



**611TH AIR SUPPORT GROUP
611TH CIVIL ENGINEER
SQUADRON
ELMENDORF AFB, ALASKA**

**KING SALMON AIR STATION
KING SALMON, ALASKA
INSTALLATION RESTORATION PROGRAM**

**RECORD OF DECISION FOR
FINAL REMEDIAL ACTION
NAKNEK RECREATION CAMP 1
(RAPIDS CAMP/SITE OT032)**

APRIL 2000

RECORD OF DECISION
FOR
FINAL REMEDIAL ACTION

NAKNEK RECREATION CAMP 1 (RAPIDS CAMP)
KING SALMON AIR STATION
KING SALMON, ALASKA

DECLARATION,
DECISION SUMMARY,
AND
RESPONSIVENESS SUMMARY

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TECHNICAL DOCUMENT TO SUPPORT INSTALLATION RESTORATION DECISION

DECLARATION

SITE NAME AND LOCATION

Installation Restoration Program (IRP) Site OT032 (Groundwater Zone (GWZ) 6); Naknek Recreation Camp 1 (also known as Rapids Camp), located at King Salmon Air Station (KSA), Alaska.

STATEMENT OF BASIS

This decision is based on information contained in the Administrative Record, including but not limited to the results of an IRP Records Search, site investigations (1990 and 1991), a Remedial Investigation (RI) (1995), follow-up sampling (1996 and 1998), a Feasibility Study (FS) (1998), and Interim Remedial Action (IRA) performed in 1998 and 1999.

This Record of Decision (ROD) presents the selected alternative for the above listed site. This ROD has been developed in accordance with the Defense Environmental Restoration Program, 10 *United States Code* (USC) 2701, consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC 9601 and Executive Order 12580 (52 *Federal Register* 2923) and Alaska Department of Environmental Conservation (ADEC) Water Quality Standards [18 Alaska Administrative Code (AAC) 70] and Oil and Hazardous Substances Pollution Control Regulations (18 AAC 75), and to the extent practicable with the National Oil and Hazardous Substances Pollution Contingency Plan (40 *Code of Federal Regulations* 300).

ASSESSMENT OF SITE

Rapids Camp was established in 1952 as a recreational facility for troops stationed at KSA. The facility included boat docks, fish camps, lodging, and a fuel storage area. Waste oils, fuels, and polychlorinated biphenyls (PCBs) were used and stored at the site. The camp was permanently closed in 1977.

A Preliminary Assessment (PA) of the site in June 1988 revealed approximately thirty 55-gallon drums, ground surface staining, and steel construction debris. Site investigation activities performed at Rapids Camp in 1990 and 1991 revealed buried tanks and debris, and the potential presence of petroleum hydrocarbons and solvents in site soils. A 1994 RI identified two main areas of contamination: the generator pad and the beach/dock areas. Additional investigations and evaluations, including a baseline human and ecological risk assessment, fate and transport modeling, an FS to evaluate remedial alternatives, and site monitoring, were performed from 1996 through 1998 at Rapids Camp. Resulting compounds of concern (COCs) were identified as are petroleum hydrocarbons, including diesel-range organics (DRO), ethylbenzene, and toluene, and the chlorinated solvent, trichloroethylene (TCE).

A Proposed Plan (PP) for IRA at Rapids Camp was prepared in March 1998. The preferred remedial alternative (general debris cleanup, excavation and remediation of contaminated surface soils, and continued groundwater monitoring) was selected and implemented in July 1998. A landfill identified on the Rapids Camp site was capped with 12-inches of soil and vegetative material in 1998.

In June 1999, additional excavation of surface soils contaminated above ADEC cleanup levels was completed at five isolated areas. This additional excavation eliminated the need for continued monitoring of these areas.

A Fact Sheet summarizing IRA results, monitoring results, and current site conditions at Rapids Camp was prepared and distributed in June 1999. The Fact Sheet also briefly describes the plan of action for site closure, which is detailed in this decision document. The Fact Sheet is provided as Appendix B. Details pertaining to current site groundwater and soil conditions are presented below.

Groundwater. Results from the most recent groundwater-sampling event (October 1998) indicate that no contaminants are present in site groundwater. Additionally, no contaminants were found in any of the area residential wells sampled from 1993 through 1997.

Soil. An isolated area of subsurface soil with DRO concentrations up to 9,300 mg/kg will be left in-place in the generator pad area. This area of impacted soil is located approximately 45 feet above the groundwater table and 30 feet bgs. Based on modeling, which indicated that this contamination will not leach to the groundwater, a cleanup level of 12,500 mg/kg (the maximum allowable DRO soil concentration under 18 AAC 75) was established for the generator pad area.

DESCRIPTION OF THE SELECTED REMEDY

Based on current site conditions at Rapids Camp and the successful implementation of interim remedial actions in 1998 and 1999, the U.S. Air Force (USAF) and ADEC have selected a plan of institutional controls (land-use restrictions), inspection and maintenance of the landfill cap, and continued groundwater monitoring, with no further remedial action planned, as the final action for Rapids Camp.

The selected remedy is deemed sufficient to protect human health and the environment from risks associated with exposure to contaminated soil and groundwater at the site. The selected remedy includes the following components:

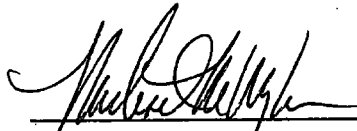
- The USAF will modify the General Plan, 611th Air Support Group (ASG), Remote Alaska (hereafter referred to as the General Plan) and appropriate land records (i.e., deeds and/or notices) to include approved institutional controls, which restrict future installation of drinking-water wells and soil excavation within 100 feet of the generator pad and the landfill. Construction also will be prohibited at the landfill site. Land-use restrictions and land surveys will be included in the General Plan, which is scheduled for completion by October 2000.
- An inspection and maintenance program has been developed for the landfill cap. This program will be implemented following plans similar to those designed for the North and South Bluff sites (IRP Site OT029), as detailed in the *Draft Operation, Monitoring, and Maintenance Manual, North and South Barrel Bluffs, King Salmon, Alaska* (Hart Crowser, 1999).
- Annual groundwater monitoring will continue at the landfill site until the field and analytical data support the conclusion that contaminant levels remain below ADEC 18 AAC 75, Table C Groundwater Cleanup Levels. Monitoring may be discontinued after the five-year review and only with agency and community approval.

- Contamination remaining at the Rapids Camp site does not pose an unacceptable threat to human health or the environment; however, subsurface soil contamination exceeding established cleanup levels is being left in-place at the generator pad; therefore, the remedy summarized above and detailed in this ROD will be reviewed by the USAF and ADEC at a frequency of not less than once every five years to evaluate if the remedy continues to be effective and appropriate. The first review will be conducted by 2005. Input from the Naknek/South Naknek Native Village Council, King Salmon Village Council, Federal and State trustees, and the King Salmon Restoration Advisory Board (RAB) will be solicited prior to implementing any changes.

STATUTORY DETERMINATIONS

No further remedial action, except institutional controls and monitoring, is necessary to protect human health or the environment at this site. Interim remedial actions taken at the site have eliminated the need to conduct further remedial action. The monitoring results will be reviewed no less often than once every five years to ensure that the remedy remains protective of human health and the environment.

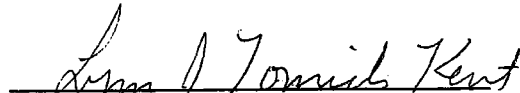
This decision may be reviewed and modified in the future if new information becomes available which indicates the presence of previously undiscovered contamination or exposure routes that may cause a risk to human health or the environment.



Michael Wyka, Colonel, USAF
Commander, 611th Air Support Group
United States Air Force

30 Jun 00

Date



Lynn J. Tomich Kent
Division of Spill Prevention and Response
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4/11/00

Date

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ABBREVIATIONS AND ACRONYMS

611 th CES	611th Civil Engineer Squadron
AAC	Alaska Air Command
AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
AFB	Air Force Base
ARARs	Applicable or Relevant and Appropriate Requirements
ASG	Air Support Group
bgs	Below Ground Surface
BRISTOL	Bristol Environmental Services
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CFR	Code of Federal Regulations
COCs	Contaminants of Concern
CRP	Community Relations Plan
DRO	Diesel-Range Organics
EMCON	EMCON Alaska, Inc.
FAA	Federal Aviation Administration
FS	Feasibility Study
GRO	Gasoline-Range Organics
GWZ	Groundwater Zone
IRA	Interim Remedial Action
IRP	Installation Restoration Program
KSA	King Salmon Air Station
MCL	Maximum Contaminant Level
MSL	Mean Sea Level
NCP	National Contingency Plan
NFRAP	No Further Response Action Planned
NORAD	Northern American Aerospace Defense Command
OASIS	OASIS Environmental, Inc.
PA	Preliminary Assessment
PCB	Polychlorinated Biphenyl
PP	Proposed Plan
PRG	Preliminary Remediation Goal
RAB	Restoration Advisory Board
RAO	Remedial Action Objective
RG	Remediation Goal
RI	Remedial Investigation
ROD	Record of Decision
TCE	Trichloroethylene
TPH	Total Petroleum hydrocarbons
USAF	United States Air Force
USC	United States Code
VOC	Volatile Organic Compound

UNITS OF MEASURE

mg/Kg	Milligrams Analyte per Kilogram of Sample
mg/L	Milligrams Analyte per Liter of Sample
µg/Kg	Micrograms Analyte per Kilogram of Sample
µg/L	Micrograms Analyte per Liter of Sample

1 INTRODUCTION

This Decision Summary provides an overview of the No Further Remedial Action Planned (NFRAP) determination with institutional controls and continued groundwater monitoring for Installation Restoration Program (IRP) Site OT-032 (Groundwater (GWZ) 6); Naknek Recreation Camp 1 (commonly known as Rapids Camp), located at King Salmon Air Station (KSA), Alaska.

This document presents the physical features of the site, the contaminants present, and the associated risks to human health and the environment. It also describes the rationale for a NFRAP determination with institutional controls and continued groundwater monitoring, and states how the determination satisfies requirements of the Defense Environmental Restoration Program, 10 *United States Code* (USC) 2701, consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC 9601 and Executive Order 12580, and the National Oil and Hazardous Substances Pollution Contingency Plan.

The U.S. Air Force (USAF) has completed a remedial investigation, feasibility study, human health and ecological risk assessments, modeling assessment, interim remedial action (IRA), and additional sampling at Rapids Camp. The results of the various investigation activities and the risk assessment were used to determine the need for remedial action at Rapids Camp.

A Proposed Plan (PP) for IRA at Rapids Camp was prepared in March 1998. The PP outlined a preferred remedial alternative for the site. After consideration of public comments, the preferred remedial alternative was selected. The selected alternative for remedial action (debris removal, excavation, and remediation of contaminated soils, and continued site monitoring) was implemented in July 1998. A fact sheet presenting the plan of action for site closure at Rapids Camp was distributed in June 1999 and is summarized below.

Generally, fieldwork conducted at the site has reduced the risk to human health and the environment; therefore, the need to conduct further remedial action has been eliminated. The resulting decision includes the following elements:

- Institutional controls limiting the installation of drinking wells, soil excavation, and construction;
- An inspection and maintenance program for the landfill cap;
- Annual groundwater monitoring; and
- Five-year reviews to ensure that no unacceptable risk or threat to public health or the environment remains at the site.

2 SITE NAME, LOCATION, AND DESCRIPTION

King Salmon is situated on the Alaska Peninsula adjacent to Bristol Bay and Katmai National Park and Preserve, approximately 280 miles southwest of Anchorage and 15 miles east of Kvichak Bay (Figure 1). King Salmon lies in the Nushagak-Bristol Bay Lowland, a broad piedmont characterized by morainal topography and abundant fresh-water lakes. The area is accessible only by air or water.

The name "King Salmon" is used in this ROD to indicate the general area of the property and installation, including the commercial airport, current and former USAF property, and the community of King Salmon. KSA refers specifically to current and former USAF property.

Rapids Camp is located on the northern bank of the Naknek River, roughly 6 miles southeast of KSA (Figure 1). The camp occupies about 12.5 acres of land and is contained within Section 4 of Township 18S, Range 44W. A road provides access to the site from the community of King Salmon.

ADEC is the lead regulatory agency for KSA. As such, the Rapids Camp site is presently being addressed as a contaminated site under the State of Alaska Oil and Hazardous Substances Pollution Control Regulations (18 AAC 75).