Ms. Kim DeRuyter, ADEC, was also present at the meeting.

Comments and Questions in general have been paraphrased; quotes are in italic text. Any response given during the public meeting and additional Lead Agency Responses are provided.

3.1.1 Verbal Comments and Questions

1. Comment from Mr. Huntington: Mr. Huntington is concerned about spending taxpayer money for cleanup of a place like Kalakaket which "*could sit there 1,000 years and not hurt anybody*" rather than spending money to protect our troops sacrificing overseas (in Iraq specifically).

Response from Mr. Haas: Mr. Hass was presenting about remedial actions at Galena when Mr. Huntington made this comment, but he responded to the question by agreeing that there should be some visible benefit for cleanup effort.

Additional Response from AF: Kalakaket RRS has essentially been unused for over 30 years and has been scheduled for demolition since the 1990's. The remedial activities being conducted by the U.S. Air Force in Kalakaket are in accordance with state and federal regulations and U.S. Air Force policy. Demolition work and remedial activities are being coordinated to minimize time and costs when appropriate. Funding provided by Congress for remedial activities is separate from funding necessary for other Department of Defense activities, as required by law.

2. Question from Ms. Debbie Koontz: What does "staged" and "manifested" mean with respect to what is happening with contaminated soil and waste at Kalakaket?

Responses from Ms. Tokar and Ms. DeRuyter: Based on State and Federal regulations, different wastes need to be handled in different ways, as far as storage, labeling, transport, and disposal. Staging is following these regulations during temporary storage. "Manifest" refers to requirements for tracking/labeling potentially hazardous material.

Response from DOT employee in audience: Contaminated soil has rules that must be followed when transporting contamination on roads/by plane and the process of "staging" and "manifesting" reflects those rules.

Additional Response from AF: In the context of hazardous waste, the word "stage" or "staging area" typically refers to the temporary storage or temporary storage area where hazardous waste is placed prior to being moved to another location. For example, when a hazardous material is

being prepared or awaiting for shipment, it is placed at a centralized staging area. This is to differentiate it from the term "storage" area which has very specific meaning for hazardous waste. A hazardous waste "storage" area has to meet specific requirements such as aisle space and secondary containment. “Manifest” refers to using The Hazardous Waste Manifest System which is a set of forms, reports, and procedures designed to seamlessly track hazardous waste from the time it leaves the generator facility (Kalakaket RRS) where it was produced, until it reaches the off-site waste management facility that will store, treat, or dispose of the hazardous waste (Washington or Oregon). The system allows the waste generator to verify that its waste has been properly delivered, and that no waste has been lost or unaccounted for in the process.

3. Comment from Mr. Koontz: It doesn’t seem to make sense to spend the money to remove PCB-contaminated soil that isn’t impacting anyone away in a remote, not-visited site to store it somewhere else.

Response from Ms. DeRuyter during meeting: Federal regulations require that certain concentrations be dealt with in specific ways, such as removal. It is important to remove PCBs from the site because they bioaccumulate up the food chain, eventually building up in food animals such as caribou, ptarmigan, etc.

Additional Response from AF: PCBs have been demonstrated to cause cancer, as well as a variety of other adverse health effects on the immune system, reproductive system, nervous system, and endocrine system. Once in the environment, PCBs do not readily break down and therefore may remain for long periods of time in soil. PCBs can accumulate in the leaves and above-ground parts of plants and food crops. They are also taken up into the bodies of small organisms and fish. As a result, people or animals that ingest small organisms or fish may be exposed to PCBs that have bioaccumulated. The Air Force is required by State of Alaska regulation to clean-up soil contaminated with PCB at concentration greater than 1 mg/kg (1 part per million (ppt) to protect human health and the environment.

4. Question from Mr. Phil Koontz: Why not dispose of PCB soils at Kalakaket?

Response from Ms. DeRuyter: Federal regulations require higher concentrations be disposed of offsite and some lower concentrations may be disposed of onsite.

Additional Response from AF: The Air Force must follow State and Federal regulations for the disposal of PCB contaminated soils. Soil contaminated with PCB at concentrations between 1 mg/kg and 10 mg/kg could be disposed of at Kalakaket RRS if the landfill is designed and permitted to accommodate it. However, Kalakaket soil is contaminated with a wide range of PCB concentrations, from 1 mg/kg to over 3,000 mg/kg. The AF has decided that due to the short field season it is not worth the additional effort to identify the soil contaminated with concentrations between 1 mg/kg and 10 mg/kg for on site disposal. Soil above 50 mg/kg can not be disposed of in the State of Alaska and must be shipped to facilities in Washington or Oregon.

5. Question from Mr. Demaski: What will the Air Force do to compensate me if there is damage to the native allotment (land) from moving equipment to and from Kalakaket?

Response from Air Force: If you want to file a claim for compensation, contact the Claims Officer, 3WG/JA, 8517 20th St, Suite 330, Elmendorf AFB, AK 99506-2400."

6. Question from Mr. Demanski: What will happen to the cabins? The two cabins south of the airstrip were built by MK construction and no one will miss them but the black cabin closer to the creek is one I use for trapping (Mr. Demanski said he did not own it) and I will be upset if it is demolished.

Response from Ms. Tokar: I will give your phone number to the AF "Clean Sweep" team so they can contact you about the cabins.

Additional Response from Air Force: The two hunting cabins south of the airstrip are scheduled for demolition. No other cabins are scheduled for demolition

7. Question from Ms. Sam: We had 30 days to get comments in, what is time limit on responses?

Response from Mr. Baker: There is not a time limit on responses; it will depend on the number and type of questions. The AF must provided responses before the ROD can be finalized, therefore the AF will address them as quickly as possible.

8. Question from Mr. Bodony: Can comments change the Proposed Plan as far as what will be done?

Response from Ms. Tokar: "Community Acceptance" is an important factor in selection of preferred alternative. The Proposed Plan is specifically for identifying how the AF will clean up contaminated soil and groundwater and comments can change the preferred alternative. However, please note that the demolition of the facilities is not a CERCLA action and the Air Force is not required to have a public comment period on demolition plans.

Response from Ms. DeRuyter: Demolition can begin, but public comments must be addressed before cleanup of contamination can begin.

9. Question from Mr. Bodony: Did community have any input on decision to demolish buildings? For example, above North Pole a radar station was left in place for air navigation purposes.

Response from Mr. Baker: Associated with a Galena BRAC meeting a meeting was held about demolition at Kalakaket where public comments were taken. The demolition does not follow the same process as the formal Remedial Investigation, but the AF did provide opportunity for public to provide input. With respect to what happened at the other site, the AF weights the structures' value for navigation against liability of someone potentially getting hurt on these structures.

10. Question from unidentified speaker: How will individual questions be responded to?
Response from Ms. Tokar: There are several options: individuals who provided an address at sign-in will get copy of the Response Summary document. The Response Summary will be made available at the post office, on PP website (which will stay up through ROD signature), and possibly a local website.

Additional Response from AF: The Response Summary will be included in Section 3 of the ROD.

11. Question from Mr. Demaski: Why is the public comment period happening now after contract has been put out and there is already equipment in place to perform the action? I understand contractors should be allowed to do their jobs, but why hire them to do this in the first place?

Response from Air Force: The AF prefers to have public comment periods before any contracts are awarded; however, the project for the demolition of Kalakaket RRS structures was moved up 1 year and that caused and overlap with the CERCLA process for cleanup of contamination.

12. Question from Ms. Sam: Shouldn't the public comment period be extended since the public meeting was delayed?

Response for Ms. Tokar: The requirement is for a public meeting within the 30-day period, it does not specific exactly when. There is an option for the public to request and extension of the public comment period.

13. Question from Ms. Sam: How many contracting companies will be working at Kalakaket to remove and inspect?

Response from AF: The demolition and clean up of contaminated soil will be accomplished through the 611th Civil Engineering Squadron's "in-house" environmental clean-up personnel. A team of eight 611th CES, supported by approximately three camp support personnel contracted through Marsh Creek will accomplish the work.

14. Question from Ms. Sam: How much effort will be put in hiring local people for the work at Kalakaket?

Response from AF: Since the demolition and clean-up is being accomplished through 611th Civil Engineering Squadron "in-house" environmental clean-up personnel there is limited need for additional local workers. However, the AF encourages any contractors to use local hire as much as possible.

15. Question from Ms. Nollner: Are blueberries at Kalakaket contaminated? There are very large berries near the airstrip.

Response from the AF: The AF did not test the blueberries directly; however the AF looks at the concentrations of contamination in the soil and groundwater and evaluates the risk to humans if they directly contact or consume soil or groundwater. By looking directly at soil, the PCB contamination in soil does pose unacceptable risk to humans, and that is why the AF is cleaning it up. While there is PCB contaminated soil identified near the Airstrip warehouse, none was identified near the airstrip itself. The blueberries therefore cannot accumulate PCBs when they are absent from soil in this area.

3.1.2. Written Comments

1. Comment from Ms. Sam: Extend the comment period to real 30 days. Initial info reviewed June 2, 09 – therefore end July 2, 09.

Response from AF: The public comment period was extended 30 days to July 9, 2009.

2. Comment from Ms. Sam: Contractor use local hire for any labor or work.

Response from AF: Since the demolition and clean-up is being accomplished mainly through 611th Civil Engineering Squadron "in-house" personnel there is limited need for additional local workers. However, the AF encourages any contractors to use local hire as much as possible.

3. Comment from Mr. Bodony: Please extend the public comment period until July 9, 2009 to allow for more opportunities to collect comments. Most Galena residents only learned of a public

comment period in late May or at the public meeting on June 2.

Response from AF: The public comment period was extended 30 days to July 9, 2009

4. Comment from Ms. Wanda Attla Lord: Dear Sir or Mam, I am requesting that the Public Comment period be 30 days from June 2, 2009 since this is the time that we were having the meeting we attended. Please give me a response and notification of all answered questions here tonight. Thank you.

Response from AF: The public comment period was extended 30 days to July 9, 2009. A copy of the Response Summary will be mailed to you.

5. Question from Ms. Wanda Attla Lord: Could it be that some of the large number of people who have cancer and died of cancer could have been caused by the Air Force contaminants? What are they doing to find out?

Response from AF: No link of any kind has been shown between contaminants at Kalakaket Creek RRS and health issues among Galena area residents. The cleanup levels required by ADEC regulations are based in part on minimizing future risk of any negative impacts to human health and the environment. Risk assessment is an integral part of the U.S. Air Force's approach to environmental remediation for all sites

6. Question from Ms. Koontz: What efforts will be made to hire as many local people as possible for this project?

Response from AF: Since the demolition and clean-up is being accomplished mainly through 611th Civil Engineering Squadron “in-house” personnel there is limited need for additional local workers. However, the AF encourages any contractors to use local hire as much as possible

7. Comment from Mr. Koontz: This proposed plan should have been presented about a year ago, before the Air Force mobilized all their rented heavy equipment down the Yukon and back up the ice road. Sidney Huntington commented verbally, and I agree, that the spectacle of hauling million of pounds of equipment and thousands of gallons of fuel to an isolated mountaintop in bush Alaska is a bit horrifying in the scope of the waste and expense.

Response from Air Force: The AF prefers to have public comment periods before any contracts are awarded; however, the project for the demolition of Kalakaket RRS structures was moved up 1 year and that caused and overlap with the CERCLA process for cleanup of contamination.

3.2 Summary of Stakeholder Comments and Lead Agency Responses

The Alaska Department of Environmental Conservation (ADEC) provided written statements on the SSI/RI and Proposed Plan during their development. These comments were resolved prior to issuance of Final SSI/RI and Final Proposed Plan.

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Attachment 1
Notice of Document Availability

NMclassifieds459-7555

1-23 ANNOUNCEMENTS | 26-32 EMPLOYMENT | 34-43 FINANCIAL | 48-49 INSTRUCTION & SCHOOLS | 60-79 REAL ESTATE | 80-99 RENTALS | 100-108 LIVESTOCK & PETS | 110-159 GENERAL MERCHANDISE | 160-166 AIRCRAFT & BOATS | 170-187 AUTOMOTIVE

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1-23 ANNOUNCEMENTS

1. Legal Notices

298132
FAIRBANKS RECORDING DISTRICT NOTICE OF DEFAULT AND ELECTION TO SELL

1. Default has been made by the maker being delinquent in the payment due under a certain Adjustable Rate Note and Rider dated December 5, 2008, in the amount of $240,000.00, wherein Christopher S. Scarborough is the maker and Mt. McKinley Bank is the lender; and
2. The balance due on above described note is in the sum of $243,267.10, which includes interest and late fees from January 1, 2009 through March 16, 2009, at the rate of six and one half percent (6.5%) per annum; and other sums pursuant to the Deed of Trust and Adjustable Rate Rider under said Deed of Trust that was given as security for said notes, including costs of sale; and
3. Under the terms of the note and Deed of Trust, the unpaid balance shall become due and immediately payable at the lender's option upon the delinquency of any installment payment. The monthly payment is two months in arrears, and the full amount is now due and owing: and Mt. McKinley Bank exercises its option and declares the full unpaid balance of the note forthwith payable and has so notified the maker thereof, and does hereby again notify the maker thereof; and
4. Said above-described note is secured by a Deed of Trust wherein Christopher S. Scarborough and Tina Scarborough are the Trustors and Yukon Title Company, Inc., is the Trustee, and Mt. McKinley Bank is the Beneficiary, which Deed of Trust was recorded on December 10, 2008 as Instrument #2008-024357-0; Records of the Fairbanks Recording District, State of Alaska; and
5. The property that is the subject of said Deed of Trust is situated in the Fairbanks Recording District, Fourth Judicial District, State of Alaska and more particularly described as:
Lot 1, Block 2 of BIRCH-WILLOW SUBDIVISION, according to the plat filed June 7, 1990 as Plat Number 90-40; Records of the Fairbanks Recording District, Fourth Judicial District, State of Alaska.
With an address of 1393 Birchwillow Road, Fairbanks, Alaska.
6. The Trustee hereby elects to sell said property to satisfy the unpaid obligations;
All persons take note that the Trustee, Yukon Title Company, Inc., does hereby elect to sell the above-described property for non-payment of the above-described credit agreement that is secured by said previously described Deed of Trust, and that such sale shall be on the 2nd day of July 2009, at the hour of 10:00 a.m., in the indoor lobby of the Alaska State Court and Office Building, 101 Lacey Street, Fairbanks, Fourth Judicial District, State of Alaska. Interested persons should go through courthouse security.
Yukon Title Company, Inc.
714 Gaffney Road
Fairbanks, Alaska 99701
/s/by: Cathy Shuttleworth
Its: Secretary
Publish: April 30, May 7, 14, 21, 2009

1. Legal Notices

Defendants.
Case No. 4FA-09-1365 CI.
NOTICE AND SUMMONS TO ABSENT DEFENDANTS
To: Gareth Spaulding.
Also, all other persons or parties unknown claiming a right, title, estate, lien or interest in the real properties described in the complaint on file in this action.

You are hereby summoned and required to plead in response to the complaint on file in this action. Your pleading must be filed with the Clerk of Court, Rabinowitz Courthouse, 101 Lacey Street, Fairbanks, Alaska 99701 within 30 days of the last publication of this notice. You must also, within the same time, direct a copy of your pleading to plaintiff's attorney Barry Donnellan, 937 8th Avenue, Fairbanks, Alaska 99701.

This is an action to quiet title to real properties described as follows:

Tracts One (1) and Two (2), Blueberry Acres Subdivision, according to the plat filed July 11, 1960 as Instrument Number 60-5287, Fairbanks Recording District, Fourth Judicial District, State of Alaska.

The relief demanded is that title to the real properties described above be quieted in plaintiff free and clear of the claims of defendants.

Gareth Spaulding is joined in this action because he is named as a grantee in the warranty deed recorded March 27, 2002 and recorded as Instrument Number 2002-005976-0, Fairbanks Recording District.

If you fail to plead a default judgment may be entered against you for the relief demanded in the complaint.
Clerk of Court
Dated 4-28-09
/s/by: Amy McKnight,
Deputy Clerk
Publish: April 30, May 7, 14, 21, 2009

301595
IN THE SUPERIOR COURT FOR THE STATE OF ALASKA FOURTH JUDICIAL DISTRICT
In the Matter of the Estate of
Richard Lee Waugaman,
Deceased.
Case No.
4FA-09-255 PR/E
NOTICE TO CREDITORS
NOTICE IS HEREBY GIVEN that Suzanne Leveque Waugaman has been appointed personal representative of the above-named estate. All persons having claims against the decedent are required to present their claims within four months after the date of the first publication of this notice or said claims will be forever barred. Claims must either be presented to Suzanne Leveque Waugaman Personal Representative of the Estate of Richard Lee Waugaman c/o Hompesch & Evans, P.C., 119 North Cushman St., Suite 400, Fairbanks, Alaska 99701, or filed with the court.
Dated this 28th day of April, 2009.
/s/by:
Suzanne Leveque Waugaman
2667 Alaska Range Lane
Fairbanks, Alaska 99709
Publish: April 30, May 7, 14, 2009

2. Public Notices

303242
The American Recovery and Reinvestment Act of 2009 (ARRA) provided additional funds to the Emergency Food and Shelter National Board Program (EFSP) for the following jurisdictions: Fairbanks North Star Borough, Nome Census Area, Northwest Arctic Borough, Southeast Fairbanks Census Area, and Yukon-Koyukuk Census Area.

The selection will be made by a National Board that is chaired by the Department of Homeland Security's Federal Emergency Management Agency (FEMA). The National Board is charged to distribute funds appropriated by Congress to help expand the capacity of food and shelter programs in high-need areas around the country.

A Local Board will determine how the funds are to be distributed among the emergency food and shelter programs run by local service agencies in various areas. The Local Board is responsible for recommending agencies to receive these funds and any additional funds available under this phase of the program.

Under the terms of the grant from the National Board, local agencies chosen to receive funds must: (1) be private voluntary nonprofits or units of government, (2) have an accounting system, (3) practice nondiscrimination, (4) have demonstrated the capability to deliver emergency food and/or shelter programs, and (5) if they are a private voluntary organization, they must have a voluntary board. Qualifying organizations are urged to apply.

Public or private voluntary agencies interested in applying for Emergency Food and Shelter Program funds must contact United Way of the Tanana Valley at 907-452-7211 extension 24 for an application. The deadline for applications to be received is **May 29, 2009.**
Publish: May 7, 10, 20, 21, 200

4. Invitation to Bid

302982
ALASKA RAILROAD CORPORATION (ARRC)
INVITATION TO BID 09-21-57472 PORT MACKENZIE BI-MODEL BULK FACILITY CONSTRUCTION PROJECT

The Alaska Railroad Corporation (ARRC) is soliciting bids from interested concerns for Port MacKenzie Bi-Model Bulk Facility Construction Project.

Pre-Bid Conference: May 14, 2009 at 2:00PM at the Alaska Railroad Corporation's Denali Board Room, 3rd floor, 327 W. Ship Creek Ave., Anchorage, AK.

Bids will be accepted until 3:00p.m. May 21, 2009.

ARRC is an equal opportunity corporation who encourages the utilization of small business concerns owned and controlled by socially and economically disadvantaged individuals.

To receive a copy of this offer please contact: Alaska Railroad Purchasing & Materials, (907) 265-2630.

This bid document is also available on the Internet under www.alaskarailroad.com, "Solicitations". Publish: May 6, 7, 8, 2009

303189
INVITATION FOR BID IFB No. 09068, Goldstream Moose Creek Service Area Annual Maintenance
Public notice is given that the FNSB will receive sealed bids for annual road maintenance within the Fairbanks North Star Borough Goldstream Moose Creek Service Area. Bids will be received until **May 21, 2009 at 2:00 p.m.**

FNSB bid documents are available for viewing online at www.co.fairbanks.ak.us/bidsonline and are available in the Purchasing Office at 809 Pioneer Road, Fairbanks, AK. Publish: May 7, 2009

303185
INVITATION FOR BID IFB No. 09069, Herning Hills Service Area Annual Maintenance
Public notice is given that the FNSB will receive sealed bids for annual road maintenance within the Fairbanks North Star Borough Herning Hills Service Area. Bids will be received until **May 21, 2009 at 2:00 p.m.**

FNSB bid documents are available for viewing online at www.co.fairbanks.ak.us/bidsonline and are available in the Purchasing Office at 809 Pioneer Road, Fairbanks, AK. Publish: May 7, 2009

303180
INVITATION FOR BID IFB No. 09071, Lakloey Hill Service Area Annual Maintenance
Public notice is given that the FNSB will receive sealed bids for annual road maintenance within the Fairbanks North Star Borough Lakloey Hill Service Area. Bids will be received until **May 21, 2009 at 2:00 p.m.**

FNSB bid documents are available for viewing online at www.co.fairbanks.ak.us/bidsonline and are available in the Purchasing Office at 809 Pioneer Road, Fairbanks, AK. Publish: May 7, 2009

303183
INVITATION FOR BID IFB No. 09072, McCloud Service Area Annual Maintenance
Public notice is given that the FNSB will receive sealed bids for annual road maintenance within the Fairbanks North Star Borough McCloud Service Area. Bids will be received until **May 26, 2009 at 2:00 p.m.**

FNSB bid documents are available for viewing online at www.co.fairbanks.ak.us/bidsonline and are available in the Purchasing Office at 809 Pioneer Road, Fairbanks, AK. Publish: May 7, 2009

302412
REQUEST FOR PROPOSAL
Project Title: Video Teleconferencing System
The North Slope Borough is seeking a common carrier to provide digital satellite transport connectivity, VTC equipment, installation and training, as well as ongoing maintenance, on-call technical support, helpdesk phone support, and management services. The objective is to provide and maintain video teleconferencing connectivity between the villages of Anaktuvuk Pass, Atqasuk, Barrow, Kaktovik, Nuiqsut, Point Lay, and Wainwright to more effectively and efficiently conduct the business of the Borough, augmenting the delivery of health care and training services.
An electronic copy of the Request for Proposal may be obtained from Gail Reed, Project Administrator, Health Department, 5200 Karluk Street, Barrow, Alaska 99723, 907-852-0366, gail.reed@north-slope.org
Proposals are due no later than 4 PM ADT on Wednesday, May 27, 2009 to the ATTN of Gail Reed at the above listed address. Proposers are responsible for the timely delivery of their proposal and are solely responsible for any and all costs incurred in responding to the Request for Proposal. Publish: May 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 2009

301702
SUB AND SUPPLIER BIDS REQUESTED FOR: New Norton Sound Regional Hospital Nome, Alaska
Sol. #09-102-SOL-00003

BIDS DUE TO NCI BY: May 27, 2009 3:00 PM

SUBMIT BIDS TO:
Bering Straits Development Co./
Neeser Construction, Inc. JV
Attn: George Tuckness
2501 Blueberry Road
Anchorage, AK 99503
Phone: 907-276-1058
Fax: 907-276-8533
george@neeserinc.com

Bering Straits Development Co./Neeser Construction, Inc. JV is an Equal Opportunity Employer and requests bids from Small Businesses: American Indian/Alaska Native Firms, Small Disadvantaged Business Firms, HUB-Zone Firms, Women-Owned Firms, Veteran-Owned Firms, & Service-Disabled Veteran-Owned Firms
Publish: April 30, May. 1, 2, 3, 4, 5, 6, 7, 8, 2009

10. Lost & Found

Found: 05/04 In Bentley Mall Safeway Parking Lot Set Of Keys Have Pilot Auto Start Mechanism. Call 388-7916 To Identify.

Found: Girl's Metallic Blue Bike On Farmers Loop Near University. Call 474-0107 To Identify.

Found: Gold Necklace UAF Campus 479-0804

Found: Keys At 10th & Barnette On May 5th. Call 459-7555 To Identify.

LOST Norwegian Elkhound & English Bulldog near Shuros Dr. off Farmer's Lp. 452-6252

12. The Meeting Place

NEED A SERVICE? Be sure to check out the "WHO DOES IT" Service Directory for your special needs.

NEW MEETINGS OF GAMBLERS ANONYMOUS. Meet Friday night 7-8pm at St. Matthews 1030 2nd Ave

13. Personals

A FREE PREGNANCY TEST CareNet Pregnancy Center 455-TALK (8255)

AL-ANON for family and friends of Alcoholics. Call 456-6458

Emergency & Crisis Services. 24 hrs / day. Fbks Community Behavioral Health Cntr. 452-1575

Need to stop drinking? ALCOHOLICS ANONYMOUS We can help. Call 456-7501

PROBLEM WITH DRUGS? Call the Narcotics Anonymous Help Line 452-7372

17. Special Notices

AL-ANON Meeting for family and friends of Alcoholics. First Presbyterian Church 547 7th Ave, 2nd Floor. Every Wed. 12:30pm-2:00pm

19. Travel-Transportation

NOTICE
Most airline tickets are non transferable. Airlines may not honor tickets held by individuals other than those named on the ticket. Second party users also run the risk of insurance non-compliance.

NOTICE
Most airline tickets are non-transferable. Airlines may not honor tickets held by individuals other than those named on the ticket. Second party users also run the risk of insurance non-compliance.

SHIP YOUR VEHICLE ANYWHERE in the USA For Rate Info call weekdays 452-7342

The deadline for legal notices is 3 PM the day before publication. Classified: 459-755 fax 452-5054

23. Free Ad Column

1992 Toyota Carolla. Wrecked Car for Parts. 750-1441.

88 Mercury Topaz. AWD. Great Parts Car. 488-6609 or 687-6589.

Awesome Rescued Cats. Tired of life in cages. 978-0515.
♥♥♥♥♥♥♥♥♥♥♥♥♥♥

Can't find the pet you're looking for??? Try the Borough Animal Shelter at 2408 Davis Road

Closet Maid Complexions. New Material. Free Of Cost. Small Installation Fee. 456-2234

Free Ferrets. Apply Online at: tinyurl.com/c4aqcb email deokasweaselwarehouse@gmail.com or Call. 808-389-5626

FREE Friendly Sled Dogs - Several older leaders. To good homes only. 347-8168

Free Small Female Dog. Needs Spay. 455-7355

Free Cars with Titles. 86 Toyota Van - Body damage. 85 Mitsubishi Pick-up - Body damage. 90 Plymouth Horizon - Bad axle. 93 Ford Escort - Body Shot. 87 Plymouth Horizon - Body Damage. 92 Nissan Sentra - Bad Tranny. Call 490-0174.

Full Grow Siberian Huskies. 2 Males, 1 Female. 488-6609 or 687-6589

Moving. Harlee Needs A Good Home. Female, Spayed, De-Clawed. Likes To Cuddle & Play Outdoors. To Good Home Only 388-8519

26-32 EMPLOYMENT

26. Childcare Wanted

For Childcare Services Check our "Who Does It" SERVICE DIRECTORY

29. Help Wanted

Established Alaskan business seeks qualified **ACCOUNTS RECEIVABLE** person for permanent full time employment. 5 years accounting and computer experience required. Excellent pay & benefits offered. Position open until filled. Send resume and 3 professional references to Blind Box #250, PO Box 70710, Fairbanks, AK 99707.

ADD PIZAZZ TO YOUR AD
Your advertisement will be seen and remembered by more readers when you use an attention-getter. We have the following symbols (and more) available in various size types.

ATTENTION GETTERS
Really Work - Just Ask!
459-7555

ADMIN ASSISTANT
Needed for FT permanent positions. Bookkeeping/accounting exp a must. Pay DOE. EOE. Apply at Apply at Yukon Equipment Co., 3511 International St. Fairbanks.

Airport Gas and Oil is currently accepting applications for the following:

Gas Station Attendant
Part Time/On-call. Varied hours.

See additional open positions at www.evertsair.com. Fax resume to Tania at 907-450-2320 or complete an application at 5525 Airport Industrial Rd. EEO Employer.

American Relocation Services is looking for CLASS A CDL DRIVERS. Must have 2 years driving exp., current DOT medical card & pass pre-employment drug screen. Household goods moving exp. a plus, but not necessary. Good pay & benefits. Please bring copy of driving record and apply at 3411 Lathrop St. Ste L.

Assistant Kitchen Manager. Experience in catering, supervising employees, food quality and cleanliness. Must be a team leader. Apply in person or send resume to Big Daddy's BBQ 107 Wickersham St. Fairbanks AK 99701

Automotive Mechanic/Technician
Auto Service Company is currently looking for an Automotive Technician with Ford/Mazda experience. Come join the staff of Fairbanks' number one Auto Dealership. We offer a very competitive wage and benefit package. Must have a valid driver's license and good driving record. Apply in person at 1000 Cadillac Ct. or fax resume to 907-455-9825. No phone calls please.

BARISTA/CASHIER/DELI needed for cafe downtown. Must be friendly, motivated, energetic, and have great customer service skills. Apply in person at River City Cafe and Espresso, 523 2nd Avenue. No phone calls please.

BARTENDER positions available. Apply in person at Shenanigans, 10p-5p Monday thru Friday.

BEWARE
Employment offers that suggest out of state or overseas positions, glamorous travel, gifts or unrealistically high wages for limited experience may be deceptive or unethical in nature. To verify the validity of such jobs you may contact the Department of Labor at 451-2886

IT'S A CINCH to get new customers for your business when you advertise in the News-Miner Classifieds. Dial 459-7555.

BUDGET RENT-A-CAR
Lot Attendant
Night / Weekends.
Wage $12/hr. + Benefits. Must have good Driving Record. Apply at the Airport Counter. No phone calls.

Full Time Waitstaff. Must Be Over 21. Part Time Dishwasher/Prep Cook. For Applications & Interview Call The Vallata 455-6600

CANDY KINGDOM in the Bentley Mall is looking for dependable, outgoing & honest people to help customers & stock. Stop by for an application!!

CAR DETAILERS
Immediate FT openings. Must be exp'd, dependable & have good driving record. Must work weekends & possible nights. Drug test required. Serious prospects only. Apply in person at 4960 Dale Rd. Mon-Fri, 10a-4p

Carpenter, Plumber, Electrician, Computer Tech, Maintenance, Mechanic, Rent/Wages 479-0751

Cleaner/Kennel Worker Needed: E-mail resume to holydogkennels@yahoo.com

Cribs, Cradles & Things needs a Motherly/Grandmotherly SALES PERSON who loves babies and has lots of patience to work on weekends & Mondays. Apply in person at 1440 University Ave.

CUSTODIANS
Part/Full-time position open, evening & some weekends. Must dependable & reliable w/ verifiable work experience. Drug screening required. $10.50/hr Starting. Call 458-8899 between 9a-1p for appt.

CUSTOMER SERVICE REPS
Needed Mon-Thur: 4pm-2am, & Fri/Sat/Sun: 4am-2pm. Apply at Hertz Airport counter.

DENTAL ASSISTANT
Family practice. Permanent position. Experienced in dental assisting only. Call 374-7936

DENTAL ASSISTANT
Our practice needs an experienced, energetic, technically excellent, patient-focused team member. Excellent hours, salary and benefits. Bring resume to 102 Tenth Ave. or fax to 456-6122.

Driver/Guide Needed For Local Shuttle & Tour Company. Must Be 25. Clean Record. Chauffeurs Lic, Class B Passenger A Plus. Salary DOE. Call Jeff at 452-3337

DRIVERS WANTED. ALASKA CAB & KING CAB. Will train, Must be 23 y/o. Chauffeur's Lic req. 479-6818 or 452-2222

Environmental Company accepting applications for entry level Environmental Management position in Fairbanks. Min. 2 yrs exp. in environmental or construct. work. Fax resume: 907-258-8662.

Everts Air Fuel is currently accepting applications for a **TRUCK MECHANIC.** Must have 5 yrs exp. Class A, or Class B Tanker inspection certificate preferred. See additional open positions at www.EvertsAir.com. Fax resume to HR, Attn: Tania at 907-450-2320, or complete an application at 5525 Airport Industrial Rd. EEO Employer

EXP'D LANDSCAPE CREW MEMBERS & 1 CARPENTER with deck, fence & retaining wall skills. Must possess valid driver's license. Pay DOE. Apply at Labrenz Landscaping, 2759 College Rd.

FAIRBANKS URGENT CARE
MEDICAL ASSISTANT
Looking for a motivated individual to join our team! This is a full-time rotational schedule position including evenings and weekend. Salary DOE. Benefit package available. Applicants apply in person at 1867 Airport Way (130B) or fax resume to 452-3176.

MEDICAL RECEPTIONIST
FT, Busy medical practice. Position will require applicant to work evenings & weekends. Experience desired, but not required. Training provided. Must be able to work efficiently in a fast paced environment and also maintain a high level of accuracy. Only individuals willing to work as part of a team need apply. Salary DOE. Benefit package available. Please fax cover letter/resume to 452-3524.

NEED EXTRA CASH? Have a garage sale for spendable money. Phone 459-7555 and a Classified Ad-Visor will help you.

303001 Legal

PUBLIC NOTICE
AIR FORCE ANNOUNCES PROPOSED PLAN FOR REMEDIAL ACTIONS
KALAKAKET CREEK RADIO RELAY STATION (RRS)
KALAKAKET CREEK, ALASKA

The 611th Civil Engineer Squadron (611 CES) at Elmendorf Air Force Base, Alaska, announces the public availability of Proposed Plans and a 30-day public comment period regarding environmental cleanup options and recommendations. Kalakaket Creek Radio Relay Station is located approximately 20 miles south of Galena, and 270 mile west of Fairbanks, AK. Kalakaket Creek RRS was originally constructed as part of the White Alice Communication System in the 1950's; in 1973 the site was deactivated. The Proposed Plan includes descriptions of the site background, summary of site characteristics, summary of site risks and remedial action objectives, summary of remedial alternatives and evaluation of remedial alternatives. The remedial alternatives evaluated for soil include (1) No action; (2) Source removal and natural attenuation of petroleum-contaminated soil with land use controls and onsite/offsite disposal of PCB-, dieldrin-, and 1,2,3-trichloropropane-contaminated soil; and (3) Onsite Low-Temperature Thermal Desorption of petroleum-, PCB-, dieldrin-, and 1,2,3-trichloropropane - contaminated soil. The preferred contaminated soil alternative in the Proposed Plan is Alternative 2, Source removal and natural attenuation of petroleum-contaminated soil with land use controls and onsite/offsite disposal of PCB-, dieldrin-, and 1,2,3-trichloropropane-contaminated soil. The remedial alternatives evaluated for groundwater include (1) No action, and (2) Land use controls with natural attenuation. The preferred contaminated groundwater alternative in the Proposed Plan is Alternative 2, Land use controls with natural attenuation. The selected alternatives will satisfy the following Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) requirements: be protective of human health and the environment; comply with applicable remedial action requirements; be cost- effective; utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable; and satisfy the preference for treatment as a principle element, or explain why the preference for treatment will not be met.

The Proposed Plan is a document that the Air Force is required to issue to fulfill the requirements of CERCLA. The public is encouraged to participate in the decisionmaking process regarding the site. You may comment on the proposed cleanup alternatives presented in the Proposed Plan during the 30-day public comment period, from May 11 to June 9, 2009. There is a public meeting to discuss the Proposed Plan to be held at the Galena Community Center 7pm on Monday, May 11, 2009. During this meeting, the public will be given the chance to submit both oral and written comments. The Proposed Plan is available at http://projects.ch2m.com/Kalakaket/ and copies can be obtained by contacting Mr. Tommie Baker at the address or phone numbers listed below. You may submit your comments through written letter, fax, email or telephone to:

Mr. Tommie Baker Community Relations Coordinator
10471 20th Street, Suite 340
Elmendorf AFB, AK 99506-2200
1-(800)-222-4137 toll-free
(907)-552-4506 direct line
e-mail: tommie.baker@us.af.mil

Publish: May 7-11, 2009

303001 5 1 09

PUBLIC NOTICE
U.S. Army Corps of Engineers, Alaska District
Announces

You'll find the expert to match the job in the ... **WHO DOES IT** Service Directory

303001 Legal

PUBLIC NOTICE
AIR FORCE ANNOUNCES PROPOSED PLAN FOR REMEDIAL ACTIONS
KALAKAKET CREEK RADIO RELAY STATION (RRS)
KALAKAKET CREEK, ALASKA

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Mr. Tommie BakerCommunity Relations Coordinator
10471 20th Street, Suite 340
Elmendorf AFB, AK 99506-2200
1-(800)-222-4137 toll-free
(907)-552-4506 direct line
e-mail: tommie.baker@us.af.mil

303001-5-11-09

Publish: May 7-11, 2009