



PROPOSED PLAN FOR SR018

FORMER RECREATIONAL SMALL ARMS USE AREA

CAPE ROMANZOF LRRS, ALASKA



HOW YOU CAN PARTICIPATE

You are encouraged to comment on this Proposed Plan. The public comment period begins 23 September 2015 and ends 22 October 2015. The Air Force will accept written comments during the public comment period. A pre-addressed form is included with this document. All comment letters must be postmarked by 22 October 2015.

Submit comments to:
 Keith Barnack
 Restoration Project Manager
 Air Force AFCEC/CZOP
 10471 20th St, Ste 341
 JBER, Alaska 99506
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This Proposed Plan summarizes information that can be found in greater detail in the Feasibility Study and other documents contained in the Administrative Record file for this site. The Air Force and Alaska Department of Environmental Conservation encourage the public to review these documents to gain a comprehensive understanding of SR018 and the response activities that have been conducted at the Cape Romanzof LRRS.

September 2015



Cape Romanzof Installation

U.S. AIR FORCE ANNOUNCES PROPOSED PLAN

This Proposed Plan, developed for the United States Air Force (Air Force) Environmental Restoration Program (ERP) proposes a remedy for area SR018, Former Recreational Small Arms Use Area, located at the Cape Romanzof Long-Range Radar Site (LRRS), Alaska. The remedy proposed at SR018 is Removal and Offsite Disposal. This Proposed Plan also summarizes the response alternatives evaluated for implementation at SR018. The chemical of concern (COC) is lead.

The Cape Romanzof LRRS was established in 1953. Located in the Yukon-Kuskokwim Coastal Lowland region, approximately 560 miles west of Anchorage, the site is accessible only by air or water. The closest villages are Scammon Bay and Hooper Bay, which are located approximately 15 miles east and south of the installation, respectively. The installation consists of 4,900 acres divided into two main areas: Lower Camp, where the main camp facilities are located, and Upper Camp which is situated at the top of Towak Mountain. The two areas are connected by a gravel road and former tramway service. SR018 is located approximately 300 feet south of the access road between the Lower Camp and the airstrip. The LRRS currently serves as a Minimally Attended Radar Site and is part of the Alaska Radar System managed by the Pacific Air Forces Regional Support Center, a tenant on Joint Base Elmendorf-Richardson in Anchorage, Alaska. The Upper Camp occupies the summit of Towak Mountain, which reaches a maximum elevation of 2,300 feet above mean sea level.

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This Proposed Plan is issued by the Air Force as the lead agency for site activities. Alaska Department of Environmental Conservation (ADEC) is the regulatory support agency. The Air Force will select a final remedy for the site after reviewing and considering all information submitted during the public comment period, and may modify the Preferred Alternative or select another response action based on new information or public comments.

The public is encouraged to review and comment on this Proposed Plan. The Air Force is issuing this Proposed Plan as part of its public participation responsibilities under §117 (a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), U.S. Code (USC) Title 42, §9617(a) and §300.430 (f)(2) and (3) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Following consideration of public comments, the Air Force will prepare a Record of Decision (ROD) to document the final response action selected for SR018. The ROD will contain a summary of responses to public comments received.

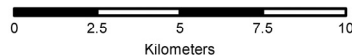
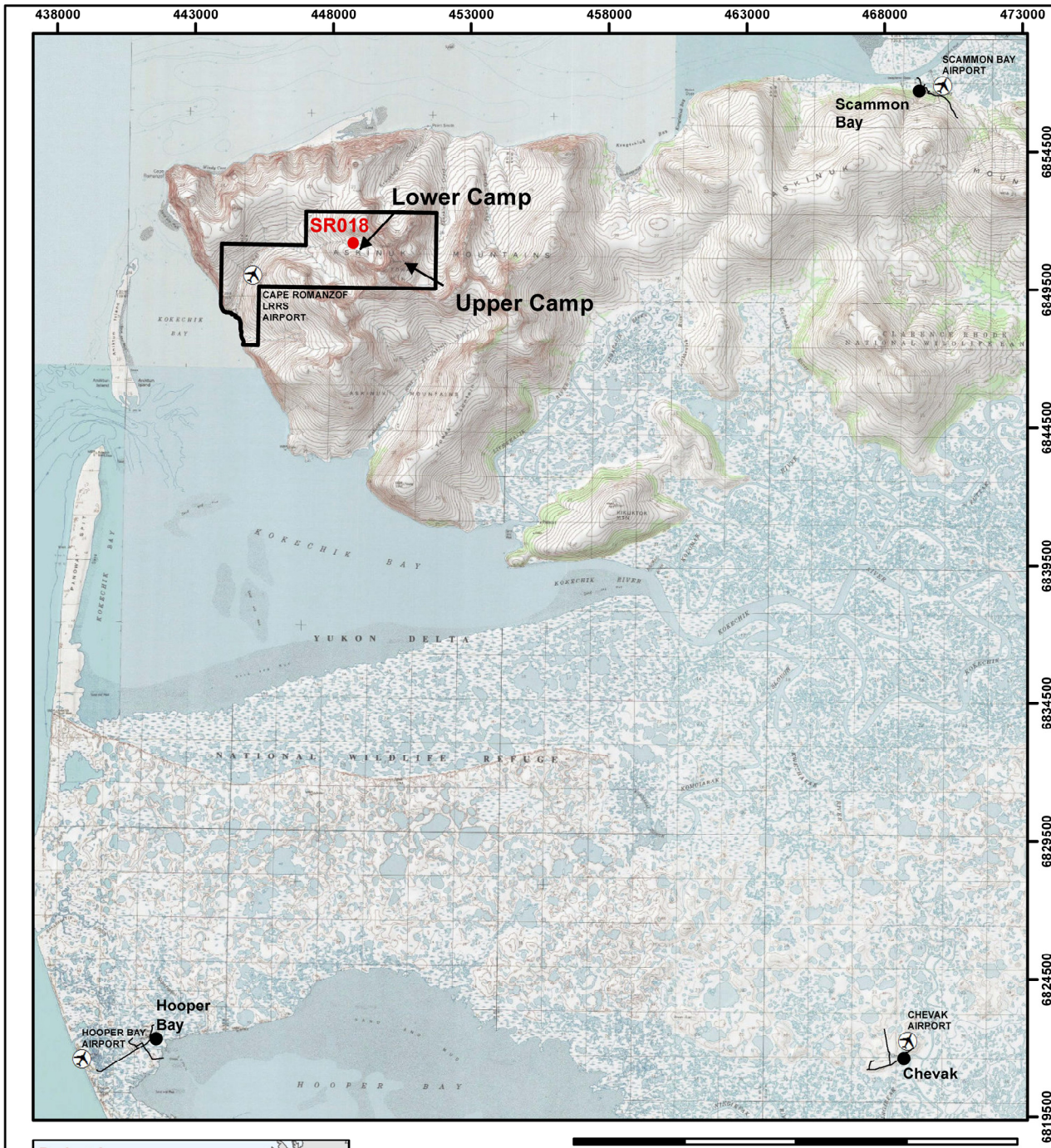
SITE BACKGROUND

Site Location and History

Constructed in 1953, the Cape Romanzof LRRS was one of the Aircraft Control and Warning (AC&W) sites built to establish an air defense system in Alaska. This system was replaced with a White Alice Communications System (WACS) in 1958. In 1977, operation of the installation was transferred from military to contractor personnel. In 1979, with the advent of satellite-based communications systems, the facility was phased out and the number of personnel at the site reduced. The technology at the station was upgraded again in 1985 with the installation of a Minimally Attended Radar system. Currently, the facility is managed by four personnel who reside there year-round. Most of the original AC&W/WACS buildings and structures at the Cape Romanzof LRRS were demolished in the mid-1980s.

Land Use

Current land use of the Cape Romanzof LRRS includes industrial activities associated with operation and maintenance of the radar installation and runway. Current use of nearby lands is minimal; it is unknown to what extent installation personnel use the resources in Fowler (Nilumat) Creek, but a limited amount of subsistence use is expected. With only a few contract personnel occupying the site, use is likely insignificant. Fowler Creek empties into Kokechik Bay, an important resource for subsistence gathering of shellfish and herring spawn. The Cape Romanzof LRRS is surrounded by the Yukon Delta Wildlife Refuge. Land uses are not expected to change in the foreseeable future.



WGS 1984 UTM Zone 3N, meters

Service Layer Credits: Copyright © 2013 National Geographic Society, i-cubed

LOCATION AND VICINITY MAP
CAPE ROMANZOF LRRS SITE SR018

CAPE ROMANZOF, ALASKA



Concrete Target Foundations

HISTORICAL INVESTIGATIONS

Investigations pertaining to SR018 are briefly summarized below. These documents are available in the Administrative Record file for the site. The Air Force and ADEC encourage the public to review these documents to gain a more comprehensive understanding of SR018 and the response activities that have been conducted at the Cape Romanzof LRRS.

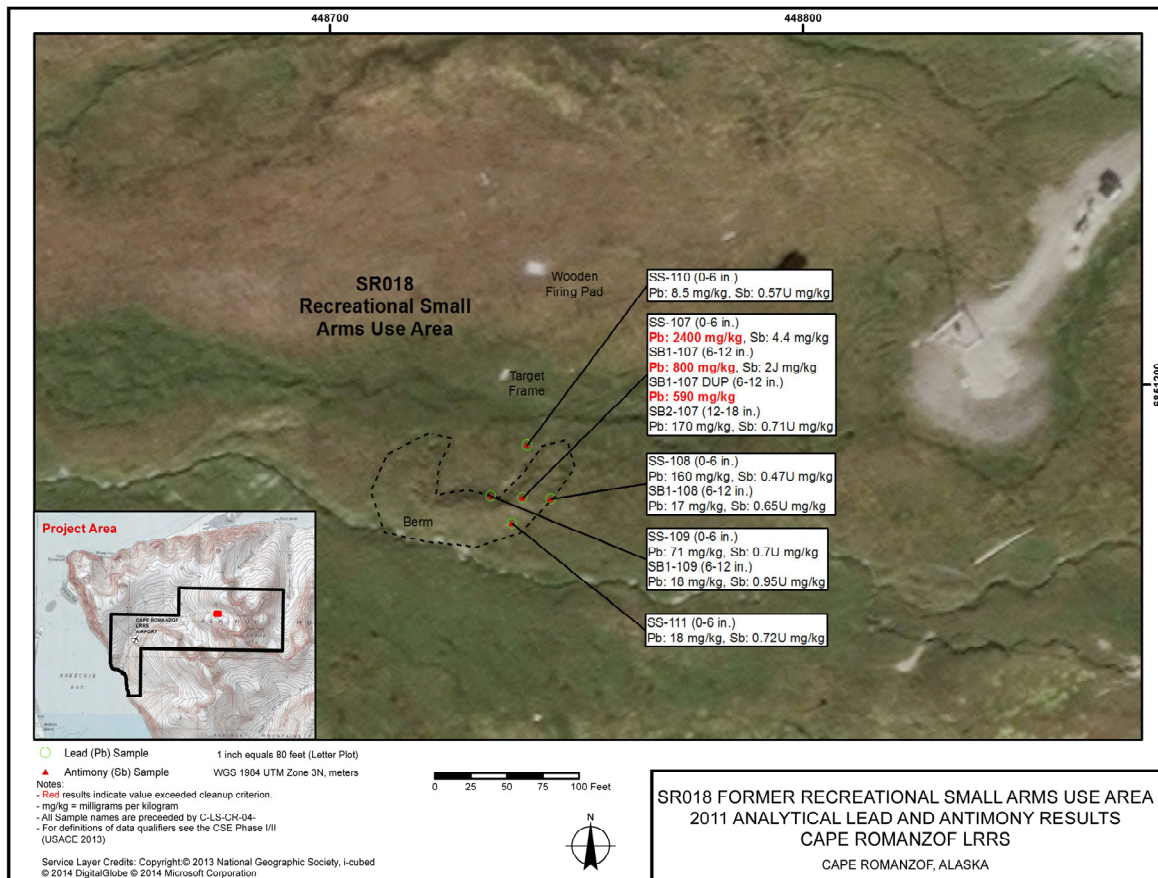
Comprehensive Site Evaluation Phase I/II

Pursuant to CERCLA, a Comprehensive Site Evaluation (CSE) Phase I/II was conducted in 2011 in order to obtain information and evaluate the possible presence of munitions, munitions debris, explosives, and contaminated media at two potential munitions response areas (USACE 2013).

The CSE Phase I/II concluded that the small arms use at SR018 was recreational in nature, and the recreational small arms use area is not an “other than operational” military range; therefore, it is not a munitions response area. Results of the CSE Phase I/II also concluded that, although both lead and antimony are present in the soil at SR018, only lead is present at concentrations above the cleanup level, and further CERCLA response action under the ERP was recommended.

Feasibility Study

A Feasibility Study (FS) prepared in 2015 evaluated potential response technologies to address metals contamination in soil at SR018 (Air Force 2015). The alternatives presented in the FS were screened based on site-specific effectiveness, implementability, and cost.



The following alternatives were developed and evaluated for addressing soil contamination:

- Alternative 1: No Action
- Alternative 2: Land-Use Controls and Long-Term Monitoring
- Alternative 3: Capping, Land-Use Controls, and Long-Term Monitoring
- Alternative 4: Debris Removal, In Situ Soil Treatment, Capping, and Land-Use Controls
- Alternative 5: Removal and Offsite Disposal

The No Action alternative was retained as a baseline against which the other alternatives could be compared. Each alternative was subjected to detailed analysis, based on the threshold and primary balancing criteria established under the NCP [Title 40 of the Code of Federal Regulations (CFR) §300.430 (e)].

SITE CHARACTERISTICS

SR018 is an abandoned small recreational shooting area located in the Lower Camp, approximately 300 feet south of the road between Lower and Upper Camps and north of Fowler (Nilumat) Creek. SR018 consists of a man-made clearing covered with native grasses and shrubs. Seventeen ERP sites are located at the Cape Romanzof LRRS, three of which remain open/active. The closest ERP sites to SR018 are OT005 Road Oiling and LF004 Landfill No. 3. The north end of the clearing nearest the road is the firing point, and the south end of the clearing has a large berm/impact area. Features present at the site include a wooden firing pad, an old pistol range, wooden target frames



Bering Sea Coast, facing west

and miscellaneous debris, and the earthen berm. Historical aerial photographs of the Lower Camp from 1963 did not show any evidence of SR018. Through records review, field reconnaissance, and visual surveys of SR018 during the CSE Phase I/II, it was concluded that SR018 is a recreational small arms use area and not eligible for investigation under the Air Force Military Munitions Response Program.

NATURE AND EXTENT OF CONTAMINATION

The primary COCs at SR018 are metals associated with small-caliber ammunition (lead). During the CSE Phase I/II, soil was sampled for lead and antimony. Analytical results indicated that there is lead in surface and subsurface soil associated with activities conducted at SR018. Samples detected lead in concentrations that exceeded the soil cleanup level (400 milligrams per kilogram [mg/kg]) in one location in the berm/impact area.

All results for antimony were less than the most stringent cleanup criterion. Although antimony was identified as a chemical of potential concern in the CSE Phase I/II and evaluated as a potential contributor to overall risk, site concentrations are well below both state and federal cleanup levels. The antimony results were collocated with lead. Lead-contaminated soil is located at the firing range berm/impact area. This area

WHAT IS THE CONTAMINANT OF CONCERN?

The Air Force and ADEC have identified one contaminant that poses potential risk to human health and the environment at this site:

Lead – Lead adsorbs to soil and is not considered highly mobile in the environment. When lead is deposited in soil from anthropogenic sources, it does not biodegrade or decay and is not rapidly absorbed by plants; therefore, it remains in the soil at elevated levels. The maximum concentration found at SR018 was 2,400 mg/kg. No principal threat wastes exist.

REMEDIAL ACTION OBJECTIVES

The following environmental remedial action objectives (RAO) have been established for SR018 based on regulatory guidance and the findings of previous investigations, actions, and assessments:

- Prevent direct contact of humans to soil containing lead in excess of 400 mg/kg
- Minimize or eliminate direct ecological exposure to COCs
- Reduce the potential for COCs to migrate from site soil to any groundwater, surface water, and/or sediments where human receptors could be exposed

The cleanup level selected for this site is one of the chemical-specific applicable or relevant and appropriate requirements (ARAR) for lead, based on the ADEC Method Two soil cleanup level (400 mg/kg for direct contact/ingestion). Achievement of these RAOs will reduce the overall human health hazard quotient to less than 1, allowing continued use of the site for the Air Force mission at Cape Romanzof LRRS.

measures approximately 10 feet by 15 feet and extends an estimated 18 inches below ground surface (bgs); it is estimated that approximately 8.3 cubic yards of soil are contaminated with lead. The affected volume of soil was estimated based on the ADEC Method Two cleanup criterion of 400 mg/kg for lead in residential areas (ADEC 2015). There was no evidence of historical use of explosives, and no munitions and explosives of concern were observed during the CSE Phase I/II; only “small arms debris” was observed during the visual survey.

No surface water, sediment, or groundwater data were collected during the CSE Phase I/II; therefore, these are considered potential exposure pathways. Groundwater is used as the drinking water source for the Cape Romanzof LRRS (USACE 2013). Depth to groundwater at the Lower Camp ranges from 1 to 60 feet bgs

(USACE 2013). Groundwater at LF003, which is upgradient of SR018, was found at 10 to 20 feet bgs. Due to the low mobility of lead in soil, a lack of receptors, and a small source volume, the groundwater pathways are likely negligible but remain potentially complete in the absence of information to the contrary.

SCOPE AND ROLE OF THE RESPONSE ACTION

The preferred response alternative identified in this Proposed Plan is Removal and Offsite Disposal. This alternative fits into the Air Force’s overall site environmental restoration strategy to protect human health and the environment from actual or threatened releases of hazardous substances into the environment. The scope of the proposed alternative addresses contaminated soil and debris remaining at SR018.

SUMMARY OF SITE RISKS

Screening level human health and ecological risk assessments performed as part of the CSE Phase I/II were limited to the lead soil sample data collected in 2011.

Human Health Risks

The human health risk assessment concluded that lead in soil at SR018 may result in risk to human receptors, as all three exceedances (2,400, 800, and 590 mg/kg) resulted in screening hazard quotients of 6, 2, and 1.5, respectively (USACE 2013). These exceed the target hazard quotient of less than 1.

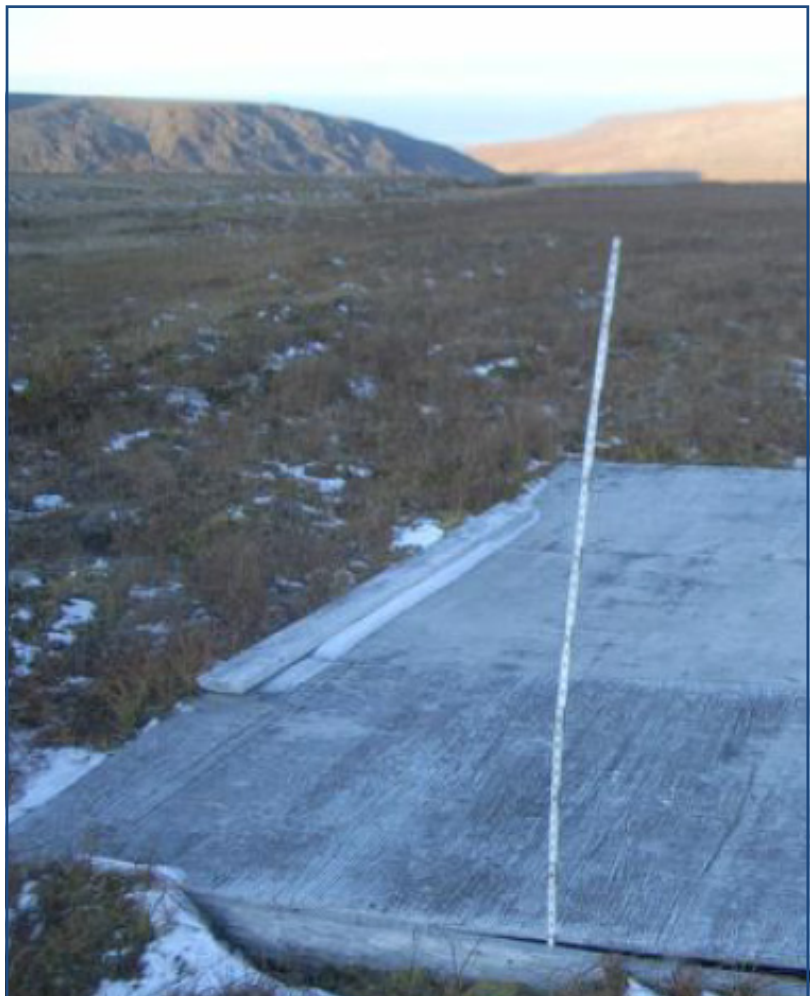
The lateral and vertical extent of contaminated soil around the highest result appears well defined. In order for contamination at a site to pose a risk or threat to people or the environment, a complete exposure pathway must be present. Current contaminant concentrations at SR018 pose a potential risk to human health due to potential contact with lead-contaminated soil.

Wetlands at the Cape Romanzof LRRS are strongly dominated by moist, sloping areas with fewer wetter areas of seasonal flooding and very few areas of persistent standing water. Exposure to contaminants by surface or groundwater at the site is not a current or reasonably expected future pathway. Sample results indicate that leaching of contaminants is not occurring. However, groundwater is a current source of actual drinking water. Current use of nearby lands is minimal; it is unknown to what extent installation personnel use the resources in Fowler (Nilumat) Creek, but a limited amount of subsistence use is expected. With only a few contract personnel occupying the site, use is likely insignificant. Land uses are not expected to change in the foreseeable future.

Under the preferred alternative, munitions debris and soil contaminated with lead above the Method Two cleanup level (400 mg/kg) would be excavated, staged, manifested, and transported offsite for disposal. Approximately 8.3 cubic yards of lead-contaminated soil will be removed, which eliminates risk to human health, and the site would be restored for unlimited use/unrestricted exposure.

Ecological Risks

Ecological risk was assessed based on possible ecological receptors and exposure pathways. Birds, mammals, and fish can be exposed to COCs through ingestion of surface water, plants and animals, and soil/sediment. Lead in soils may result in



Wooden Firing Pad—Evidence of Small Arms Activity

unacceptable risks to ecological receptors at SR018. Although antimony was identified as a chemical of potential concern in the CSE Phase I/II and evaluated as a potential contributor to overall risk, site concentrations are well below both state and federal cleanup levels. Because antimony is collocated with lead, most treatments addressing lead will also address antimony.

It is the Air Force's current judgment that the preferred alternative identified in this Proposed Plan, or one of the other active measures considered in the Proposed Plan, is necessary to protect public health, welfare, or the environment from actual or threatened releases of hazardous substances into the environment.

SUMMARY OF ALTERNATIVES

To develop a response strategy for lead-contaminated soil at SR018, a conceptual understanding of the volume and location of the contamination is needed. Approximately 8.3 cubic yards of lead-contaminated soil remain at SR018.

Alternative 1: No Action

Under the No Action alternative, which is required under the NCP (40 CFR 300.430[e][6]) and serves as a baseline for comparison to other alternatives, no activities would be undertaken to treat or remove the contamination present or to otherwise prevent exposure to the contamination. No monitoring would be conducted. Capital Costs: \$0, Annual Operations & Maintenance: \$0, Present Worth Costs: \$0, Estimated Duration: 0 days.

PREFERRED ALTERNATIVE

The preferred alternative for SR018 is Removal and Offsite Disposal. Under this alternative, munitions debris at the site and soil contaminated with lead greater than 400 mg/kg would be excavated, staged, manifested, and transported offsite for disposal at a Resource Conservation and Recovery Act (RCRA)-permitted chemical waste landfill capable of managing RCRA-regulated lead contaminated soil.

Soil would be excavated and staged onsite prior to transport. Approximately 8.3 cubic yards (12.5 tons) of lead-contaminated soil remain at the site; when excavated, the amount of soil to be disposed equates to approximately 10 cubic yards (15 tons) when adjusting for bulk factor.

Analytical samples would be collected from the staged soil for waste profiling. It is anticipated that excavation activities would focus on surface soil to an 18-inch depth.

Confirmation sampling of the excavation would be required to ensure lead is no longer present at concentrations above the ADEC cleanup level. Once analytical results from confirmation samples indicate that all contaminated soil has been removed, the excavation cavity would be backfilled.

Upon completion, the site would be restored for unlimited use/unrestricted exposure.

CERCLA five-year reviews would not be required with this alternative. This remedial action at SR018 would be conducted concurrently with other response actions at the Cape Romanzof LRRS.

The preferred alternative identified in this Proposed Plan is protective of public health, welfare, and the environment from actual or threatened releases of hazardous substances into the environment.

Remedial Alternative Evaluation System

Category	Evaluation Criteria	Standard	Value
Threshold Criteria	Overall Protection of Human Health and the Environment	Protective; provides adequate risk reduction.	Pass or Fail
	Compliance with Applicable or Relevant and Appropriate Requirements (ARAR)	Complies with ARARs.	Pass or Fail
Primary Balancing Criteria	Long-Term Effectiveness and Permanence	Contaminants are destroyed or removed; no recurrence is possible.	5
		Some contaminants destroyed, removed, or contained.	1 to 4
		Contaminants not removed or contained.	0
	Reduction of Toxicity, Mobility, or Volume through Treatment	Significantly reduces toxicity, mobility, or volume through treatment; no residuals remaining after treatment.	5
		Somewhat reduces toxicity, mobility, or volume through treatment; some residuals remaining after treatment.	1 to 4
		Does not reduce toxicity, mobility, or volume through treatment; significant residuals remaining after treatment.	0
	Short-Term Effectiveness	Protective of community and workers during remediation; no environmental impacts; rapidly meets RAOs.	5
		Somewhat protective of community and workers during remediation; limited environmental impacts; meets RAOs over a period of years to decades.	1 to 4
		Not protective of community and workers during remediation; significant environmental impacts; will not meet RAOs in the near future.	0
	Implementability	Proven, reliable technologies; little or no difficulty in obtaining needed approval, equipment, personnel, and materials. Technical difficulties are expected to be minimal.	5
		Somewhat unproven technologies; potentially more difficulty in obtaining needed approval, equipment, personnel, and materials. Technical difficulties may be significant.	1 to 4
		Unproven technologies; obtaining needed approval, equipment, personnel, and materials could be very difficult. Technical difficulties could prevent implementation.	0
	Cost	Estimated present worth cost is listed for each alternative.	Estimate
Modifying Criteria ¹	State Acceptance	To be determined.	N/A
	Community Acceptance	To be determined.	N/A

Notes:

¹ State and community acceptance will be evaluated following public comment on the Proposed Plan and addressed when the Record of Decision is prepared.

N/A = not applicable

Alternative 2: Land-Use Controls and Long-Term Monitoring

Under this alternative, land-use controls (LUC) would be implemented to restrict invasive and recreational activities and protect human health from exposure to lead contamination in soil above the ADEC Method Two cleanup level (400 mg/kg). LUCs would include dig restrictions and signage, and the Air Force would file a notice of contamination with the Air Force Real Property office. Long-term monitoring (LTM) for erosion and other site conditions and CERCLA five-year reviews would be required to evaluate the long-term protectiveness of the remedy. LTM inspections would be coordinated with other site inspections for ERP sites at the Cape Romanzof LRRS and would occur no less often than once every five years. The NCP requires that response actions that result in any hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure be reviewed every five years to ensure protection of human health and the environment. Five-year reviews would be required indefinitely. Capital Costs: \$239,556, Annual Operations & Maintenance: \$29,205, Present Worth Costs: \$320,804, Estimated Duration: 1 day per 5 years.

COMPARISON OF ALTERNATIVES FOR SR018

Evaluation Criteria	Alternative 1: No Action	Alternative 2: LUCs	Alternative 3: Capping, LUCs, and LTM	Alternative 4: Debris Removal, In Situ Soil Treatment, Capping, and LUCs	Alternative 5: Removal and Offsite Disposal
Overall protection of human health and the environ-	Fail	Pass	Pass	Pass	Pass
Compliance with Applicable or Relevant and Appropriate Requirements	Fail	Pass	Pass	Pass	Pass
Long-term effectiveness and permanence	0	2	3	4	5
Reduction in toxicity, mobility, and volume through	0	0	0	2	0
Short-term effectiveness	0	3	3	2	2
Implementability	0	4	3	3	3
Cost (in millions)	\$0	\$0.32	\$0.89	\$1.08	\$0.92

BASIS FOR THE PREFERRED ALTERNATIVE

Based on the information currently available, it is the Air Force's judgment that the response actions proposed under Alternative 5, Removal and Offsite Disposal, are necessary to protect public health, welfare, and the environment from actual or threatened releases of pollutants or contaminants at SR018.

Alternative 1 lacks both land-use controls and active treatment. Humans could be exposed to lead at concentrations above the ADEC Method Two cleanup level. Alternatives 2 through 5 would be effective. Alternatives 2, 3, and 4 would entail higher costs due to the maintenance of land-use controls indefinitely. In contrast, Alternative 5 would not require any land-use controls or long-term management and has a lower cost than Alternative 4. Therefore, Alternative 5 meets all the remedial action objectives outlined in this Proposed Plan (page 7).

Alternative 3: Capping, Land-Use Controls, and Long-Term Monitoring

Under this alternative, munitions debris at the site and soil contaminated with lead greater than 400 mg/kg would be capped with a minimum 2-foot soil cap. The cap and LUCs would be implemented to restrict invasive activities and protect human health and the environment from exposure to lead contamination in soil over the cleanup level. LUCs would include dig restrictions and signage, and the Air Force would file a notice of contamination with the Air Force Real Property office.

LTM would be implemented to ensure the integrity of the cap and inspections would occur once a year for the first five years, then every five years thereafter, indefinitely. A permeable cap would be appropriate at this location because it should effectively prevent migration of contaminants to groundwater. Based on the estimated extent of contamination, the cap would need to cover approximately 150 square feet and would be constructed with 2 feet of locally available gravel. CERCLA five-year reviews would be required until cleanup levels are met for the site (indefinitely). Capital Costs: \$699,144, Annual Operations & Maintenance: \$29,355, Present Worth Costs: \$886,257, Estimated Duration: 5 days.

Alternative 4: Debris Removal, In Situ Soil Treatment, Capping, and Land-Use Controls

Under this alternative, surficial munitions debris would be removed and disposed of offsite. Soil to an 18-inch depth containing lead above 400 mg/kg would be treated with a chemical stabilization product to prevent leaching and limit migration. Analytical samples would be collected from the soil prior to and after treatment with a chemical stabilization product and analyzed using the Toxicity Characteristic Leaching Procedure (TCLP) for lead. Should the post-treatment soil samples fail TCLP, the soil will be managed and disposed of offsite as RCRA hazardous waste.

The treated soil would then be covered with a 2-foot soil cap. The cap and LUCs would be implemented to restrict invasive activities and protect human health and the environment from exposure to lead-contaminated soil over the cleanup level. LUCs would include dig restrictions and signage, and the Air Force would file a notice of contamination with the Air Force Real Property office. LTM would be implemented to ensure the integrity of the cap and inspections would occur once a year for the first five years, then every five years thereafter. CERCLA five-year reviews would be required until cleanup levels are met for the site (indefinitely). Capital Costs: \$888,014, Annual Operations & Maintenance: \$29,355, Present Worth Costs: \$1,075,127, Estimated Duration: 12 days.

Alternative 5: Removal and Offsite Disposal

Under this alternative, munitions debris and soil contaminated with lead above the Method Two cleanup level (400 mg/kg) would be excavated, staged, manifested, and transported offsite for disposal to a RCRA-permitted chemical waste landfill that is capable of handling and certified to manage RCRA-regulated lead-contaminated soil. Soil samples would be analyzed using the TCLP to determine if the any of the soil should be managed and disposed of as RCRA hazardous waste. Soil would be excavated and staged onsite prior to transport.

Approximately 8.3 cubic yards of lead-contaminated soil will be removed. It is anticipated that excavation activities would focus on surface soil to an 18-inch depth. Confirmation sampling of the excavation would be required to ensure lead was no longer present at concentrations above the ADEC cleanup level. Under this alternative, the site would be restored for unrestricted use/unlimited exposure. CERCLA five-year reviews would not be required with this alternative. Capital Costs: \$917,871, Annual Operations & Maintenance: \$0, Present Worth Costs: \$917,871, Estimated Duration: 13 days.

EVALUATION OF ALTERNATIVES

In accordance with the NCP, the response alternatives were evaluated against the nine criteria, except state and community acceptance, described in §121(b) of CERCLA and the NCP [40 CFR 300.430(f)(1)(f)] and presented in the table on page 10. These criteria are used to evaluate and compare the different remediation alternatives to select a remedy. The table on page 11 presents a comparison of the alternatives conducted during the screening process. This table profiles the relative performance of each alternative against seven of the nine criteria, noting how it compares to the other options under consideration. Evaluation of the last two criteria—state and community acceptance—will be conducted after the public comment period.



Beach Landing

IMPLEMENTATION OF THE PREFERRED ALTERNATIVE

Based on information currently available, the Air Force believes the preferred alternative meets the threshold criteria and provides the best balance of tradeoffs among the other alternatives with respect to the balancing and modifying criteria. The Air Force expects the preferred alternative to satisfy the following statutory requirements of CERCLA §121(b): (1) be protective of human health and the environment; (2) comply with applicable or relevant and appropriate requirements; (3) be cost-effective; (4) utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent possible; and (5) satisfy the preference for treatment as a principal element, or explain why the preference for treatment will not be met. However, this preferred alternative can change based on public comments received during the public comment period or the introduction of new information.

As part of the preferred alternative, soil would be excavated and staged onsite prior to transport. Approximately 8.3 cubic yards of lead-contaminated soil would be removed. Analytical samples would be collected from the staged soil for waste profiling. Confirmation sampling of the excavation would be required to ensure lead was no longer present at concentrations above the ADEC cleanup level. The excavation would be backfilled with clean backfill. This remedial action at SR018 would be conducted concurrently with other response actions at the Cape Romanzof LRRS. Under this alternative, SR018 would be restored for unlimited use/unrestricted exposure. CERCLA five-year reviews would not be required with this alternative.

Following the receipt of comments on this Proposed Plan, the alternatives will be further evaluated based on the modifying criteria: state/support agency acceptance and community acceptance. The final response alternative will be presented in a Record of Decision.

YOUR OPPORTUNITY TO PROVIDE COMMENTS

The Air Force would like community members to provide comments on the alternatives presented in this Proposed Plan. Your input on the Proposed Plan for SR018 is important to the Air Force. Comments provided by the public are valuable in helping the Air Force select a final remedy. You can send your comments in writing using the comment form that is inserted in this document, provide your comments over the phone by calling 1-800-222-4137, or email your comments to keith.barnack@us.af.mil.

If a public meeting is held, comments may also be presented at the public meeting. For your convenience, a pre-addressed comment form has been included in this Proposed Plan. If there is sufficient interest for a public meeting on this Proposed Plan, an acceptable meeting date will be scheduled in Hooper Bay, Alaska before 30 October 2015, and the comment period will be extended by an additional 30 days. Following the receipt of comments on this Proposed Plan, the alternatives will be further evaluated based on the modifying criteria: state/support agency acceptance and community acceptance. The final response alternative will be documented in a Record of Decision.



Fowler (Nilumat) Creek emptying into Kokechik Bay

ADMINISTRATIVE RECORD

The final response action alternative will be selected for the site based on comments from the community. The Air Force and ADEC encourage the public to gain a more comprehensive understanding of SR018 and the response activities that have been conducted at the site. Information concerning the Cape Romanzof LRRS can be found in the Administrative Record files located online at afcec.publicadmin-record.us.af.mil. Once at the website, click on Cape Romanzof LRRS, Alaska from the installation list on the left side of the page. Then select SR-018 from the list of sites and press the Search button. You can also type SR018 into the “Subject or Title” line and select Search to view the Feasibility Study for SR018 or type Comprehensive Site Evaluation into the “Subject or Title” line and select Search to view the CSE Phase I/II.

REFERENCES

- ADEC (Alaska Department of Environmental Conservation). 2015 (June). *Oil and Other Hazardous Substances Pollution Control*. 18 AAC 75.
- Air Force (U.S. Air Force). 2015 (February). *Feasibility Study for SR018 Cape Romanzof Long-Range Radar Site*. Prepared by Jacobs Engineering Group Inc.
- USACE (U.S. Army Corps of Engineers). 2013 (October). *Cape Romanzof Long Range Radar Site Comprehensive Site Evaluation Phase I/II*. Prepared by HDR Environmental.



Small Lake in Fowler (Nilumat) Creek

**THANK YOU FOR YOUR COMMENTS ON THE PROPOSED PLAN FOR
SR018 CAPE ROMANZOF LRRS**

Your input on the response action alternatives discussed in this Proposed Plan is important to the U.S. Air Force. Comments provided by the public are valuable in helping us select a remedy. Use the space below to prepare your comments. When you are finished, please fold and mail. A return address has been provided on the back of this page for your convenience. Comments must be postmarked by 22 October 2015.

Alternatively, if you would prefer to leave your comments by telephone, please call 1-800-222-4137 and leave a voicemail message. You may also email your comments to keith.barnack@us.af.mil. You may leave an anonymous message, or you can provide contact information if you prefer to receive a response. If you have questions about the comment process, please contact Keith Barnack at 907-552-5160.

Name: _____
Address: _____
City, State, Zip: _____
Email and/or Phone: _____





**Comments on Proposed Plan for
SR018 CAPE ROMANZOF LRRS, Alaska**



Return Address

Keith Barnack
Restoration Project Manager
10471 20th Street, Suite 341
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GLOSSARY OF TERMS

Alaska Department of Environmental

Conservation (ADEC) – The regulatory body that monitors the enforcement of Alaska’s environmental standards.

ADEC Method Two – Risk-based cleanup levels for soil for the State of Alaska under Title 18 of the Alaska Administrative Code, Chapter 75.

Administrative Record (AR) – A file that contains information used by the Air Force to decide on the cleanup for a contaminated site. This file is available for public review.

Antimony – Antimony chlorides are corrosive to skin. Alloying lead and tin with antimony improves the properties of the alloys which are used in solders, bullets and plain bearings.

Applicable or relevant and appropriate requirements (ARAR) – Federal, state, and local standards, requirements, criteria, or limitations that are legally applicable or relevant and appropriate to the site; they can be chemical-specific, action-specific, or location-specific.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – A U.S. Federal law designed to clean up sites contaminated with hazardous substances

Environmental Restoration Program (ERP) – Air Force’s environmental cleanup program.

Feasibility Study – A public document required under CERCLA to investigate the potential options available to remediate contamination.

Hazard Quotient – The ratio of the potential exposure to the substance and the level at which no adverse effects are expected.

Land-Use Controls – Legal measures that limit human exposure by restricting activity, use, and access to properties with residual contamination.

Lead – Lead is used in building construction, lead-acid batteries, bullets and shot, weights. If ingested, lead is poisonous to animals and humans, damaging the nervous system and causing brain disorders. Lead is a neurotoxin that accumulates both in soft tissues and the bones.

mg/kg – milligram per kilogram

National Oil and Hazardous Substances

Pollution Contingency Plan (NCP) – The regulations that provide the structure and procedures for responding to discharges of oil and hazardous substances, as directed by CERCLA.

Principal Threat Wastes – Source materials considered to be highly toxic or highly mobile that generally cannot be reliably contained or would present a significant risk to human health or the environment should exposure occur.

Record of Decision (ROD) – A public document that explains which alternative or action will be used to clean up a contaminated site.

Superfund Amendments and Reauthorization Act (SARA) – This act amended the CERCLA in order to respond to changes and additions to the program.

Toxicity Characteristic Leaching Procedure (TCLP) – A soil sample extraction method for chemical analysis employed as an analytical method to simulate leaching through a landfill. At SR018, this testing method is used to determine if a waste should be disposed of as RCRA hazardous waste.

White Alice Communication System (WACS) – A communications system built throughout rural Alaska in the 1950s for military and civilian use.



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