



# PROPOSED PLAN FOR NO DEPARTMENT OF DEFENSE ACTION INDICATED YAKUTAT AIR BASE FUDS

FUDS PROJECT No. F10AK0606

FEBRUARY 2015

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## INTRODUCTION

This Proposed Plan for the former Yakutat Air Base (also known as the Yakutat Army Air Base) located in Yakutat, Alaska (Figure 1) is issued by the U.S. Army Corps of Engineers (USACE), the lead agency for site activities. USACE, after coordinating with the Alaska Department of Environmental Conservation (ADEC), will make the final determination for the sites after reviewing and considering all information submitted during the public comment period.

Based on information gathered about potential contamination resulting from military use of the Army Air Base during World War II (1940 to 1946), 67 individual areas of concern (AOCs) have been identified. This Plan proposes no further action, defined by USACE as No DoD Action Indicated (NDAI), for 15 of those sites. The 52 remaining AOCs will be addressed in the future by USACE with stakeholder (ADEC, public, tribal, and landowner) input after the sites have been reorganized into smaller, discrete projects that can be more efficiently executed.

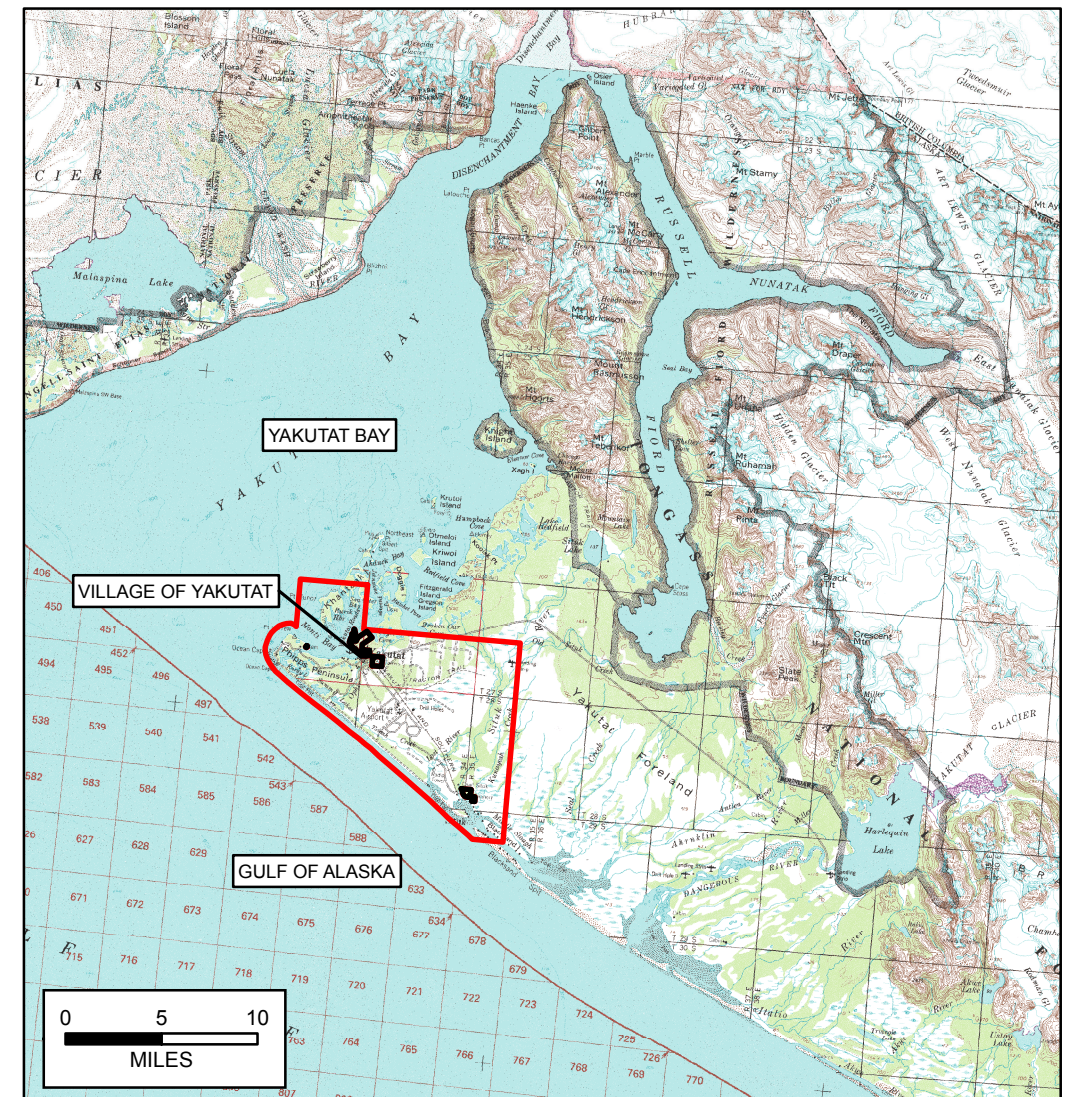
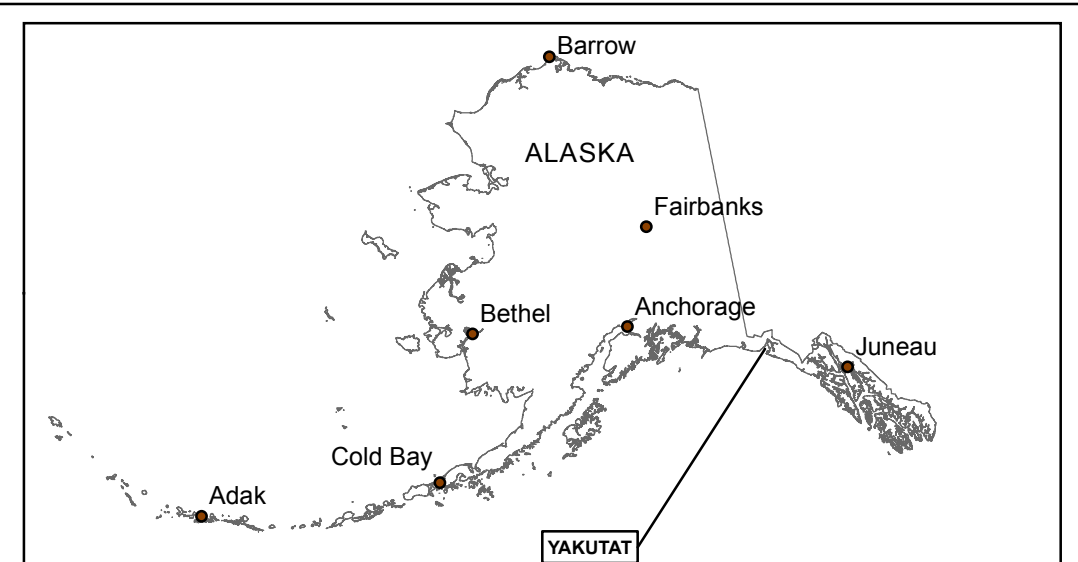
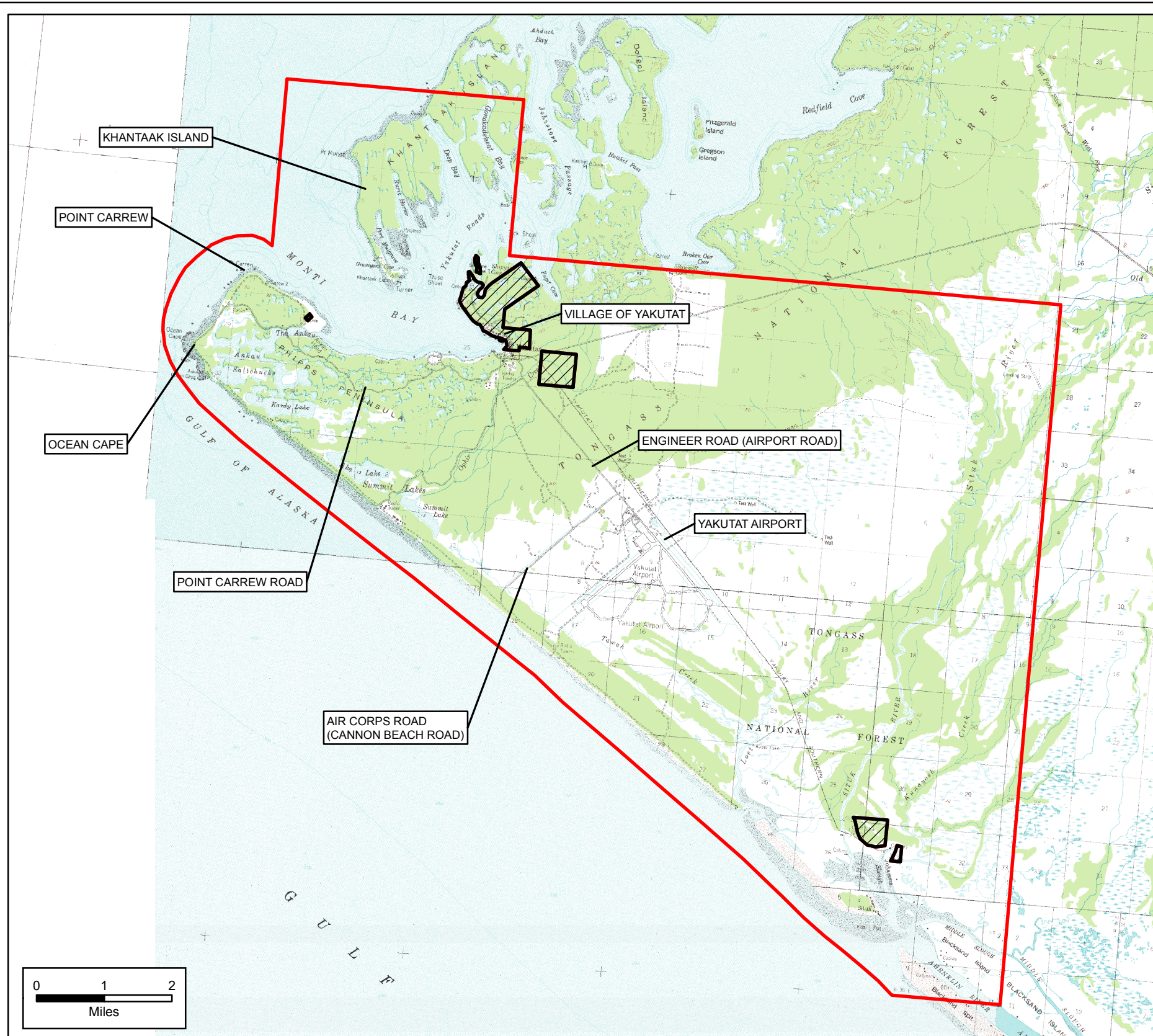
The Proposed Plan summarizes information that can be found in greater detail in previous remedial investigation (RI) reports, the July 2010 Feasibility Study (FS), and other documents contained in the Administrative Record file. USACE encourages the public to review these documents to gain a more comprehensive understanding of the sites and investigation activities that have been conducted at the sites.

The AOCs presented were investigated by USACE under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §117(a) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) §300.430(f)(2). Although 14 of the 15 AOCs do not involve CERCLA-regulated substances, the project follows CERCLA guidance for the presentation of this document and the public involvement process.

The Department of Defense (DoD) is authorized to carry out a program of environmental restoration at former military sites according to Title 10 of the United States Code, Section 2701(a). The Defense Environmental Restoration Program was set up to accomplish this task. The cleanup of Formerly Used Defense Sites (FUDS) is a part of this program. FUDS are those properties that the DoD once owned or used, but no longer owns or controls.

USACE proposes NDAI status for the 15 sites, however, a final determination will be made only after the public has had an opportunity to comment, and the comments are reviewed and addressed.



Changes to the proposed approach may be made if public comments or additional information indicate that such changes would result in more appropriate solutions.



**REFERENCES**  
 BACKGROUND MAPS ARE USGS TOPOGRAPHIC MAPS:  
 YAKUTAT B-5, 1959, 1:63,360  
 YAKUTAT C-5, 1970, 1:63,360  
 YAKUTAT C-4, 1972, 1:63,360  
 YAKUTAT, ALASKA 1982, 1:250,000

**ACRONYMS AND ABBREVIATIONS**  
 USACE - U.S. ARMY CORPS OF ENGINEERS  
 USGS - U.S. GEOLOGICAL SURVEY

**NOTES**  
 1. FUDS PROPERTY BOUNDARY IS BASED ON MAP TITLED  
 "REAL ESTATE, YAKUTAT AIR BASE MILITARY RESERVATION" DATED 16 APRIL 1949.

**LEGEND**  
 FUDS PROPERTY BOUNDARY  
 PROPERTY WAS NOT OWNED, LEASED, OR OTHERWISE POSSESSED BY DOD AND IS EXCLUDED FROM FUDS



**LOCATION AND VICINITY MAPS**

**YAKUTAT AIR BASE - F10AK0606**  
 YAKUTAT, ALASKA

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After considering public comments, USACE will prepare a Decision Document which describes the final determination. The Decision Document will include responses to significant public comments received in a section titled “Responsiveness Summary.”

## **SITE BACKGROUND**

Yakutat, located at the mouth of Yakutat Bay, is approximately 200 miles northwest of Juneau and 380 miles southeast of Anchorage at 59° 33’ N Latitude, 139° 44’ W Longitude. The general Yakutat Air Base AOC locations are shown on Figure 2.

U.S. military interest in Yakutat began with the creation of the Yakutat Bay Naval Reservation in 1929. However, an actual physical presence did not begin until October 26, 1940 when the first Army Engineer troops arrived to begin construction of the Yakutat Landing Field, which was completed June 15, 1943. The Army dock and wharf facilities were built on Monti Bay in support of the air base. The Minor Naval Air Facilities seaplane base was established as a Naval Air Facility in September 1942. Military activities were gradually reduced beginning in December 1943, with personnel and equipment being transferred elsewhere.

The base (redesignated Yakutat Army Air Base in 1944) was placed on caretaker status in April of that year. A similar reduction took place at the seaplane base, which was officially closed on July 22, 1944. The air base was declared surplus by the Army in December 1945 and ceased operations in 1946.

On December 1, 1945, the Civil Aeronautics Administration (CAA) assumed responsibility for maintenance and operation, leading to the transfer of the airfield (not the air base) and all associated facilities from the War Department to CAA on April 4, 1947. The Yakutat Army Air Base improvements, equipment, and materials, not transferred to CAA, were declared to the War Assets Administration (WAA) for

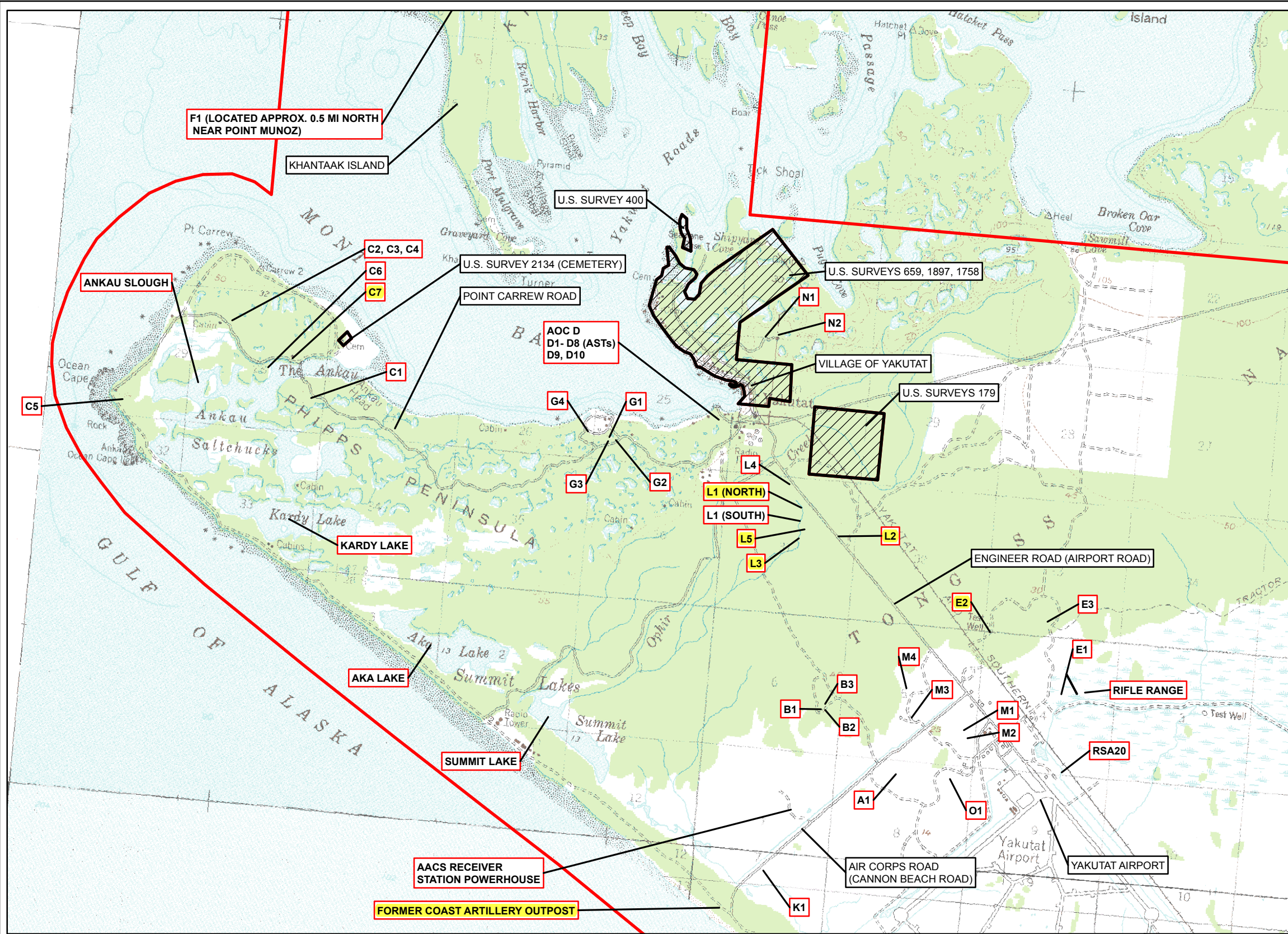
disposition in May 1948, pursuant to the Surplus Property Act of 1944.

Beginning in 1946, the Yakutat Army Air Base property was relinquished and retransferred to the U.S. Department of the Interior, Bureau of Land Management (42,437 acres in two portions: July 1946 and March 1947), the CAA (147 acres, November 1948), and the Department of the Navy (3,500 acres, March 1949). In 1953, the Yakutat Bay Naval Reservation was revoked, which withdrew 266 acres for the CAA, and returned the remainder to the Tongass National Forest.

In 1984, USACE conducted a debris cleanup and site restoration project at Yakutat. Most of the Department of Defense infrastructure that had remained in place after the 1948 WAA disposal (including buildings, tanks, and associated equipment) was demolished and removed during the 1984 cleanup.

Multiple remedial investigations have been conducted at the former Yakutat Air Base since the 1984 cleanup operations. The RIs typically included select areas and focused on sampling and analysis of media including surface soil, subsurface soil, sediment, surface water and groundwater for suspected contaminants. In addition, multiple geophysical studies have been performed to locate buried objects such as piping, tanks and drums; and debris within local surface water bodies. ADEC has participated in the RI/FS process through review and comment on investigation plans and reports.

Two Feasibility Studies have been prepared for selected AOCs within the former Yakutat Air Base. This Proposed Plan not only summarizes the information for 15 NDAI AOCs found in the 2010 FS, but also incorporates results from additional investigation efforts conducted during the 2010 Supplemental RI. The sites presented in the 2010 FS requiring further action will be addressed under separate FUDS projects in the future.



**FORMER YAKUTAT AIR BASE AOC LIST**

**No Further Action Proposed for the Following 15 Areas of Concern:**

- AOC C - Point Carrew**
- AOC C7 - Pt. Carrew Garrison - Powerhouse No. 1093
- AOC E - Quartermaster Loop Area**
- AOC E2 - Debris Disposal/Barrel Dump Area
- Former Coast Artillery Outpost**
- AOC L - ACOR Tank Farm**
- AOC L1 - North Drum Dump
- AOC L2 - Tank Farm Pipeline System- 7 Junctions
- AOC L3 - Tanks 2, 4, 5, 6, 9, 10, 12, 13, 15 (9 AOCs)
- AOC L5 - Pump House

**Further Action Warranted for the Following 52 Areas of Concern:**

- AOC A1 - Air Corps Increase Group No. 2**
- AACS Receiver Station Powerhouse - No. 1202**
- Aka Lake**
- Anka Slough**
- AOC B - Air Warning Filter Center (AWFC)**
- AOC B1 - AWFC Powerhouse No. 1 - No. 1205
- AOC B2 - AWFC Auxiliary Powerhouse No. 2 - No. 1211
- AOC B3 - AWFC Tank and Associated Piping, Bath - No. 1213
- AOC C - Point Carrew**
- AOC C1 - Anka Slough Garbage/Drum Dump
- AOC C2 - Garrison Area Drum Dump
- AOC C3 - Garrison Area Powerhouse Foundation - No. 1035
- AOC C4 - Garrison Area Surface Debris
- AOC C5 - Ocean Cape Base End Station - Powerhouse No. 1092
- AOC C6 - 50,000-Gallon Reserve Fuel Tank - No. 1094
- AOC D - Army Dock Area Aboveground Storage Tanks**
- AOC D1-D8 (AST1, 2, 3, 4, 5, 6, 7, 8) (8 AOCs)
- AOC D - Army Dock Area Pipelines**
- AOC D9 - AvGas Pipeline
- AOC D10 - Diesel Pipeline
- AOC E - Quartermaster Loop Area**
- AOC E1 - Quartermaster Loop - Drainage Ditch
- AOC E1 - Quartermaster Loop - Northwest Drum Dump
- AOC E3 - Quartermaster Loop Drum Dump
- AOC F1 - Khantaak Island Base End Station**
- AOC G - Seaplane Base**
- AOC G1 - Minor NAF (Seaplane Base) Suspected piping and debris
- AOC G2 - Minor NAF (Seaplane Base) Suspected UST1 and debris
- AOC G3 - Minor NAF (Seaplane Base) Suspected USTs 2 and 3
- AOC G4 - Minor Naval Air Facilities (Seaplane Base) Slough
- AOC K1 - Solid Waste Disposal Dump No. 4**
- Kardy Lake**
- AOC L - ACOR Tank Farm**
- AOC L1 - Air Corps Operations Reserve (ACOR) Tank Farm, South Drum Dump
- AOC L3 - Tank 1, 3, 7, 8, 11, 14
- AOC L4 - Truck Fill Stand No. 4
- AOC M - Post Powerhouse/25,000-Gallon Tactical Tank**
- AOC M1 - Suspected Hangar Pipeline System/UST
- AOC M2 - Camp Area Fuel/Water Separator and Pressure Tank Pit
- AOC M3 - Air Corps Increase Group No. 1, 50 KW Powerhouse - No. 520
- AOC M4 - Air Corps Increase Group No. 1, 400 KW Power House - No. 564
- AOC N - Aircraft Warning System (AWS) Station**
- AOC N1 - AWS Powerhouse - No. 907
- AOC N2 - Buildings 901, 902, 903, 905, Several Detector Buildings, Transmission Lines
- AOC O1 - Air Corps Warehouse Group No. 2**
- Rifle Range - Backstop Berms (RRBB)**
- Rifle Range - Skeet Area (RRSA)**
- RSA20 - Runway Safety Area 20**
- Summit Lake**

Note: USACE will revise this AOC list as additional FUDS-eligible sites are identified.

**REFERENCES**  
 BACKGROUND MAPS ARE USGS TOPOGRAPHIC MAPS:  
 YAKUTAT B-5, 1959, 1:63,360  
 YAKUTAT C-5, 1970, 1:63,360  
 YAKUTAT C-4, 1972, 1:63,360

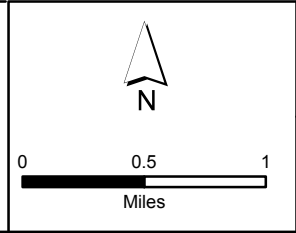
**ACRONYMS AND ABBREVIATIONS**  
 USACE - U.S. ARMY CORPS OF ENGINEERS  
 USGS - U.S. GEOLOGICAL SURVEY  
 AOC - AREA OF CONCERN

**LEGEND**

- FUDS PROPERTY BOUNDARY
- PROPERTY WAS NOT OWNED, LEASED, OR OTHERWISE POSSESSED BY DOD AND IS EXCLUDED FROM FUDS

**NOTES**

1. FUDS PROPERTY BOUNDARY IS BASED ON MAP TITLED "REAL ESTATE, YAKUTAT AIR BASE MILITARY RESERVATION" DATED 16 APRIL 1949.
2. AOC LABELS HAVE RED BORDERS.



**AREA OF CONCERN (AOC) LOCATIONS**

**YAKUTAT AIR BASE - F10AK0606**  
 YAKUTAT, ALASKA

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Details regarding the findings of the 1984 cleanup, RIs, FSs, and other investigations, assessments, removal actions, and pipeline closures can be found in the Information Repository presently housed in the Yakutat Tlingit Tribe office. Public involvement related to site cleanup has been through periodic meetings of the Yakutat Restoration Advisory Board (RAB), where the findings documented in various reports were presented. Established in 2001, the RAB generally meets on an annual basis.

### **SITE CHARACTERISTICS**

The 67 discrete AOCs listed in Table 1 have been identified at the former Yakutat Air Base as potentially containing contamination resulting from military use of the property during World War II. Table 1 identifies the 15 NDAI AOCs in this Plan (highlighted) and the 52 AOCs that will be addressed under subsequent FUDS actions (not shaded).

Chemicals of potential concern (COPC) are defined as a regulated compounds detected in sediment, soil, surface water and/or groundwater above predetermined screening levels. Each AOC was evaluated to determine FUDS eligibility and those AOCs requiring further action. AOCs that had soil, sediment, surface water and/or groundwater containing chemicals of concern (COC) were identified as requiring further action. A COC is defined as chemicals that were detected at concentrations that exceed risk-based or regulatory levels.

Based on remedial investigations and site histories, the predominant COCs identified at the former air base sites are petroleum hydrocarbon constituents and metals. Affected media include surface soil, subsurface soil, sediment, surface water, and groundwater.

The primary sources of known contamination include rusted and leaking drums, debris,

potential former aboveground storage tanks (ASTs) or underground storage tanks (USTs), transformers, wastes associated with historical disposal practices at abandoned and/or demolished buildings, and metal debris. Secondary sources of contamination include impacted soil, sediment, surface water, and groundwater under influence of surface water.

### **SCOPE AND ROLE OF THE ACTION**

The NDAI determinations are based on the results of the 1984 removal action and subsequent assessments, removal actions, and pipeline closures that were conducted at the various sites. This is anticipated to be the final action for the 15 AOCs presented. To be determined NDAI, the sites met the following criteria:

- The site did not contain contaminants at concentrations above naturally occurring background levels and above levels that may pose an unacceptable risk to human health or the environment.
- Remediation met ADEC's most stringent cleanup levels (18 AAC 75.341 and 18 AAC 75.345), commonly referred to as ADEC Table B soil and Table C groundwater cleanup levels. And/or:
- Evidence, including aerial photographs, debris and type of contamination, indicates a non-DoD origin of the chemicals of concern.

Detailed information supporting these NDAI determinations is contained in the 2010 FS and 2010 Supplemental RI. Additional information is also provided in the *Site Summaries* section.

**Table 1. Areas of Concern at Yakutat Air Base FUDS**

No.	AREAS OF CONCERN (AOCs)	No.	AREAS OF CONCERN (AOCs)
1	C7 - Point Carrew Garrison 7.5 kW Powerhouse - No. 1093	34	D6 – Army Dock Area - Former 1000 BBL Tank - No. 831 (AST6)
2	E2 - Quartermaster Loop - Debris Disposal/Barrel Dump Area	35	D7 – Army Dock Area - Former 2000 BBL Tank - No. 832 (AST7)
3	Former Coast Artillery Outpost (FCAO)	36	D8 – Army Dock Area - Former 2000 BBL Tank - No. 829 (AST8)
4	L1 - Air Corps Operations Reserve (ACOR) Tank Farm, North Drum Dump	37	D9 - Army Dock Area - AvGas Pipeline
5	L2 - ACOR Tank Farm, Pipeline System- 7 Junctions	38	D10 - Army Dock Area - Diesel Pipeline
6	L3 - ACOR Tank - No. 1302 (AST 2), Foundation	39	E1 - Quartermaster Loop - Drainage Ditch
7	L3 - ACOR Tank - No. 1314 (AST 4), Foundation	40	E1 - Quartermaster Loop - Northwest Drum Dump
8	L3 - ACOR Tank - No. 1315 (AST 5), Foundation	41	E3 - Quartermaster Loop Drum Dump
9	L3 - ACOR Tank - No. 1312 (AST 6), Foundation	42	F1 - Khantaak Island Base End Station
10	L3 - ACOR Tank - No. 1309 (AST 9), Foundation	43	G1 - Minor Naval Air Facilities (Seaplane Base) Suspected piping & debris
11	L3 - ACOR Tank - No. 1307 (AST 10), Foundation	44	G2 - Minor NAF (Seaplane Base) Suspected UST1 & debris
12	L3 - ACOR Tank - No. 1311 (AST 12), Foundation	45	G3 - Minor NAF (Seaplane Base) Suspected USTs 2&3
13	L3 - ACOR Tank - No. 1310 (AST 13), Foundation	46	G4 - Minor Naval Air Facilities (Seaplane Base) Slough
14	L3 - ACOR Tank - No. 1304 (AST 15), Foundation	47	K1 - Solid Waste Disposal Dump No. 4
15	L5 - ACOR Tank Farm, Pump House	48	Kardy Lake
		49	L1 - Air Corps Operations Reserve (ACOR) Tank Farm, South Drum Dump
16	A1 - Air Corps Increase Group No. 2	50	L3 - ACOR Tank - No. 1301 (AST 1), Foundation
17	AACS Receiver Station Powerhouse - No. 1202	51	L3 - ACOR Tank - No. 1303 (AST 8), Foundation
18	Aka Lake	52	L3 - ACOR Tank - No. 1305 (AST 14), Foundation
19	Ankau Slough	53	L3 - ACOR Tank - No. 1306 (AST 11), Foundation
20	B1 - AWFC 20 kW Powerhouse, Unit 1 - No. 1205	54	L3 - ACOR Tank - No. 1308 (AST 7), Foundation
21	B2 - AWFC 15 kW Powerhouse, Standby Unit - No. 1211	55	L3 - ACOR Tank - No. 1313 (AST 3), Foundation
22	B3 - AWFC Tank and Associated Piping, Bath - No. 1213	56	L4 - ACOR Tank Farm, Truck Fill Stand No. 4
23	C1 - Ankau Bridge Garbage/Drum Dump	57	M1 - Camp Area Suspected Hangar Pipeline System/Tactical UST
24	C2 - Point Carrew Garrison Area Drum Dump	58	M2 - Camp Area Fuel/Water Separator & Pressure Tank Pit
25	C3 - Point Carrew Garrison Area Powerhouse - No. 1035	59	M3 - Air Corps Increase Group No. 1 - 50 kW Powerhouse - No. 520
26	C4 - Point Carrew Garrison Area Surface Debris	60	M4 - Air Corps Increase Group No. 1 - 400 kW Post Powerhouse - No. 564
27	C5 - Ocean Cape Base End Station 7.5 kW Powerhouse - No. 1092	61	N1 - Aircraft Warning System (AWS) Station Powerhouse - No. 904
28	C6 - Pt Carrew Garrison Area 50,000 Gal Reserve Diesel Tank - No. 1094	62	N2 - AWS Station (excluding N1)
29	D1 – Army Dock Area - Former 1000 BBL Tank - No. 836 (AST1)	63	O1 - Air Corps Warehouse Group No. 2
30	D2 – Army Dock Area - Former 500 BBL Tank - No. 835 (AST2)	64	Rifle Range Backstop Berms
31	D3 – Army Dock Area - Former 500 BBL Tank - No. 834 (AST3)	65	Rifle Range Skeet Area
32	D4 – Army Dock Area - Former 1000 BBL Tank - No. 833 (AST4)	66	Runway Safety Area 20
33	D5 – Army Dock Area - Former 2000 BBL Tank - No. 830 (AST5)	67	Summit Lake
Note 1: Highlighted AOCs Proposed for NDAI			
Note 2: USACE will revise the AOC list as additional FUDS-eligible sites are identified			

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## **SUMMARY OF SITE RISKS**

Sufficient data has been collected from the multiple RIs to evaluate the potential risks to human health and the environment. A baseline risk assessment for the former Yakutat Air Base has not been conducted, and is not deemed necessary for the 14 DoD AOCs addressed in this Plan.

### **Human Health Risk Assessment**

This Proposed Plan does not assess AOC E2 for human health risk because the contamination at the site has been determined to be of non-DoD origin.

For the remaining 14 AOCs, either the AOC did not contain contaminants above naturally occurring background levels, or the AOC was found to not contain contaminants at levels above ADEC's most stringent cleanup levels. As a result, it is concluded that these AOCs do not contain contaminants at levels that would pose an unacceptable risk to human health. There are no unacceptable human health risks that would limit use or exposure at these AOCs, therefore discussion on exposure to human health has not been included.

### **Ecological Risk Assessment**

This Proposed Plan does not assess AOC E2 for ecological risk because the contamination at the site has been determined to be of non-DoD origin.

For the remaining 14 AOCs, either the AOC did not contain contaminants above naturally occurring background levels; or, the AOC was found to not contain contaminants at levels above ecological screening levels that could pose an unacceptable risk to environment. There are no unacceptable ecological risks that would limit use or exposure at these AOCs, therefore further discussion of ecological exposure pathways has not been included.

## **OBJECTIVES**

The primary objectives of this Plan are to document the disposition of the 15 AOCs and to propose the remedy of NDAI for 14 of the 15 AOCs as protective of human health and the environment. For the remaining AOC, NDAI is warranted because the contamination is believed to be from non-DoD sources.

The CERCLA process describes proposing Remedial Action Objectives (RAOs) and proposed alternatives for contaminated sites. There are no RAOs proposed for the 15 AOCs addressed in this Proposed Plan because contaminant concentrations at the sites are below ADEC cleanup levels or background levels (Table 2), no evidence of the site exists, or contamination can be attributed to others. This Proposed Plan only presents the preferred alternative of NDAI.

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## **SITE SUMMARIES**

The 15 AOCs investigated and summarized below have been identified as requiring no further action based on either the absence of COC concentrations above ADEC cleanup levels, or ineligibility as a FUDS.

### **AOC C7 – Point Carrew Garrison 7.5 KW Powerhouse - No. 1093**

AOC C7 contained a 7.5-kilowatt gasoline-engine generator to provide power to warehouses in the ammunition storage area of the Point Carrew Garrison. A rectangular concrete slab foundation approximately 12 feet by 18 feet was located on site. During previous RIs, arsenic (26.3 mg/kg) and chromium (42.7 mg/kg) were detected in a surface soil sample above background concentrations. However, only the primary samples from these locations reported arsenic and chromium concentrations above background concentrations. The reported concentrations in the associated field QC duplicate samples (8.31 mg/kg arsenic and 18.9 mg/kg chromium) were below the background concentrations. Moreover, soil testing in 2010 indicated chromium concentrations in the Yakutat area soil are not hexavalent chromium. All of the soil samples concentrations were well below the non-hexavalent chromium ADEC cleanup level.

During the 2001 RI, three groundwater monitoring wells were also sampled. Lead (0.0575 mg/L), arsenic (0.0587 mg/L), and chromium (0.186 mg/L) concentrations in groundwater exceeded ADEC cleanup levels. The elevated metals concentrations were attributed to suspended solids associated with sample turbidity. Additional groundwater sampling was conducted in 2004 using low flow sampling techniques. Chromium was detected at an estimated concentration of 0.0111 mg/L, which does not exceed the ADEC cleanup level of 0.1 mg/L. Arsenic and lead were not detected in groundwater.



**C7 - Concrete Powerhouse Foundation (ENSR 2003b)**

### **AOC E2 – Debris Disposal/Barrel Dump Area – Quartermaster Loop**

AOC E2 is located on Quartermaster Loop, approximately 1 mile from Engineers Road. Over 20 drums were found at AOC E2 during the 2001 RI. Further investigation was recommended to better define overall site conditions in the Quartermaster Loop area. Based on the results of the 2010 RI, concentrations of polychlorinated biphenyls (PCBs) (2.5 mg/kg) in surface soil, diesel range organics (DRO), selenium, and mercury in sediment, and barium in surface water exceed the cleanup levels for these analytes in their respective media and are, therefore, considered COCs. However, the presence of an abandoned Colorado Gas Corporation sign, and the exceedance of barium, a common drilling additive, in surface water suggest that AOC E2 may not be a FUDS site. Further evaluation of aerial photographs and topographic maps point to non-DoD origins for this site.



**E2 - Colorado Oil Sign Yakutat No. 1 (S&W 2012)**



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USACE has concluded the weight of evidence suggests the mostly likely source of the contamination at E2 is from the Colorado Oil & Gas Co. Well YAKUTAT 1 drilled in 1957.

**AOC L1 – Air Corps Operations Reserve (ACOR) Tank Farm, North Drum Dump**

A drum dump, designated AOC L1 - North Drum Dump, was located west of the Tank 1 foundation of the Air Corps Operations Reserve (ACOR) Tank Farm. During the 2001 RI/FS activities, a geophysical survey was conducted at the debris/drum dump site west of Tank 1 prior to sampling activities to delineate the extent of possible buried debris. Several anomalies observed within the survey area were interpreted as surface debris, indicating no drums or debris were buried at this site. Based on RI results from 2001, 2004, 2005, and 2006 fieldwork, concentrations of COPCs in the soil and groundwater do not exceed their corresponding ADEC cleanup levels.



**L1 - North Drum Dump (USACE 2006)**

**AOC L2 – ACOR Tank Farm Pipeline System Junctions (7 Junctions)**

The pipeline system junctions investigated as AOC L2 consisted of seven concrete junction vaults within the tank farm including Valve Pit A1; Valve Pit C5; Lateral C Break; Drain Line Break; Lateral D Break; Separator Tank, consisting of a booster pump, an oil-water separator, and an air release tank on the main pipeline which moved fuel to truck fill stands located along Engineer Road; and a Fuel Hose with Nozzle, consisting of a truck fill stand located along Engineer Road. Based on RI efforts conducted in 1999, 2000, 2004 and 2005, concentrations of COPCs in the soil and groundwater do not exceed the corresponding ADEC cleanup levels.



**L2 - Separator Tank (USACE 2006)**

**AOC L3 – ACOR Tank Foundations 2, 4, 5, 6, 9, 10, 12, 13, 15 (9 AOCs)**

Fifteen aboveground petroleum storage tanks, which held nearly 750,000 gallons of fuel, and an associated pipeline system, were built as part of the Air Corps Tactical Gas System during World War II. The ASTs were removed shortly before the ACOR Tank Farm site was transferred to the CAA in 1948. Remnants of the fifteen tank sites, designated Tank Foundations 1 through 15, were investigated during previous RI efforts. COPCs in soil and groundwater do not exceed cleanup levels at Tank Foundations 2, 4, 5, 6,



**L3 - Typical AST Tank Foundation (ENSR 2003b)**

9, 10, 12, 13, and 15. Additionally, in 2003 and 2008,

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the connecting pipelines were either removed or emptied and closed-in-place and pipeline closure assessments were performed. Screening and sample analyses did not identify petroleum, oil, and lubricant (POL) contaminated soil.

### **AOC L5 – Air Corps Operations Reserve Tank Farm Pump House**

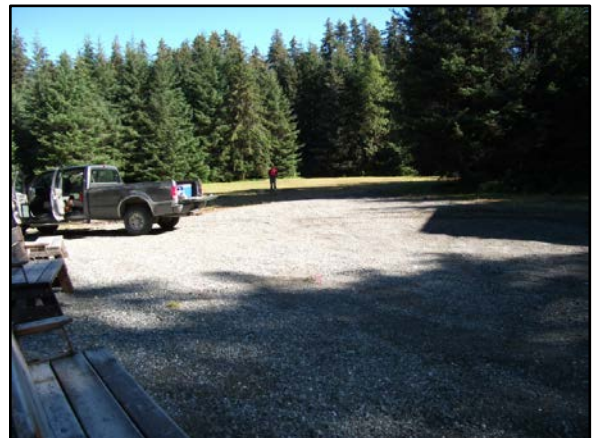
According to the 1942 Yakutat Army Base War Department maps, the ACOR Tank Farm Pump House was located at the low point of the tank farm. The piping manifold was designed to permit pumping from a tank in one lateral line to a tank in another lateral line or to the main line. The southwestern half of the foundation was framed by a vertical curb with a doorway in the west corner. A pump and part of the collapsed building were present on this part of the foundation. The northeastern half of the foundation extended below grade to form an L-shaped concrete vault that contained part of the severely rusted and fragile pipe manifold. This vault extends under the western half of the facility. In 2001, petroleum sheen was observed on standing water within the vault, and a heavy, colorful sheen emerged after a stone was dropped in. The connecting pipelines were either removed or emptied and abandoned in place and pipeline closure assessments were performed in 2003 and 2008. Based on subsurface investigations during RI efforts conducted in 2001, 2004, 2005, and 2008, concentrations of COPCs in the soil and groundwater do not exceed their corresponding ADEC cleanup levels.



**L5 - Pump House Foundation (USACE 2006)**

### **Former Coast Artillery Outpost (FCAO)**

The FCAO was the site of two 6-inch naval guns located at the south end of Cannon Beach Road. Two buildings associated with the operations of the naval guns existed at the site. One of the former buildings at the FCAO reportedly served as a power source for a small installation on Cannon Beach Road. The area is currently being used as recreational site for residents of Yakutat and consists of a covered stage where local bands perform, benches, and picnic and camping areas. During the 2010 Supplemental RI preliminary site visit, remnants of a World War II military tank and sawed off 6-inch cannons, electric lines, hydraulic lines, and concrete debris piles found northwest of the approximate former building locations were observed at the FCAO. Six surface soil samples were collected and analyzed for petroleum hydrocarbons, metals, PCBs, VOCs, and SVOCs. One Sample result showed that 2,4-dinitrotoluene was detected at an estimated concentration of 0.623 J mg/kg, which exceeds the ADEC cleanup level of 0.0093 mg/kg. USACE believes there is no reason to conduct any further activity at the FCAO. There was only one sample, and one analyte (2,4-dinitrotoluene), that exceeded the migration to groundwater cleanup level. Because the sample was from the surface, it is not unreasonable that this could have resulted from



**FCAO Former Building Sites (S&W 2012)**

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recreational gunfire. Moreover, 2,4- dinitrotoluene is readily broken down by sunlight and by bacteria. 2,4-dinitrotoluene has been found at unrelated hazardous waste sites that contain buried ammunition wastes, but there is no evidence that munitions have been buried at the FCAO.

## **SUMMARY**

***All of the 15 AOCs listed are proposed for the designation NDAI. For these AOCs, no additional remedial action, no additional review, no implementation of long term management or land use controls is planned by DoD. If new information becomes available indicating risk or concern of military-related contamination at these AOCs, further evaluation may be warranted. AOC E2 may require additional environmental action by others.***

L1, L2, L3-AST 2, L3-AST 4, L3-AST 5, L3-AST 6, L3-AST 9, L3-AST 10, L3-AST 12, L3-AST 13, L3-AST 15, and L5 have no contaminants above ADEC cleanup levels or background levels therefore there is no environmental limit to the use or exposure at these AOCs. No long term management, periodic reviews or land use controls will be implemented. An NDAI designation at these AOCs is appropriate because there is not an unacceptable risk to human health or the environment.

AOC C7 (Point Carrew Garrison 7.5 kW Powerhouse - No. 1093) was part of the World War II Yakutat Army Air Base. No contaminants of concern are above ADEC cleanup levels therefore there is no environmental limit to the use or exposure for this AOC. No long term management, periodic reviews or land use controls will be implemented. An NDAI designation at these AOCs is appropriate because there is not an unacceptable risk to human health or the environment.

AOC E2 has contaminants of concern above ADEC cleanup levels that are from non-DoD sources and may need further action by other parties. Because of the non-DoD contamination source, NDAI designation is proposed, indicating no further action by DoD; it does not address the protection of human health and the environment.

At the Former Coast Artillery Outpost (FCAO) one contaminant (2,4-dinitrotoluene at 0.623 mg/kg) in one surface soil sample exceeded the ADEC migration to groundwater cleanup level (0.0093 mg/kg). This chemical is associated with degrading military munitions but also associated with recreational gunfire. There is no evidence that DoD munitions have been left at the AOC and any residual surface contaminants would likely be degraded. It is reasonable to assume the contaminant source can be attributed to non-DoD activities. Because of the diminutive level of contaminant, and its quick degradation, no environmental limit to the use or exposure at this AOC is warranted. No long term management, periodic reviews or land use controls will be implemented. An NDAI designation at this AOC is appropriate because there is not an unacceptable risk to human health or the environment.

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## **COMMUNITY PARTICIPATION**

Information regarding the Proposed Plan is provided to the public through the issuance of information and documents to stakeholders, the Administrative Record file for the site, and announcements published in the Driftwood Dispatch and Juneau Empire newspapers. The document is available for review on the Alaska District website at: <http://www.poa.usace.army.mil/Library/ReportsandStudies.aspx> Click on “Environmental Cleanup”, and then select “Yakutat Proposed Plan February 2015”.

In accordance with the NCP, an Administrative Record file has been established for the former Yakutat Air Base. The contents of the file include a variety of written material, such as pieces of correspondence, data reports, assessments, plans, newspaper articles, notices, and fact sheets. The Administrative Record files are available for review at the Yakutat Tlingit Tribe offices located at 606 Forest Highway 10, Yakutat, Alaska, Phone: 784-3238.

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### **PUBLIC COMMENT PERIOD**

**February 16 through March 17, 2015**

The public is invited to review and comment on the information presented in this Proposed Plan. Comments will be accepted throughout the 30-day public comment period. Written comments must be postmarked, and emails time stamped, no later than the last date of the public comment period, which is March 17, 2015.

### **OPEN HOUSE**

**February 24, 2015; 12 p.m. to 6 p.m.**

**Yakutat High School Auditorium, Yakutat, Alaska**

Representatives of USACE and ADEC will be present at the Open House to explain the Proposed Plan, listen to any concerns raised, answer questions, and accept written and oral comments.

Following the Public Comment Period, USACE will prepare a written response to all significant comments and any new data submitted in reference to this Proposed Plan. A summary of these responses will accompany the Decision Document and will be made available in the Administrative Record.

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Comments or questions concerning this Proposed Plan should be addressed to:

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## **LIST OF ACRONYMS**

ACOR	Air Corps Operations Reserve
ADEC	Alaska Department of Environmental Conservation
AOC	Area of Concern
AST	Aboveground Storage Tank
AWFC	Air Warning Filter Center
CAA	Civil Aeronautics Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COPC	Chemical of Potential Concern
COC	Chemical of Concern
DoD	Department of Defense
DRO	Diesel Range Organics
ENSR	ENSR Corporation
FCAO	Former Coast Artillery Outpost
FS	Feasibility Study
FUDS	Formerly Used Defense Sites
mg/kg	Milligrams per kilogram
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NDAI	No Department of Defense Action Indicated
POL	Petroleum, Oil, and Lubricants
RAB	Restoration Advisory Board
RAO	Remedial Action Objectives
RI	Remedial Investigation
S&W	Shannon & Wilson, Inc.
UST	Underground Storage Tank
USACE	United States Army Corps of Engineers
WAA	War Assets Administration

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