

**2022 FIVE-YEAR REVIEW FOR SITES SS002, SS007, SS010, AND WP003 AT
DRIFTWOOD BAY RADIO RELAY STATION, ALASKA**



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ACRONYMS AND ABBREVIATIONS

AAC	Alaska Administrative Code
ACM	asbestos-containing material
ADEC	Alaska Department of Environmental Conservation
ADNR	Alaska Department of Natural Resources
AFCEC	Air Force Civil Engineer Center
amsl	above mean sea level
AST	aboveground storage tank
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CES	Civil Engineering Squadron
COC	contaminant of concern
CS	Contaminated Site
DRO	diesel-range organics
EPA	United States Environmental Protection Agency
ETM	exposure tracking model
FYR	Five-Year Review
GRO	gasoline-range organics
IC	institutional control
LTM	long-term monitoring
LUC	land use control
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MNA	monitored natural attenuation
NCP	National Contingency Plan
n.d.	no date
NEC	Notice of Environmental Contamination
NPL	National Priorities List
PA	Preliminary Assessment
PAH	polycyclic aromatic hydrocarbon
POL	petroleum, oils, and lubricants
RAO	remedial action objective
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
RRO	residual-range organics
RRS	Radio Relay Station
SARA	Superfund Amendments and Reauthorization Act
SI	Site Inspection
TAH	total aromatic hydrocarbons
TAqH	total aqueous hydrocarbons
TPH	total petroleum hydrocarbons

USAFUnited States Air Force
USTunderground storage tank
UU/UEunlimited use/unrestricted exposure
VOCvolatile organic compound

I. INTRODUCTION

The purpose of a Five-Year Review (FYR) is to evaluate the implementation and performance of a remedy in order to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in FYR reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The United States Air Force (USAF) is preparing this FYR pursuant to United States Department of Defense policy, consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121, consistent with the National Contingency Plan (NCP) (Title 40 Code of Federal Regulations Section 300.430(f)(4)(ii)) and considering United States Environmental Protection Agency (EPA) policy.

This is the first FYR for Site WP003 and the second FYR for Sites SS002, SS007, and SS010 at the Driftwood Bay Radio Relay Station (RRS), Alaska. Statutory reviews under CERCLA are not required for these sites because no CERCLA contaminants exceeding acceptable exposure levels protective of human health and the environment remain. These sites are regulated under Alaska state law and this FYR has been prepared because contamination resulting from releases of petroleum products remain at WP003, SS002, SS007, and SS010 above levels that allow for unlimited use and unrestricted exposure (UU/UE). The four sites are currently listed as “Active” in the Alaska Department of Environmental Conservation (ADEC) Contaminated Sites Database.

LF006 was originally designated for inclusion in this FYR, but due to the recent collection of site data and subsequent ADEC determination that cleanup is complete and the site can support UU/UE (ADEC, 2022d), this FYR no longer includes a technical assessment of the protectiveness of the remedy at LF006 or a protectiveness statement for LF006.

Sites SS002, SS007, SS010, and WP003 do not have official Decision Documents. The remedies for these sites were determined through correspondence between the USAF and ADEC. For Site SS002, the remedy consists of institutional controls (ICs) and annual inspections, consistent with the recommendation made in the *Preliminary Assessment/Site Inspection for Driftwood Bay RRS* (USAF, 2005). ADEC concurred with the Preliminary Assessment/Site Inspection (PA/SI) report in a 19 December 2005 letter (ADEC, 2005). For Sites SS007, SS010, and WP003, the site remedies were documented in the ADEC *Determination of Final Compliance for Driftwood Bay* letter (ADEC, 2010).

The remedy for SS007 included ICs and monitored natural attenuation (MNA). The remedies for SS010 and WP003 were ICs. An IC Plan for SS010 and SS002 was finalized in 2015 (USAF, 2015 and 2016). An IC Plan for WP003 (Air Force Civil Engineer Center [AFCEC], 2018) was completed in 2018. Interim IC inspections occur as part of the Driftwood Bay RRS LTM program. The remedy for LF006 was excavation, as documented in the Record of Decision (ROD) (USAF, 2013).

The Driftwood Bay RRS FYR was performed by Ahtna Solutions, LLC, (Ahtna) on behalf of AFCEC under contract FA8903-22-C0016. Participants included AFCEC, Ahtna, and ADEC personnel with expertise in site investigation and remediation. The review began in September 2022.

Site Background

This section presents background information on the Driftwood Bay RRS sites included in this FYR. The site chronology summarizing significant events and documents is provided in Appendix B.

Site Location and History

Driftwood Bay RRS is located on the north-central coast of Unalaska Island, part of the Fox Islands on the Aleutian Archipelago of Alaska. The installation is located approximately 15 miles from Unalaska/Dutch Harbor (Figure 1). Access to the site is limited to air transportation and seagoing landing craft.

Driftwood Bay RRS was one of 18 Distant Early Warning Line stations constructed in Alaska. The site was activated in 1961 as a White Alice Communications Systems facility, was redesignated as an RRS in 1969, and was deactivated in 1977 (USAF, 2018b). The installation consisted of a composite building with dormitories, office space, a vehicle maintenance shop, and equipment for standby power generation; two billboard antennas and White Alice arrays; two receiver antennas; petroleum, oils, and lubricants (POL) storage and distribution facilities; an equipment/maintenance building; an ammunition storage shed; a water supply system; a disposal area; and an airstrip.

The installation was divided into the Top Camp and Lower Camp areas. The runway and Lower Camp are located just south of Driftwood Bay at an elevation between 5 and 100 feet above mean sea level (amsl). Top Camp is located approximately 3 miles west of Driftwood Bay, on a plateau approximately 1,300 feet amsl.

In 1991, the United States Army Corps of Engineers, under the Formerly Used Defense Site Program, demolished buildings and cleaned up solid wastes at the Driftwood Bay RRS (USAF, 2011). Demolition debris, asbestos-containing material (ACM), aboveground and underground fuel storage tanks, and portions of the fuel pipeline were buried in an onsite landfill (SS002/Landfill No. 1) developed to receive these wastes and permitted by the state of Alaska. Concrete foundations were left in place. A 3,500-foot dirt runway is still present at the Lower Camp portion of the facility (USAF, 2009a).

Operations at Driftwood RRS that impacted the environment include POL transfer and storage, vehicle and electronic system maintenance, and waste disposal (landfills). Historical contamination and investigations are further detailed in the previous FYR (USAF, 2018b), Decision Documents (USAF, 2013; ADEC, 2018), and the site chronology summarized in

Appendix B. A brief description of sites included in this FYR are presented in the following sections. Site locations are shown on Figure 1.

Site SS002 (Contaminated Site [CS] Hazard ID 88)

Site SS002, Landfill No. 1, is located adjacent to (south of) the former composite building at Top Camp. The SS002 landfill was used for disposal of debris from the demolition of the former composite building, POL pump building, aboveground storage tanks (ASTs), underground storage tanks (USTs), pipelines, thermally treated oiled sand from SS007, and other RRS structures during the 1991 demolition of the facility under Landfill Permit No. 88921-BA009, created specifically to receive the waste. The original footprint of the landfill was 40,000 square feet but has expanded through the years and now encompasses up to 6.8 acres (USAF, 2018b). The landfill contains petroleum-contaminated soil and waste materials, including ACM from the former composite building. The asbestos cell is located near the water tank (USAF, 1996).

Site SS007 (CS Hazard ID 96)

Site SS007, Spill/Leak No. 7 at the POL tank farm, is located along the beach approximately 3,000 feet northeast of the airstrip and bordered on the south by Snuffy Creek (Figure 1). Site SS007 consisted of two 250,000-gallon diesel fuel ASTs, a 25,000-gallon gasoline AST, and a fuel pump house that historically supported the RRS while in operation (ADEC, n.d.). The ASTs were removed during the 1991 demolition activities at Driftwood Bay RRS (USAF, 2009a). Diesel-range organics (DRO) contamination was discovered in soil during a 2005 Preliminary Assessment/Site Investigation (USAF, 2005), and the nature and extent in both soil and groundwater was evaluated in 2007 during a Site Characterization (USAF, 2009a). Six groundwater wells were installed at this site in 2015 to monitor DRO concentrations in the groundwater (USAF, 2018b).

Site SS010 (CS Hazard ID 91)

Site SS010, Spill/Leak No. 2 at the former water supply pumphouse (Figure 1), is located at Lower Camp, approximately 1 road mile from the terminus of the runway. A pipeline transported water from Snuffy Creek to the pumphouse and then to a 24,000-gallon water storage tank located approximately 100 feet south of the former composite building (USAF, 2005). The pumphouse was presumably powered by a generator that was supplied by a 550-gallon UST, the suspected source of DRO contamination. The nature and extent of DRO impacts in soil at Site SS010 are presented in the Preliminary Assessment (USAF, 2005) and in the Site Characterization (USAF, 2009a), and summarized in the previous FYR (USAF, 2018b).

Site LF006 (CS Hazard ID 95)

LF006 consisted of a disposal area located approximately 1 mile south of the sound end of the runway (Figure 1). Site LF006 consists of two areas: the Old Disposal Area and the Electronics Debris Area. These areas have different contaminants of concern (COCs) that are regulated

separately, but the remedies identified in the 2013 ROD (USAF, 2013) for each area are the same. The selected remedies were identified as removal and offsite disposal of the petroleum contaminants for the Old Disposal Area and lead-contaminated soils for the Electronic Debris Area. The Electronic Debris Area met cleanup complete criteria following the 2015–2016 remedial action (USAF, 2017). The nature and extent of DRO and residual-range organics (RRO) impacts remaining at the Old Disposal Area are presented in the remedial action/LTM report (USAF, 2018a) and ADEC Decision Document (ADEC, 2018). The nature and extent of CERCLA-related constituents is summarized in the ROD (USAF, 2013) and post-excavation conditions are summarized in the remedial action report (USAF, 2017).

Additional soil sampling was conducted at the Old Disposal Area of LF006 in 2022 at locations that previously exceeded ADEC cleanup criteria. The 2022 soil samples indicated that no contaminants remain above the ADEC cleanup levels. Therefore, ADEC issued a Cleanup Complete Decision Document (ADEC, 2022d) for LF006, effectively removing the IC requirements.

Site WP003 (CS Hazard ID 90)

Site WP003 is a POL waste pit from a floor drain outfall located approximately 250 feet northeast of the former composite building at Top Camp (USAF, 2011). The COCs based on previous investigations consist of the POL compounds DRO and RRO (USAF, 2005 and 2011). Approximately 1,100 tons of POL-contaminated soil were excavated and removed from the site in 2015 and a 2017 investigation identified that approximately 373 cubic yards of DRO-impacted soil remain (USAF, 2017 and 2018a).

Land and Resource Use

The USAF maintains ownership of most of the land on which Driftwood RRS is located under a Public Land Order (USAF, 2011). The land occupied by Driftwood Bay RRS is “overfiled” by both Aleut Corporation and Ounalashka Corporation. Under the Alaska Native Claims Settlement Act and the Alaska Land Transfer Acceleration Act, regional and village corporations can file applications selecting certain lands for transfer to the Native Corporation and can “overfile” or “top-file” withdrawn lands for future selection when they become available. Site LF006 is located on land owned by the Ounalashka Corporation. Land surrounding Driftwood Bay RRS is part of the Alaska Maritime National Wildlife Refuge and is managed by the United States Fish and Wildlife Service (USAF, 2015).

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Sites SS002, SS007, SS010, and WP003		
EPA ID: AK3570028644		
Region: 10	State: AK	City/County: Unalaska/Aleutians West Census Area
SITE STATUS		
NPL Status: Non-NPL		
Multiple OUs? No	Has the site achieved construction completion? Yes	
REVIEW STATUS		
Lead agency: Other Federal Agency <i>[If "Other Federal Agency", enter Agency name]:</i> United States Air Force		
Author name (Federal or State Project Manager): Ahtna Solutions, LLC, on behalf of the Air Force Civil Engineer Center (AFCEC)		
Author affiliation: Contractor		
Review period: 9/9/2022 – 4/7/2023		
Date of site inspection: N/A		
Type of review: Discretionary		
Review number: Review #2 for Sites SS002, SS007, and SS010; Review #1 for WP003		
Triggering action date: 6/8/2018		
Due date (five years after triggering action date): 6/8/2023		

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II. RESPONSE ACTION SUMMARY

This section summarizes the basis for taking action and site risks, response actions, and remedial action objectives, as well as the selected remedies and their status of implementation.

Basis for Taking Action

Table 1 summarizes the COCs that have been identified at the Driftwood Bay sites that are included in this FYR.

Table 1: COCs by Site

Site	Medium	COCs
SS002	Soil	DRO
		TPH
SS007	Soil	DRO
		TPH
		Benzo(a)pyrene
		Naphthalene
		Phenanthrene
		Pyrene
	Groundwater	DRO
SS010	Soil	DRO
LF006	Soil	DRO
		RRO
		Benzo(a)pyrene
		Lead
WP003	Soil	DRO
		RRO

Key:
COC contaminant of concern
DRO diesel-range organics
RRO residual-range organics
TPH total petroleum hydrocarbons

Risk Summary

A quantitative risk assessment was not performed for Site SS002 because site-specific chemical concentrations from the landfill perimeter did not exceed ADEC Method Two criteria (USAF, 2009b). In 2009, a quantitative baseline risk assessment was conducted for Sites SS007 and SS010, and a qualitative risk assessment was conducted for WP003 (USAF, 2009b).

The following subsections summarize the potential human health and ecological receptors, the potentially complete exposure pathways, and the potential ecological and human health risks associated with Sites SS007, SS010, WP003, and LF006.

Human Health Risk Summary

The only potential human health receptors evaluated in the risk assessment were recreational visitors, and the potential exposure media evaluated were surface water and soil (USAF, 2009b). The primary exposure pathways evaluated for human health were inhalation, incidental surface water or soil ingestion, and dermal contact with contaminated soil or surface water. Groundwater was not considered a likely exposure pathway for recreational visitors because there is no access to it (USAF, 2009b).

Risk estimate calculations are presented in the 2009 risk assessment (USAF, 2009b) for Sites SS007, SS010, and WP003 and in the previous FYR for Sites SS007 and SS010. The total hazard index and total incremental lifetime cancer risk for each site were less than the non-cancer criterion of 1 and the carcinogenic effects criterion of 1×10^{-5} (USAF, 2009b). Qualitative assessment of carcinogenic risks associated with DRO and RRO for WP003 determined that the cancer risk did not exceed 1 in 100,000. The human health risk assessment concluded that contaminant concentrations in soil at Sites SS007, SS010, and WP003 do not pose an unacceptable level of risk to human receptors.

The 2009 risk assessment was based on current and anticipated land-use assumptions at the time. To ensure that assumptions and results of the risk assessment remain valid, ICs were recommended for the three sites.

Ecological Risk Summary

An ecological risk assessment (ERA) was not performed for Site SS002 or WP003; however, the 2009 ERA determined that there were no ecological receptors at Top Camp, where Sites SS002 and WP003 are located (USAF, 2009b). There were no contaminants of potential ecological concern identified for Site SS010. The exposure pathways evaluated for Site SS007 include direct contact pathways (i.e., surface water ingestion, incidental soil or sediment ingestion, dermal contact with soil, or sediment, and inhalation of dust), as well as uptake by biota (i.e., plants and animals) and food chain transfer. The ERA concluded that polycyclic aromatic hydrocarbons (PAHs) in soil at Site SS007 pose unacceptable risks to mammalian receptors (masked shrew and sea otter). However, the lithology at Site SS007 consists of medium-to-large gravel to cobble, and burrowing mammals would not burrow at the site to the depth of contamination. Therefore, the exposure pathway to these ecological receptors is incomplete.

LF006 Exposure Pathway Evaluation and Cumulative Risk

Following investigation, cleanup at the site, and additional sampling in 2022, exposure to the remaining contaminants was evaluated using ADEC's Exposure Tracking Model (ETM) (ADEC, 2022d). Exposure pathways are the conduits by which contamination may reach human or ecological receptors. ETM results show all pathways to be one of the following: De Minimis Exposure, Exposure Controlled, or Pathway Incomplete (ADEC, 2022d). The LF006 site soil and

groundwater are cleaned up to below the ADEC cleanup levels and residual contaminant concentrations meet the human health cumulative risk criteria for residential land use.

Response Actions

Following is a description of the response actions performed at Site SS007 and WP003 prior to the 2010 determination of the site remedy. No response actions were performed at Sites SS002, SS010, or LF006, prior to remedy selection.

At Site SS007, oiled sand was excavated from the foundations of the two 250,000-gallon ASTs during the 1991 demolition activities (USAF, 2005). The oiled sand was thermally treated and then placed in the Site SS002 landfill. Prior to treatment, a sample of the sand was collected and analyzed for TPH and DRO. TPH and DRO were detected at concentrations of 27,000 milligrams per kilogram (mg/kg) and 1,930 mg/kg, respectively (USAF, 2005).

At Site WP003, limited investigations performed at this site in 1985, 1995, and 2005 detected POL contaminants above ADEC cleanup levels. During a 2007 site investigation, 20 soil samples were collected from boreholes advanced along the visibly stained drain outfall area. Three samples exceeded the ADEC cleanup levels for DRO, and one sample exceeded the ADEC site cleanup levels for RRO (USAF, 2018a).

Remedial Action Objectives

Remedial action objectives (RAOs) provide a general description of what the cleanup will accomplish. Sites SS002, SS007, SS010, and WP003 do not have official Decision Documents, so RAOs have not been identified for these sites. The 2013 ROD for LF006 (USAF, 2013) listed the site-specific RAO for the Old Disposal area as follows:

- Prevent ingestion, inhalation, and offsite migration of soil containing RRO in excess of 8,300 mg/kg; benzo(a)anthracene in excess of 4.0 mg/kg; benzo(b)fluoranthene in excess of 4.0 mg/kg; benzo(k)fluoranthene in excess of 40 mg/kg; benzo(a)pyrene in excess of 0.4 mg/kg; dibenzo(a,h)anthracene in excess of 0.4 mg/kg; and indeno(1,2,3-cd)pyrene in excess of 4.0 mg/kg.
- Prevent exposure to and release of potential contamination associated with buried solid waste by removal from environmentally sensitive areas.

The RAO site-specific cleanup levels referenced in this section do not depict the most current cleanup levels, however the Cleanup Complete determination was made in consideration of the promulgated soil cleanup levels (ADEC, 2022d).

Selected Remedies

Sites SS002, SS007, SS010, and WP003 do not have official Decision Documents. The remedies for these sites were determined through correspondence between the USAF and ADEC. For Site

SS002, site recommendations were documented in the *Preliminary Assessment/Site Inspection for Driftwood Bay RRS* (USAF, 2005). ADEC concurred with the Preliminary Assessment/Site Inspection (PA/SI) report in 19 December 2005 letter (ADEC, 2005). For Sites SS007, SS010, and WP003, the site remedies were documented in the *ADEC Determination of Final Compliance for Driftwood Bay* letter (ADEC, 2010). The remedy for LF006 was documented in the 2013 ROD (USAF, 2013) and the 2022 Decision Document (ADEC, 2022d). The remedies selected by the USAF for sites included in this FYR are detailed in the following subsections.

Site SS002

For Site SS002, the remedy consists of ICs, consistent with the recommendation made in the 2005 PA/SI report. (ADEC, 2005; USAF, 2005). The ICs, as identified in the *Remedy Implementation at the Former Driftwood Bay Radio Relay Station, Alaska* (USAF, 2015) consist of:

- LUCs incorporated into the 61thh CES LUC Management Plan to indicate the presence of a closed and permitted landfill with ACM.
- A Notice of Environmental Contamination placed with the Alaska Department of Natural Resources' land records.
- Warning signs posted at the extent of the landfill boundaries to provide contact information for LUC management.

In addition, the following actions were identified for Site SS002 in order to ensure compliance with Title 18 Alaska Administrative Code (AAC) Chapter 60 (18 AAC 60), Solid Waste Management (ADEC, 2022b):

- Adequately backfill depressions and grade to promote drainage without erosion.
- Provide sufficient cover to prevent debris eroding from the landfill.
- Take proper precautions to ensure that asbestos fibers are not released to the air or surface water, and install asbestos warning signs.

Site SS007

The remedy selected for Site SS007 per the 2010 ADEC *Determination of Final Compliance for Driftwood Bay Radio Relay Station (RRS) Sites* was MNA with ICs (ADEC, 2010). The major components of the selected remedy are as follows:

- Implement ICs to document the location of residual soil contamination and that the groundwater should not be used as a drinking water source.
- Implement MNA to document whether the DRO plume in groundwater is shrinking and the concentrations are decreasing.

Site SS010

The remedy selected for Site SS010 per the *2010 ADEC Determination of Final Compliance for Driftwood Bay Radio Relay Station (RRS) Sites* was ICs (ADEC, 2010). The major components of the selected remedy are as follows:

- Implement ICs to document the location and extent of residual contamination.
- Limit land use solely to limited/remote recreational use.
- Document the need to properly manage residual contamination in accordance with applicable regulations.

Site WP003

The remedy selected per the *2010 ADEC Determination of Final Compliance for Driftwood Bay Radio Relay Station (RRS) Sites* for Site WP003 was ICs (ADEC, 2010). The major components of the selected remedy are as follows:

- Implement ICs and document the location and extent of residual contamination.
- Limit land use solely to limited/remote recreational use.
- Document the need to properly manage residual contamination in accordance with applicable regulations.

Additionally, the USAF implemented an excavation and offsite removal remedy for WP003 in 2015–2016 (USAF, 2017).

Site LF006

The remedy selected under CERCLA for Site LF006 (Old Disposal Area and Electronic Debris Area) was excavation and offsite disposal (USAF, 2013). Following excavation, the remedy for remaining petroleum contamination selected under state law for the Old Disposal Area was land use controls (LUCs)/ICs established in the 2018 Decision Document (ADEC, 2018). Based on additional sampling in 2022, ADEC issued a 2022 Decision Document (ADEC 2022d) with a Cleanup Complete determination, effectively eliminating the LUC/IC requirements.

Status of Implementation

The remedies for all five sites included in this FYR involve ICs and/or LUCs. This section provides details on the status of implementation for the major components of the site remedies.

In 2015, an IC Plan was developed for Sites SS002, SS007, and SS010 (USAF, 2015). The IC Plan for these three sites included the following elements:

- LUCs for each site will be incorporated into the 611th Civil Engineering Squadron (611 CES) LUC Management Plan (completed July 2015).

- A Notice of Environmental Contamination (NEC) will be placed in the Alaska Department of Natural Resources' (ADNR's) land records (completed April 2018).
- Warning signs placed at the boundary of each site will provide contact information for LUC management (USAF, 2016) (completed August 2015). Signage descriptions are provided in the previous FYR (USAF, 2018b).

In February 2018, an IC Plan was developed for WP003 (AFCEC, 2018) that included the following elements:

- LUCs for the site are incorporated into the 611 CES LUC Management Plan.
- An NEC will be placed in ADNR's land records no later than 31 March 2020.
- Warning signs will be placed at the extent of the site to provide contact information for LUC management no later than 31 October 2019. The signage will be implemented and maintained by the 611 CES.

In August 2019, the USAF issued the revised LUC Management Plan for the Pacific Air Forces Regional Support Center Installation (LUC Management Plan) (USAF, 2019), which includes Driftwood Bay RRS. The Management Plan identifies that there are LUCs in effect at Sites SS002, SS007, and SS010 (USAF, 2019). The revised 2019 LUC Management Plan also includes LUCs in effect for LF006 and WP003. The LUC boundary figure and Table 2-1 from the updated LUC Management Plan, which describes the LUCs in effect, are provided in Appendix C. Copies of the NECs for SS002, SS007, and SS010 are also included in Appendix C. The implementations status of the LUCs/ICs are summarized in Table 2.

Table 2: Summary of Planned and/or Implemented LUCs/ICs

Media, Engineered Controls, and Areas That Do Not Support UU/UE Based on Current Conditions	LUCs/ICs Needed	Impacted Parcels	LUC/IC Objective	Title of LUC/IC Instrument, Documents, or Actions Implemented and Date
Warning signs are in place in accordance with the IC Plan.	Yes	SS002, SS007, SS010, WP003, LF006	Notify site visitors of the presence of onsite contaminants and provide contact information for IC management.	SS002, SS007, and SS010 – Warning signs installed August 2015 LF006 – Warning signs installed in 2020 WP003 – Warning signs installed in 2021
Excavation and digging restrictions are in place to prevent exposure to onsite contamination.	Yes	SS002, SS007, SS010, WP003, LF006	Limit human exposure to contaminants by restricting site use and limiting access and exposure to onsite contaminants.	LUC Management Plan for the Pacific Air Forces Regional Support Center Installation, 2015, amended 2019 IC Plan for Site WP003, 2018

Key:

IC	institutional control
LUC	land use control
UU/UE	unlimited use/unrestricted exposure

The first annual IC inspections were conducted at Sites SS002, SS007, and SS010 in 2015, with a subsequent IC inspection performed in 2016 as part of the previous FYR (USAF, 2016 and 2018b). In 2017, IC inspections were performed at all three sites, as well as at WP003 (USAF, 2018a). All five sites included in this FYR were subject to LUC/IC inspections in 2019, 2020, and 2021 (USAF, 2020a; 2021; and 2022). Results of the 2017–2021 IC inspections are discussed in Section IV, Site Inspections.

The following subsections detail site-specific information on remedy implementation.

Site SS002

The Site SS002 remedy selected by the USAF, consistent with the recommendation made in the 2005 PA/SI report was ICs and inspection to ensure ICs have been implemented. Additionally landfill cap monitoring and repair are required to ensure compliance with 18 AAC 60 maintenance and inspection requirements for the closed and permitted landfill with ACM cell. Cap maintenance includes grading of the landfill cover with additional material placed, as necessary, to ensure proper landfill cell coverage (minimum of 2 feet) and to promote runoff while minimizing erosion and infiltration, well as ensuring that ACM are sufficiently covered to prevent the release of fibers to the air or surface water. As detailed in the previous FYR, inspections were carried out in 2015 and 2016, along with the installation of four LUC signs. Inspections of the landfill cap identified limited vegetation success, areas of erosion, and subsidence. Debris presumed to be sourced from the landfill was documented either protruding from the landfill cap or located on the surface. Subsequent inspections have further documented exposed debris and recommended repairs to ensure sufficient cover to prevent debris eroding from the landfill (USAF, 2018a; 2020a; and 2022). Details regarding landfill maintenance progress during the period of this FYR are discussed in Section IV, Site Inspections.

Site SS007

Site SS007 was recommended for MNA with ICs (ADEC, 2010). The site remedies were documented in the ADEC *Determination of Final Compliance for Driftwood Bay* letter (ADEC, 2010), which supported the finding that groundwater at the site is not a current or likely future drinking water source and recommended continued monitoring of DRO to document decreasing concentrations (USAF, 2010). Following the findings of the site characterization, six well points were installed at SS007 in 2015. Samples were collected in 2015 and 2016 and analyzed for DRO, which showed analytical exceedances of ADEC cleanup levels. In 2016, DRO exceeding the ADEC criteria was detected above the groundwater cleanup level of 1.5 milligrams per liter (mg/L) at two of the well points sampled: WP-04 (1.55 mg/L) and WP-06 (3.86 mg/L) (USAF, 2018b).

In 2017, ADEC approved an 18 AAC 75.350 determination for the site, agreeing that groundwater is not to be considered a future potential drinking water source at Site SS007 (ADEC, 2017). Because of the proximity of the well points to the adjacent water, groundwater was determined to be tidally influenced and subject to ADEC surface water quality criteria listed in 18 AAC 70 (ADEC, 2022c) for total aromatic hydrocarbons (TAH) and total aqueous hydrocarbons (TAqH) concentrations.

Because ICs and the 18 AAC 75.350 groundwater use determination are in place, groundwater monitoring is no longer required by ADEC. Site SS007 meets the requirements for a determination of Cleanup Complete with ICs. However, to support a Cleanup Complete without ICs designation, sampling of DRO is planned to continue in order to achieve three consecutive monitoring events below applicable cleanup levels so that the remedy allows for UU/UE. Discussion of the 2017, 2019, and 2021 MNA sampling and results are provided in Section IV, Data Review.

Site SS010

As described previously, the current ICs in place at Site SS010 include land use restrictions and the placement of signage to alert site visitors of the presence of residual contamination.

Site WP003

In 2015, a remedial action took place in which 1,100 tons of POL-contaminated soil were excavated and removed from WP003. Analysis of the post-excavation confirmation samples detected the presence of residual contaminated soil above ADEC cleanup levels. The remedial action report concluded that additional characterization was necessary to define and quantify the full extent of POL contamination soil at the site (USAF, 2017).

In 2017, 17 soil borings were advanced at the POL delineation area from the 2015 remedial action. Only one borehole location contained a DRO concentration that was above site cleanup levels. Additional step-out boreholes were advanced downgradient of the boring hole that exceeded the DRO cleanup level. The analytical results from the step-out locations were below site cleanup levels and indicated the downgradient extent of POL-impacted soils had been adequately defined. The estimated in-place volume of POL-contaminated soil that remains at WP003 is 373 cubic yards (USAF, 2018a).

Site LF006

The 2013 ROD remedy for the Old Disposal Area was removal and offsite disposal for petroleum-contaminated soil and commingled solid waste. During the removal action effort in 2015–2016, approximately 4,850 tons of petroleum-contaminated soil and solid waste were excavated and transported off site for disposal. Confirmation samples collected from the base of the excavation (5–8 feet below ground surface [bgs]) showed DRO remaining in place above the ADEC cleanup level in three locations (16DWB120SL0.5LF006, 16DWB052SL8.0LF006 and 16DWB078SL5.0LF006) (USAF, 2017). ADEC determined that the remaining residual

contamination concentrations did not pose an unacceptable risk to human health or the environment, provided the site-specific ICs were maintained.

However, to support closure without ICs for LF006, additional soil sampling was conducted in 2022 at the three known hot spot locations at the request of ADEC (CES-Insight, 2022b). The samples were analyzed for previously exceeded analytes (DRO, RRO, and benzo(a)pyrene). Analytical results from the 2022 sampling demonstrate that remaining contaminant concentrations are below ADEC requirements. As a result, ADEC issued a Cleanup Complete determination (ADEC, 2022d), which removes the IC requirements and renders the remedy complete. A detailed discussion of the 2022 soil sampling results is provided in Section IV, Data Review.

Systems Operations/Operations and Maintenance

There are no systems operating at Sites SS002, SS007, SS010, LF006, or WP003.

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III. PROGRESS SINCE THE LAST REVIEW

Protectiveness Statement from the Previous FYR

This section includes the exact protectiveness determinations and statements from the last FYR for Sites SS002, SS007, and SS010 (Table 3), as well as the recommendations from the last FYR and the current status of those recommendations (Table 4).

Table 3: Protectiveness Determinations/Statements from the 2018 FYR

Site	Protectiveness Determination	Protectiveness Statement
SS002	Not Protective	The USAF has determined that the remedy at Site SS002 is not protective of human health and the environment due to noted deficiencies in the landfill cover. Debris is protruding through the cap, and subsidence and erosion have been documented. The landfill cover requires corrective action in order to restore the protectiveness of the Site SS002 remedy. However, ICs are in place to minimize exposures to onsite contaminants, and warning signs are present at the site. In order for the remedy to be protective in the long term after correction of these deficiencies, an NEC must be filed in the ADNRR's land records to ensure protectiveness.
SS007	Short-term Protective	The remedy at Site SS007 is currently protective of human health and the environment. There are no immediate threats from Site SS007, and the remedy is being implemented as planned. ICs are in place and effective. The Site SS007 remedy is protective because ICs are in place. However, in order for the remedy to be protective in the long term, an NEC must be filed in the ADNRR's land records to ensure protectiveness.
SS010	Short-term Protective	The remedy at Site SS010 is currently protective of human health and the environment. There are no immediate threats from Site SS010, and the remedy is being implemented as planned. ICs are in place and effective. However, in order for the remedy to be protective in the long term, an NEC must be filed in the ADNRR's land records to ensure protectiveness.

Key:

ADNR Alaska Department of Natural Resources
FYR Five-Year Review
IC institutional control
LTM long-term monitoring
NEC Notice of Environmental Contamination

Table 4: Status of Recommendations from the 2018 FYR

Site	Issue	Recommendations	Current Status	Current Implementation Status Description	Completion Date (if applicable)
SS002	Deficiencies, including protruding debris and subsidence, were observed at the Site SS002 landfill cap.	Perform landfill cap maintenance to correct cover subsidence and address debris protruding through the cover.	Completed	Repair of the roadway and landfill cap, including cutting and burial of exposed debris, restoring cap thickness with local burrow pit material, and site restoration and revegetation	June 2022
SS002, SS007, and SS010	The NECs for Sites SS002, SS007, and SS010 have not been filed in the ADNR's land records.	The USAF should file the NECs in order to fully implement the ICs, in accordance with the ROD.	Completed	NECs filed with ADNR, Recording District 305 Aleutian Islands	April 2018

Key:

ADNR Alaska Department of Environmental Resources
FYR Five-Year Review
IC institutional control
NEC Notice of Environmental Conservation
ROD Record of Decision
USAF United States Air Force

IV. FIVE-YEAR REVIEW PROCESS

Community Notification, Involvement, and Site Interviews

Activities conducted during the FYR included community notifications and site interviews, data review, and review of available site inspections to assess the protectiveness of the remedy.

A public notice was made available by newspaper posting in the *Bristol Bay Times/Dutch Harbor Fisherman* on 9/22/2022 stating that there was an FYR and inviting the public to submit any comments to the USAF. The results of the review and the report will be made available at the site information repository available electronically on the USAF Administrative Record at <https://ar.afcec-cloud.af.mil>.

During the FYR process, interviews were conducted to document any perceived problems or successes with the remedy that has been implemented to date. The following parties were interviewed, or interview responses were received from them, on the dates specified:

- Robert Johnston, AFCEC Remedial Project Manager; 3 November 2022
- Cascade Galasso, ADEC Environmental Program Specialist; 28 October 2022

Multiple attempts were made to interview a representative from the Ounalashka Corporation, however no response was received. The results of the interviews that were conducted and correspondence received are summarized in this section, and complete records are provided in Appendix E.

Mr. Johnston (AFCEC) stated that the remedies for the Driftwood RRS sites are functioning as intended, and he has not been made aware of any community concerns regarding Driftwood RRS. Access to the site, limited to plane or boat, was noted as a difficulty that has impacted remedy implementations at the sites. Mr. Johnston also noted that repairs to Site SS002 and the roadway were completed in 2022. Photographs of the 2022 landfill cap repair are provided as follows (USAF, 2022c).



Description: Capping material staged along eastern edge of SS002 (facing northeast). (6/14/20221)



Description: Cap material spread and graded along southern portion of SS02 (Facing west). (6/17/22)

Ms. Galasso (ADEC) confirmed that LTM and IC reports have been submitted to ADEC as required and ICs, LUCs, and LTM appear to be functioning correctly. She also noted that access, remoteness, and weather are difficulties at Driftwood Bay RRS. Ms. Galasso noted that the Site LF006 NEC was not filed with ADNR in a timely manner and remaining contamination would need to be reevaluated. An ROD amendment, Decision Document for remaining petroleum contamination, and Environmental Covenant under the United Environmental Covenant Act with landowner concurrence may be required for the remaining petroleum contamination at the site. The site was recommended to be reevaluated during this FYR.

Data Review

The FYR data review consisted of a review of relevant documents, which included the previous FYR report, and annual LTM and IC reports submitted during the period of this FYR. A complete list of the documents reviewed is included as Appendix A. No analytical data were collected at Sites SS002 or SS010 during the period of this FYR. The following sections summarize the data review conducted for Sites SS007, WP003, and LF006 from 2017 through 2022, if available.

Site SS007

During the period of this FYR, groundwater samples were collected at Site SS007 in 2017, 2019, and 2021. In 2017, analytical groundwater samples were collected from well points WP-02, WP-03, WP-04, WP-05, and WP-06. Well point WP-01 was found to be damaged and thus was not sampled. As a result of the groundwater use determination, groundwater samples in 2017 were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) and PAHs only. The individual BTEX and PAH constituent concentrations were summed to calculate TAH and TAqH concentrations for comparison against the state's surface water quality standards listed in 18 AAC 70 (ADEC, 2022c). The analytical results for the TAH and TAqH summations for all well points sampled in 2017 were below the cleanup levels established in 18 AAC 70.

In 2019, well point WP-01 was repaired and all six well points were sampled for BTEX and PAHs. There were no concentrations of BTEX detected and both TAH and TAqH were either non-detect or below the cleanup levels established in 18 AAC 70 (USAF, 2020a). The site was recommended for a designation of Cleanup Complete with ICs with no further sampling.

However, in 2021 sampling of DRO was reinstated with the objective of achieving three consecutive monitoring events below the applicable cleanup level so that the remedy allows for UU/UE and a determination of Cleanup Complete without ICs. In 2021, no DRO concentrations exceeded the ADEC Table C groundwater cleanup level of 1.5 mg/L. All six well points were sampled with detected concentrations of DRO ranging from 0.181 mg/L to 0.911 mg/L.

Site SS007 has only been sampled three times for DRO, therefore not enough data points are available to conduct a valid Mann-Kendal analysis. Annual groundwater monitoring for DRO is planned to establish trend data. Results of the 2022 groundwater sampling will be included in the next FYR.

Site WP003

During 2017, a total of 17 soil borings were advanced at Site WP003 to further delineate and quantify the POL-contamination extent (USAF, 2018a). Soil borings were advanced at various depths from 0 to 7 feet bgs. Twenty-one samples were collected from soil borings and submitted for DRO and RRO analysis. Laboratory analysis detected concentrations of DRO in five of the analytical samples submitted, with one sample exceeding the site cleanup level of 8,250 mg/kg. This sample was collected from borehole location BH-97 at a depth of 3.5–4 feet bgs and contained a DRO concentration of 9,210 mg/kg. Concentrations of RRO were detected in 21 of the samples submitted for analysis, and ranged from 7.54 to 295 mg/kg. All of the detected RRO concentrations were below cleanup levels for the site (USAF, 2018a). The downgradient extent of the POL-impacted soil was defined and the estimated volume of contaminated soil remaining at the site was 373 cubic yards.

Site LF006

To support closure without ICs for Site LF006, additional soil sampling was conducted in 2022 at LF006 in accordance with the *Addendum to the Final Work Plan for 2022 LTM Driftwood Bay RRS* (USAF, 2022b). Three samples were collected at known hot spot locations (16DWB120SL0.5LF006, 16DWB052SL8.0LF006, and 16DWB078SL5.0LF006) and submitted for analysis of DRO, RRO, and benzo(a)pyrene depending on location. Results were compared to the most stringent ADEC Method Two soil cleanup levels (ADEC, 2022a). All sample results were below the ADEC soil cleanup levels. Sample 16DWB120SL0.5LF006 was analyzed for the benzo(a)pyrene only and had a reported concentration of 0.834 mg/kg, below the 1.2-mg/kg over-40-inch-zone human health cleanup level. Sample 16DWB052SL8.0LF006 was analyzed for DRO only and both the primary and duplicate results were non-detect. Sample 16DWB078SL5.0LF006 was analyzed for both DRO and RRO, and both contaminants were reported as non-detect.

Site Inspections

Multiple attempts were made to access the Driftwood site during the reporting period of this FYR (September through October, 2022). However, due to weather conditions, travel attempts by both air and boat were unsuccessful. To meet the FYR reporting deadline in June 2023, the most recent site visit performed in summer 2022 for SS002 landfill cap repair activities (CES-Insight, 2022a and 2022b), as well as site inspection summaries from the 2017–2021 LUC/IC LTM program, are the basis for assessing whether the remedies remain protective.

Generally, across the sites there was no evidence of unauthorized access, construction, excavation, or use of groundwater. Wildlife including birds and foxes were observed. Vegetation was growing across the sites and evidence of stressed or stained vegetation was not observed.

Site SS002

Landfill cap inspections were performed at SS002 in 2017, 2019, 2020, and 2021. The reports confirmed the findings of earlier inspections (metal debris scattered around with some pieces protruding from the landfill). The 2019 landfill cap inspection and road condition assessment geospatially identified several areas of exposed landfill debris, predominantly metal, rebar, piping, wood, tar, and presumed ACM (USAF, 2020b). The road from the runway to Top Camp was significantly impacted by erosion from runoff, rockfalls, and landslides across the roadbed. Approximately 0.5 mile of roadway was reported significantly eroded or washed out to the point where it would currently be impassable by heavy equipment or truck traffic (USAF, 2020b).

The necessary repairs to ensure Site SS002 protectiveness and functionality of the landfill cap were completed in June 2022, along with restoration of the roadway between Lower Camp and Top Camp (CES-Insight, 2022a). Activities included cutting and burial of exposed debris, restoring cap thickness with local burrow pit material, and site restoration and revegetation. Based on the pre-draft letter reporting documenting the 2022 LTM activities, dated 22 November 2022, no additional action is required and the SS002 cap remedy remains protective (CES-Insight, 2022a).

In 2017, one of the of the LUC signs at SS002 was reported damaged and hardware on the remaining intact signs showed signs of corrosion. During 2019, two signs were replaced and reattached to the same posts. Two signs were reported missing during the 2020 site inspection but were replaced during the 2021 field activities. The IC requiring warning signs at the extent of the site are in place and remain effective with no signs of excavation or soil disturbance (UASF, 2022; CES-Insight, 2022a).

Site SS007

Based on the 2021 LTM report, site conditions at SS007 are considered good, with LUC measures observed to be present and discernible in 2021 (USAF, 2020a). LUCs were functioning as intended as there were no reported signs of excavation or soil disturbance. There was no evidence of manmade disturbance at the site or any violations of the site prohibitions and restrictions. The two warning signs for SS007 were located and found to be in good condition. Following the well point WP-01 repair in 2019, all six well points are functioning to allow monitoring of the DRO plume at SS007 (USAF, 2020a and 2022a).

Site SS010

Based on the 2021 LTM report, the LUCs are in effect to limit human exposure at Site SS010. Two warning signs were located and found to be in good condition. There was no evidence observed of manmade disturbance (excavation or soil disturbance) to the site or any violations of prohibitions and restrictions (USAF, 2022a). The roadway repairs conducted in 2022 will help address the significant erosion near the site due to water runoff from the upslope portion of the roadway (USAF, 2022; CES-Insight, 2022a). Replacement of the warning sign north of the site was recommended in the 2021 LTM report and planned for replacement in 2022 (USAF, 2022a).

Site WP003

As documented in the 2021 LTM report, LUCs have been implemented to limit human exposure to the former waste pit (USAF, 2022a). The excavated area at WP003 was reported to have signs of natural vegetation establishing itself (USAF, 2020a). No evidence was observed of disturbance to the site or any violations of prohibitions/restrictions. LUCs are functioning as intended because there were no signs of excavation or soil disturbance. During 2021 LTM activities, a new warning sign was installed at the site on an existing metal pole, facing east at the end of the road, east of the site.

Site LF006

During the 2019 site inspection, the site was found to be well graded and well drained, with no standing water in the former landfill area that was removed in 2015/2016 (USAF, 2020a). Native vegetation was beginning to establish itself in the graded gravel substrate. By 2021, the site was reported with complete vegetation coverage and all berms in place (USAF, 2022a). There has been no evidence of manmade disturbance at the site despite the lack of an NEC documenting the site prohibitions and restrictions due to residual contamination at the site. The 2021 site inspection report recommended that two warning signs be placed at the boundary of the site in 2022 (USAF, 2022a).

The *Addendum to the Final Work Plan for 2022 LTM Driftwood Bay RRS* (USAF, 2022b) included additional sampling at LF006. During the 2022 field activities, soil samples were collected from three test pits that were dug with a backhoe and backfilled following sample collection (CES-Insight, 2022b).

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V. TECHNICAL ASSESSMENT

In accordance with CERCLA, the NCP, and current EPA guidance (EPA, 2001), an FYR should determine whether the remedy at the site is protective of human health and the environment. The technical assessment of a remedy examines three questions that provide a framework for organizing and evaluating data and information and ensures that all relevant issues are considered when determining the protectiveness of the remedy. These questions are presented in the following sections.

QUESTION A: Is the remedy functioning as intended by the decision documents?

Remedies at Sites SS002, SS007, SS010, and WP003 are functioning as intended. Corrective actions to repair the SS002 landfill cover and restore its integrity were completed in 2022. The extent of residual contamination at WP003 was determined in 2017, and inspections are occurring to confirm no unauthorized access or excavation is occurring. An IC Plan for Site WP003 was developed in February 2018 (AFCEC, 2018).

LUCs/ICs for all four sites are in place to minimize exposure to remaining onsite contaminants. The LUCs for all sites are documented in the LUC Management Plan (USAF, 2019). Additionally, LUC inspections have been conducted at all sites. Inspections include reviewing the condition of warning signs, reviewing the condition of landfill cover (SS002), and reviewing the sites for evidence of prohibited activities such as unauthorized excavation. Warning signs are in place and the LUCs/ICs for each site are functioning as intended to prevent exposure to site contaminants. LUC/IC reports have been submitted to ADEC.

At Site SS007, groundwater contamination has been well documented through its LTM remedy and the extent of contamination is constrained to property held by the USAF under a public land order. The site status is Cleanup Complete with ICs and an NEC has been amended to the land record for SS007. At the discretion of the USAF, MNA of DRO concentrations is being performed to provide additional data to document that site conditions meet the criteria for site closure with ICs, as documented in 18 AAC 75.380 (c)(2) (ADEC, 2022a). If sampling results continue to show concentrations remain below Table C groundwater cleanup levels, this would support site closure without ICs and UU/UE. The statistical trend evaluations will be completed after the 2022 sampling event.

QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid?

The exposure assumptions used at the time of the remedy selection are still valid. RAOs were not established for Sites SS002, SS007, SS010, and WP003. After the remedies for Sites SS002, SS007, WP003, and SS010 were determined, ADEC issued revised soil cleanup levels, which are risk-based values that incorporate updates to toxicity data. Under the NCP, if a new requirement is promulgated after the ROD is signed and the requirement is determined to be applicable or relevant and appropriate, the remedy should be examined in light of the new requirement to ensure

that the remedy is still protective. With the exception of LF006, these sites do not have official Decision Documents. In addition, cleanup standards were not specified during remedy selection for Sites SS002, SS007, LF006, WP003, and SS010; therefore, the cleanup levels are assumed to be the newly promulgated standards.

There are no changes to the exposure pathways at these sites. There have been no changes in the physical conditions of Sites SS007, LF006, or WP003 that would affect the protectiveness of the remedy. Repairs to the Site SS002 cap and roadway along SS010 have been performed to ensure protectiveness of the sites' remedies.

QUESTION C: Has any other information come to light that could call into question the protectiveness of the remedy?

There is no new information that would question the protectiveness of the remedies for the Driftwood Bay RRS sites included in this FYR.

VI. ISSUES/RECOMMENDATIONS

This section includes the issues and recommendations that affect the current and/or future protectiveness of the remedies.

Issues/Recommendations	
Sites without Issues/Recommendations Identified in the Five-Year Review:	
SS002, SS007, SS010	

Issues and Recommendations Identified in the Five-Year Review:
--

Site WP003	Issue Category: Institutional Controls			
	Issue: LUCs are incorporated into the LUC Management Plan, however an NEC is not on record with the ADNLR.			
	Recommendation: An Environmental Covenant or Notice of Activity and Use Limitations should be placed on the property to maintain the ICs identified in the 2018 IC Plan. The ICs will need to document restrictions to groundwater and soil use.			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	USAF	State	2023

Other Findings

In addition, the following are recommendations that were identified during the FYR but do not affect current and/or future protectiveness:

- At Site SS007, continue annual groundwater sampling of DRO to document attainment of UU/UE conditions.
- In its 2010 determination letter, ADEC recommended Site SS010 for a status of Cleanup Complete with ICs (ADEC, 2010). The USAF should request this status change for Site SS010, because the site status is listed as “open” in the ADEC Contaminated Sites Database (ADEC, 2022d).
- During the next planned revision of the LUC Management Plan, update Table 2-1 for each Driftwood Bay site included in this FYR.
- Prepare a fact sheet that summarizes the remedy, ICs, and the results of this FYR for the Unalaska community.

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VII. PROTECTIVENESS STATEMENTS

Protectiveness Statement		
Site SS002	<i>Protectiveness Determination:</i> Protective	<i>Planned Addendum Completion Date:</i> Not applicable
<i>Protectiveness Statement:</i> The remedy at Site SS002 is protective of human health and the environment due to landfill cover preventing direct exposure to onsite contaminants. Additionally, ICs are in place to minimize exposure to onsite contaminants, and warning signs are present at the site. An NEC is currently on file with the ADNR's Aleutian Island Recording District.		
Protectiveness Statement		
Site SS007	<i>Protectiveness Determination:</i> Protective	<i>Planned Addendum Completion Date:</i> Not applicable
<i>Protectiveness Statement:</i> The remedy at Site SS007 is protective of human health and the environment. There are no immediate threats from Site SS007, and the remedy is being implemented as planned. The Site SS007 remedy is protective because ICs are in place and an NEC is currently on file with the ADNR's Aleutian Island Recording District.		
Protectiveness Statement		
Site SS010	<i>Protectiveness Determination:</i> Protective	<i>Planned Addendum Completion Date:</i> Not applicable
<i>Protectiveness Statement:</i> The remedy at Site SS010 is protective of human health and the environment. There are no immediate threats from Site SS010, and the remedy is being implemented as planned. ICs are in place and effective and an NEC is currently on file with the ADNR's Aleutian Island Recording District.		
Protectiveness Statement		
Site WP003	<i>Protectiveness Determination:</i> Short-term Protective	<i>Planned Addendum Completion Date:</i> 2023
<i>Protective Statement:</i> The remedy at Site WP003 is currently protective of human health and the environment in the short term. The extent of residual contamination at WP003 was determined in 2017, inspections are occurring to confirm no unauthorized access or excavation is occurring, and an IC Plan for WP003 was developed in 2018. There are no immediate threats from Site WP003 and the		

remedy is being implemented as planned. For long-term protection, a Notice of Activity and Use Limitations is required to be filed with the ADNR's Aleutian Island Recording District.

VIII. NEXT REVIEW

The next FYR report is required five years from the USAF signature date on this FYR.

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FIGURES

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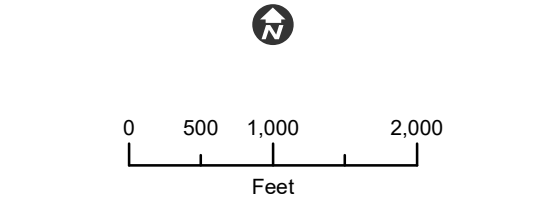
LEGEND

- ★ LUC Sign
- ⊕ Well Point
- Land Use Control
- Installation Boundary

Notes:

1. LUC boundaries depicted on this figure are preliminary pending final analysis of survey information. LUC boundaries will be updated once this information is available.
2. Boundary data are from 611th GeoBase or have been georeferenced into GIS from historical documents. Data could be incomplete and are of unknown accuracy.
3. For more detailed land use restriction information, see individual site descriptions and summaries.

GIS - Geographic Information System
LUC - Land Use Control
RRS - Radio Relay Station



**2022 Five-Year Review Report for
SS002, SS007, SS010, WP003, and LF006
at Driftwood Bay Radio Relay Station, Alaska**
U.S. Air Force Civil Engineer Center
Joint Base Elmendorf-Richardson, Alaska

Site Location and Vicinity
Figure 1

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**DRIFTWOOD BAY RRS FIGURES
AS REFERENCED IN DECISION DOCUMENTS**

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FIGURE 5-9

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2-59



SITE VICINITY MAP
NOT TO SCALE

SITE SS007

LEGEND

- AREA ABOVE ADEC METHOD TWO
- GROUNDWATER MONITORING POINT
- EXPLORATORY BORING (NO ANALYTICAL SAMPLES WERE COLLECTED)

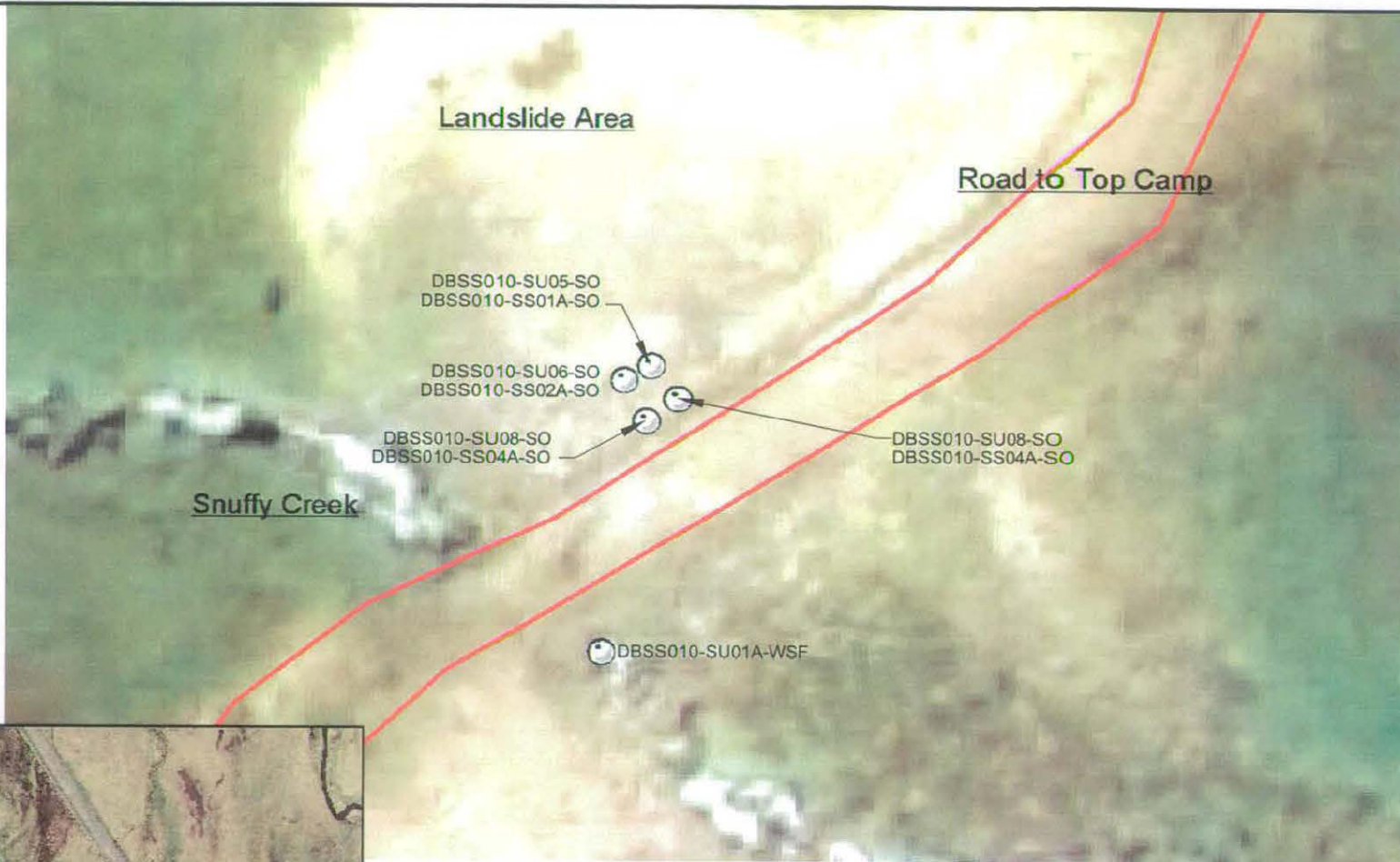


**SAMPLE LOCATIONS AT SS007
SPILL/LEAK NO. 7 AT THE FORMER POL
TANK FARM
UNALASKA ISLAND, ALASKA**

PROJECT MANAGER: S. Witzmann	FILE NAME: Fig 2-11 SS007 Spill 7.dwg	DATE: Mar. 24, 09
JE	LAYOUT TAB: Fig 2-11 SS007 Spill 7	FIGURE NO.: 2-11
	FILE LOCATION: Driftwood Bay \05BC7101 \ Characterization Rpt	

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SITE SS010



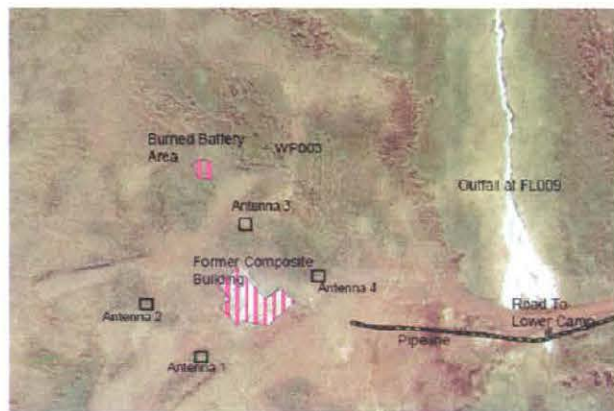
**SAMPLE LOCATIONS AT SS010
SPILL/LEAK NO. 2 AT THE FORMER
WATER SUPPLY PUMP HOUSE
UNALASKA ISLAND, ALASKA**

PROJECT MANAGER: S. Witzmann	FILE NAME: Fig 2-15 SS010 Samples.dwg	DATE: Mar. 24, 09
JE	LAYOUT TAB: Fig 2-15 SS010 Samples	FIGURE NO.: 2-15
	FILE LOCATION: Driftwood Bay \ 05BC7101 \ Characterization Rpt	

SITE VICINITY MAP

NOT TO SCALE

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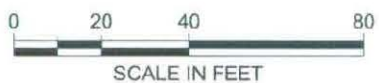
SITE VICINITY MAP
NOT TO SCALE



SITE WP003

LEGEND

-  AREA ABOVE ADEC METHOD TWO
-  SURFACE STAINING



**SAMPLE LOCATIONS AT WP003
POL WASTE PIT**

UNALASKA ISLAND, ALASKA

PROJECT MANAGER: S. Witzmann	FILE NAME: Fig 2-4 WP003 Samples.dwg	DATE: Mar. 24, 09
JE	LAYOUT TAB: Fig 2-4 WP003 Samples	FIGURE NO.: 2-4
DRAWN BY:	FILE LOCATION: Driftwood Bay \ 05BC7101 \ Characterization Rpt	

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APPENDIX A

REFERENCES

- Air Force Civil Engineer Center (AFCEC), 2018. *Institutional Control Plan for Site WP003, The Former Driftwood Bay Radio Relay Station, Alaska*. February.
- Alaska Department of Environmental Conservation (ADEC), n.d. Contaminated Sites Search: Driftwood Bay RRS. Accessed 2022. <https://dec.alaska.gov/Applications/SPAR/PublicMVC/CSP/Search?Search=True&TotalCount=0&SiteName=driftwood+bay+rrs&SiteTypeID=&HazardID=&CityName=&Status=&BoroughID=&Address=&LUSTOnly=false&ZipCodeID=&ICsOnly=false&FileNumber=&ICTypeID=&PageNumber=1&ItemsPerPage=10>
- ADEC, 2005. *Draft Report – Preliminary Assessment/Site Investigation, Driftwood Bay RRS, Alaska*. December.
- ADEC, 2010. *ADEC Determination of Final Compliance for Driftwood Bay Radio Relay Station (RRS) Sites*. February.
- ADEC, 2018. *Decision Document: Driftwood Bay RRS LF006 Old Disposal Area Cleanup Complete Determination – Institutional Controls*. April.
- ADEC, 2022a. Title 18 Alaska Administrative Code (AAC) Chapter 75 (18 AAC 75). Oil and Hazardous Substances Pollution Control. January.
- ADEC, 2022b. 18 AAC 60. Solid Waste Management. February.
- ADEC, 2022c. 18 AAC 70. Water Quality Standards. November.
- ADEC, 2022d. *Decision Document: Driftwood Bay RRS LF006 Old Disposal Area Cleanup Complete Determination*. December.
- CES-Insight, LLC (CES-Insight), 2022a. *Pre-Draft Letter Report – Driftwood Bay RRS – SS002 Landfill*. November.
- CES-Insight, LLC (CES-Insight), 2022b. *Pre-Draft Letter Report – Driftwood Bay RRS – LF006 – Old Disposal Area*. November.
- United States Air Force (USAF), 1996. *Final Preliminary Assessment/Site Inspection Radio Relay Station Driftwood Bay, Unalaska Island, Alaska*. January.
- USAF, 2005. *Final Preliminary Assessment/Site Inspection, Driftwood Bay RRA, Alaska*. December.

- USAF, 2009a. *Remedial Investigation Report, Driftwood Bay Radio Relay Station, Driftwood Bay, Alaska*. September.
- USAF, 2009b. *Risk Assessment Report, Driftwood Bay Radio Relay Station, Driftwood Bay, Alaska*. September.
- USAF, 2009c. *Site Characterization Report, Driftwood Bay Radio Relay Station, Driftwood Bay, Alaska*. September.
- USAF, 2011. *Final Feasibility Study, Driftwood Bay Radio Relay Station, Unalaska Island, Alaska*. July.
- USAF, 2013. *Final Driftwood Bay Radio Relay Station, Unalaska Island, Alaska, Record of Decision: Site LF006 Old Disposal Area and Electronic Debris Area*. March.
- USAF, 2015. *Final Remedial Action Work Plan, Remedy Implementation at the Former Driftwood Bay Radio Relay Station, Alaska*. July.
- USAF, 2016. *Final Institutional Controls Reports for the Former Driftwood Bay Radio Relay Station, Alaska*. April.
- USAF, 2017. *Final 2015–2016 Remedial Action Report for Remedy Implementation at the Former Driftwood Bay Radio Relay Station, Alaska*. May.
- USAF, 2018a. *2017 Remedial Action-Operation/Long Term Management Report, Former Driftwood Bay Radio Relay Station, Unalaska Island, Alaska*, March.
- USAF, 2018b. *First Five-Year Review Report for Sites SS002, SS007, and SS010 at Driftwood Bay Radio Relay Station, Alaska*. June.
- USAF, 2019. *Land Use Control Management Plan, Pacific Air Forces Regional Support Center Installations*. August.
- USAF, 2020a. *Final 2019 Land Use/Institutional Controls and Long Term Monitoring, Former Driftwood Bay Radio Relay Station*. April.
- USAF, 2020b. *Final Technical Memorandum – Recommendations Regarding Necessary Repairs to SS002 Landfill Cap, Including Re-seeding of the Cap Area. US Air Force Former Driftwood Bay Radio Relay Station, Unalaska Island, Alaska*. Prepared by Bethel Services, Inc. June.
- USAF, 2021. *Final 2020 Land Use/Institutional Controls and Long Term Monitoring, Former Driftwood Bay Radio Relay Station*. May.
- USAF, 2022a. *Final 2021 Land Use/Institutional Controls and Long Term Monitoring, Former Driftwood Bay Radio Relay Station*. June.

USAF, 2022b. *Addendum to the Final Work Plan for 2022 LTM Driftwood Bay RRS*. June.

USAF, 2022c. Letter Report, *Driftwood Bay RRS – SS002 Landfill*, to Robert Johnston, from CES-INSIGHT, LLC. November.

United States Environmental Protection Agency (EPA), 2001. *Comprehensive Five-Year Review Guidance*. July.

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APPENDIX B

SITE CHRONOLOGY

Event	Date
The USAF constructed the Driftwood Bay RRS facility.	1958
The USAF operated the Driftwood Bay RRS communications facilities.	1961–1977
SS007 had two surface soil samples collected near the 250,000-gallon ASTs. Trace concentrations of metals and methylene chloride were detected in the soil samples.	1985
Demolition activities were performed at Driftwood Bay RRS to remove all structures and facilities at the RRS, except for the 3,500-foot dirt runway present at the Lower Camp portion of the facility. Demolition debris, including ACM, aboveground and underground fuel storage tanks, and a portion of the fuel pipeline were buried in an onsite landfill located within SS002.	1991
<p>DRO and TPH were detected in a surface soil sample collected near a seep in the northeast portion of the landfill within SS002.</p> <p>For SS007, one surface soil sample was collected from each of the foundations of the 250,000-gallon ASTs. In addition, a surface soil sample was collected from the north side of the former pumphouse and a surface water sample was collected. All three surface soil samples were analyzed for DRO, one surface soil was analyzed for TPH, and the surface water sample was analyzed for DRO and BTEX.</p> <p>An inspection of the source area was conducted at LF006. A soil stockpile and a debris pile (solid waste) including several 55-gallon drums were noted within the disposal area.</p>	1995
<p>At SS002, three composite samples of landfill cover were collected and tested in the field for chlorides. Landfill inspection indicated that rehabilitation of the landfill cover to ensure adequate drainage without erosion and sufficient coverage of the ACM cell and other landfill contents was warranted.</p> <p>At SS007, two of four surface soil samples exceeded ADEC cleanup levels for DRO.</p> <p>At SS010, after a landslide, the top of an UST was exposed approximately 15 feet northeast of the pumphouse's former foundation at SS010. A strong hydrocarbon odor and sheen were detected in saturated soil removed from the top of the metal and in the surrounding soil. A soil sample and a duplicate were collected and analyzed for DRO, RRO, PAHs, and RCRA metals. Only DRO exceeded the ADEC cleanup level.</p> <p>At WP003, four soil samples collected around the floor drain pipe outfall contained DRO and RRO exceedances. No PCBs were detected and arsenic and lead were within background levels.</p> <p>A visual survey of LF006 indicated potential sources of contamination included batteries, vehicle parts, engines, a fire extinguisher, and drums. Depth to groundwater in the vicinity of Lower Camp (includes LF006) was reported in soil boring descriptions at approximately 5–32 feet bgs.</p>	2005
<p>Soil borings were advanced and groundwater samples were collected at SS007. DRO was detected in all but four of the 29 soil borings at concentrations exceeding the ADEC soil cleanup level. Groundwater samples from five of the six temporary well points sampled had DRO exceeding the ADEC groundwater cleanup level. DRO was also present above ADEC cleanup levels in surface soil near Snuffy Creek. Soil samples were collected at SS010 to evaluate potential impacts to surface water.</p> <p>At WP003, 20 soil samples were collected from boreholes advanced along the visibly stained drain outfall area at WP003. Three samples exceeded the ADEC Method Two direct contact criterion for DRO, and one sample exceeded the ADEC site cleanup level for RRO.</p> <p>Driftwood Bay RRS received a No Further Action Planned determination from the EPA.</p>	2007

Event	Date
A community survey conducted for LF006 determined residential use is not anticipated because site access is limited to boat or plane.	2008
<p>At SS007, six well points were installed for MNA of DRO in 2015 and sampled in 2015 and 2016. DRO exceeded the cleanup level 1.5 mg/L in four of six wells sampled in 2015, and two of six wells sampled in 2016.</p> <p>A removal action was performed at WP003 and LF006. Approximately 1,100 tons of POL-contaminated soil were excavated and removed from WP003. At LF006, approximately 4,850 tons of petroleum-contaminated soil and solid waste were excavated and transported off site for disposal.</p> <p>The Electronic Debris Area was closed following removal actions conducted in 2015 and 2016. However, one of the 10 sample locations at the Electronic Debris Area resulted in an exceedance of the ADEC Method Two, Table B1, human health cleanup level for benzo(a)pyrene at a concentration of 1.36 mg/kg from a depth of 0.5 foot bgs at sample location 120SL-LF006; this 2015 exceedance location was not excavated.</p>	2015–2016
<p>Groundwater sampling for BTEX and PAHs was performed at SS007; all samples met ADEC water quality standards. ADEC approved a request for an 18 AAC 75.350 determination that groundwater is not a potential drinking water source for SS007.</p> <p>At WP003, 20 soil samples were collected from the north and west ends of the 2015 excavation to delineate contamination remaining in place. An estimated 373 cubic yards of POL-contaminated soil remains in place.</p>	2017
LTM activities including LUC/IC inspections were performed at SS002, SS007, SS010, WP003, and LF006. Groundwater sampling was performed at SS007 for BTEX and PAHs. All samples met ADEC water quality standards.	2019
LTM activities including LUC/IC inspections were performed at SS002, SS007, SS010, WP003, and LF006.	2020
LTM activities including LUC/IC inspections were performed at SS002, SS007, SS010, WP003, and LF006. Groundwater sampling for DRO was performed at SS007. All samples met ADEC cleanup levels.	2021
<p>Repairs to the SS002 landfill and roadway were performed. Additional soil sampling at LF006 confirmed remaining contamination is below the most stringent ADEC Method Two soil cleanup levels.</p> <p>ADEC issued a Cleanup Complete determination for LF006.</p> <p>An FYR of SS002, SS010, SS007, and WP003 was performed.</p>	2022

Key:

AAC	Alaska Administrative Code
ACM	asbestos-containing material
ADEC	Alaska Department of Environmental Conservation
AST	aboveground storage tank
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
DRO	diesel-range organics
EPA	United States Environmental Protection Agency
FYR	Five-Year Review
IC	institutional control
LTM	long-term monitoring
LUC	land use control
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MNA	monitored natural attenuation
PAH	polycyclic aromatic hydrocarbon

PCB	polychlorinated biphenyl
POL	petroleum, oils, and lubricants
RCRA	Resource Conservation and Recovery Act
RRO	residual-range organics
RRS	Radio Relay Station
TPH	total petroleum hydrocarbons
USAF	United States Air Force
UST	underground storage tank

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APPENDIX C
LUC DOCUMENTATION

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TABLE 2-1
Description of LUC¹ Types Currently in Effect at PRSC ERP Sites
Land Use Control Management Plan 2019, PRSC Installations, JBER, Alaska

Installation:	ERP Site(s)	Purpose and Objectives	Prohibitions/Restrictions	Engineering Controls	Expected Durations	Monitoring/ Inspections/ Reporting/ Maintenance	Administrative Elements
Cold Bay LRRS	ST005	<ul style="list-style-type: none"> • To meet 18 AAC 75.341, Method 2 migration to groundwater cleanup level for the under 40-inch precipitation zone for soils to a depth of 10 feet • To ensure that the inhalation and ingestion standards are met and to reduce the amount of time it will take for natural attenuation to meet the cleanup levels for soils between 10 and 15 feet bgs • (For fuel contaminated groundwater) To achieve no greater than 1.5 mg/L DRO throughout the aquifer (18 AAC 75.345 Table C), and to achieve surface water quality standards (10 ug/l TAH, 15 ug/1 TAqH) at the point where groundwater discharges to surface water 	<ul style="list-style-type: none"> • Groundwater not to be used as drinking water until it meets applicable cleanup levels • If contaminated soil is excavated or exposed in the future, it will be managed in accordance with the laws and regulations applicable at that time. 	<ul style="list-style-type: none"> • (None specified) 	<ul style="list-style-type: none"> • Monitored natural attenuation will occur until groundwater DRO concentrations are less than 1.5 mg/L throughout the aquifer (18 AAC 75.345 Table C) and surface water is less than 10 ug/L TAH, 15 ug/L TAqH at the point where groundwater discharges to surface water. 	<ul style="list-style-type: none"> • Monitored natural attenuation will occur until groundwater DRO concentrations are less than 1.5 mg/L throughout the aquifer (18 AAC 75.345 Table C) and surface water is less than 10 ug/L TAH, 15 ug/L TAqH at the point where groundwater discharges to surface water. 	<ul style="list-style-type: none"> • ICs in the form of notice in land records will be developed by USAF, with ADEC concurrence, to document that groundwater should not be used as a drinking water source until it meets the applicable cleanup levels. The ICs will also document that if contaminated soil is excavated or exposed in the future it must be managed in accordance with the laws and regulation applicable at that time.
Cold Bay LRRS	OT001	<ul style="list-style-type: none"> • Protect the public health or welfare or the environment from actual or threatened releases of hazardous substances into the environment • Protect human health by reducing the risk from potential exposure 	<ul style="list-style-type: none"> • (None specified) 	<ul style="list-style-type: none"> • (None specified) 	As no contaminants remain on site above ADEC cleanup levels, site closure is anticipated	<ul style="list-style-type: none"> • (None specified) 	<ul style="list-style-type: none"> • (None Specified)
Driftwood Bay RRS	LF006	Prevent the ingestion, inhalation, and offsite migration of soil exceeding risk-based cleanup levels; <ul style="list-style-type: none"> • Meet 18 AAC 60 maintenace and inspection requirements • Be protective of human health, safety, welfare, and the environment 	<ul style="list-style-type: none"> • (None specified) 	<ul style="list-style-type: none"> • Containerize and stage contaminated soil above ADEC cleanup levels for offsite shipment; • Perform analytical sampling for waste stream characterization; • Offsite disposal; • Collect and analyze confirmation samples to ensure that cleanup levels have been met; and • Backfill the excavations with locally available material after contaminated soil in excess of ADEC cleanup levels has been removed from the site. 	<ul style="list-style-type: none"> • (None specified) 	<ul style="list-style-type: none"> • (None specified) 	<ul style="list-style-type: none"> • (None specified)
Driftwood Bay RRS	OT001	<ul style="list-style-type: none"> • Meet 18 AAC 60 maintenace and inspection requirements • Be protective of human health, safety, welfare, and the environment 	'Preliminary LUCs will remain in place until ROD is finalized; '• Signage			TBD	TBD
Driftwood Bay RRS	SS002	<ul style="list-style-type: none"> • Meet 18 AAC 60 maintenace and inspection requirements • Be protective of human health, safety, welfare, and the environment 	<ul style="list-style-type: none"> • Notification prior to digging/excavation is required by ADEC • Groundwater not to be used as drinking water until it meets applicable cleanup levels 	<ul style="list-style-type: none"> • Signage 	<ul style="list-style-type: none"> • IICs and LTM will remain in place until contaminants are below cleanup levels 	<ul style="list-style-type: none"> • Groundwater monitoring • Inspection of all site areas subject to LUCs • Five-Year reviews 	<ul style="list-style-type: none"> • (None Specified)
Driftwood Bay RRS	SS007	<ul style="list-style-type: none"> • Meet 18 AAC 60 maintenace and inspection requirements • Be protective of human health, safety, welfare, and the environment 	'Preliminary LUCs will remain in place until ROD is finalized; '• Signage			TBD	TBD

TABLE 2-1
Description of LUC¹ Types Currently in Effect at PRSC ERP Sites
Land Use Control Management Plan 2019, PRSC Installations, JBER, Alaska

Installation:	ERP Site(s)	Purpose and Objectives	Prohibitions/Restrictions	Engineering Controls	Expected Durations	Monitoring/ Inspections/ Reporting/ Maintenance	Administrative Elements
Driftwood Bay RRS	SS010	<ul style="list-style-type: none"> • Meet 18 AAC 60 maintenace and inspection requirements • Be protective of human health, safety, welfare, and the environment 	'Preliminary LUCs will remain in place until ROD is finalized; '• Signage			TBD	TBD
Driftwood Bay RRS	WP003	<ul style="list-style-type: none"> • Meet 18 AAC 60 maintenace and inspection requirements • Be protective of human health, safety, welfare, and the environment 	'Preliminary LUCs will remain in place until ROD is finalized; '• Signage			TBD	TBD
Duncan Canal RRS	SS006	<ul style="list-style-type: none"> • (None specified) 	<ul style="list-style-type: none"> • Land use restrictions maintained in the property records and signage • Control of site access using fencing • An impermeable cap placed over surface soil contamination above approved cleanup levels. 	Fencing Signage Soil Cap	<ul style="list-style-type: none"> • (None specified) 	<ul style="list-style-type: none"> • Land use restrictions maintained in the property records and signage • Control of site access using fencing • Impermeable cap placed over surface soil contamination above approved cleanup levels • LTM and maintenance of contaminant concentrations annually by USAF and LUCs by the USFS. • CERCLA Five-Year Reviews would apply until sampling indicates that contaminant concentrations are below the approved cleanup levels. • Contaminated soil in the run-off channels will be excavated, loaded onto barges, and shipped off-site to a USEPA approved facility for disposal. 	<ul style="list-style-type: none"> • Land use restrictions maintained in the property records and signage • LTM and maintenance of contaminant concentrations annually by USAF and LUCs by the USFS. • CERCLA Five-Year Reviews would apply until sampling indicates that contaminant concentrations are below the approved cleanup levels.
Eareckson AS	FT001	<ul style="list-style-type: none"> • ICs are designed to prevent activities that could disturb contaminants and affect the performance of the other components of the selected remedies and maintain current land uses, while protecting human health and the environment • The objective of the ICs are to prevent access or use of soil and groundwater contaminated with petroleum hydrocarbons, VOCs, and SVOCs. 	<ul style="list-style-type: none"> • No land use involving subsurface activitie. • No disturbing of contaminated soil or groundwater without ADEC approval 	<ul style="list-style-type: none"> • (None specified) 	<ul style="list-style-type: none"> • The ICs will remain in effect until the petroleum hydrocarbon concentrations, VOCs, and SVOCs in soil are determined to be less than the ADEC 18 AAC 75.341 Method Two cleanup levels and groundwater meets the cleanup levels listed in 18 AAC 75.345, Table C. 	<ul style="list-style-type: none"> • Visual inspections to be conducted to verify effectiveness of ICs and report inspection results to ADEC. • Inspection reports will be prepared no less than once every 5 years to evaluate status of the ICs and how any IC deficiencies or inconsistent uses have been addressed. 	<ul style="list-style-type: none"> • The Eareckson AS Base General Plan (Plan) and USAF land records will be updated to show the boundaries of the sites to restrict excavation of soil and restrict groundwater use. The Plan will contain a map indicating site locations, with restrictions on any invasive activities that could potentially compromise the integrity of soil covers and expose potential contaminants. • Dig permits issued by the Base Operating Contractor are required for any excavation or well installation at Eareckson AS. Prior to approving a permit, the Plan will be reviewed to ensure that invasive activities are not taking place within the boundary of the sites where land use has been restricted. • USAF will initiate action within 10 days of discovering any activity that may interfere with effectiveness of ICs and notify ADEC as soon as practicable after discovery. • USAF will obtain prior concurrence from ADEC to terminate the ICs, modify current land use, or allow anticipated actions that might disrupt protectiveness of ICs (including excavation or well installation). In the unlikely event that the property is to be transferred, USAF will notify ADEC at least 30 days prior to any transfer taking place. • If ICs fail or are deficient and could immediately lead to actual risk to human health and the environment, USAF will address the situation promptly, including ADEC notification. • USAF will ensure, as appropriate, that any contractor, tenant, or other authorized occupant of land subject to LUCs is informed of the LUCs and is made subject to the requirements of such LUCs.

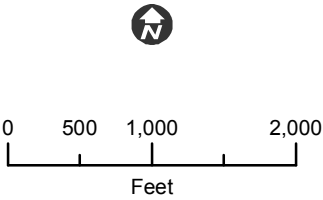


- Installation Boundary
- ERP Sites and LUC Status
- ADEC Standard Conditions (See Table 2-1A)
 - Closed (See Table 2-1B)
 - Land Use Control Restriction (See Tables 1-2 and 2-1)

Notes:

- LUC boundaries depicted on this figure are preliminary pending final analysis of survey information. LUC boundaries will be updated once this information is available.
- Boundary data are from 611th GeoBase or have been georeferenced into GIS from historical documents. Data could be incomplete and are of unknown accuracy.
- For more detailed land use restriction information, see individual site descriptions and summaries.

ADEC - Alaska Department of Environmental Conservation
ERP - Environmental Restoration Program
GIS - Geographic Information System
LUC - Land Use Control
RRS - Radio Relay Station



Land Use Control Management Plan
Pacific Air Forces Regional Support Center Installations
Joint Base Elmendorf-Richardson, Alaska

Installation Map - Driftwood Bay RRS

Figure 15

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NOTICE OF ENVIRONMENTAL CONTAMINATION

Recording District: Aleutian

As required by the Alaska Department of Environmental Conservation, Grantee, pursuant to 18 AAC 75.375 the U.S. Air Force, Grantor, as the owner of the subject property, hereby provides public notice that the property located at: Northing 1,209,324 feet, Easting 5,233,728 feet (Zone 10 Alaska State Plane), Top Camp adjacent to the Composite Building Foundation, Unalaska Island, Alaska, 99692, and more particularly described as follows:

T. 72 S., R. 119 W., Section 6, Tract 40, Seward Meridian

has been subject to a discharge or release and subsequent cleanup of oil or other hazardous substances, regulated under 18 AAC 75, Article 3, as amended June 17, 2015. This release and cleanup are documented in the Alaska Department of Environmental Conservation (ADEC) contaminated sites database at http://www.dec.state.ak.us/spar/csp/db_search.htm under Hazard ID number 88.

ADEC reviewed and approved, subject to this and other institutional controls, the cleanup as protective of human health, safety, welfare, and the environment. No further cleanup is necessary at this site unless new information becomes available that indicates to ADEC that the site may pose an unacceptable risk to human health, safety, welfare, or the environment. ADEC determined, in accordance with 18 AAC 75.325 - 390 site cleanup rules, that cleanup has been performed to the maximum extent practicable even though a permitted and closed landfill is present at the site.

Attached is a site survey or diagram drawn to scale that shows the property boundaries and locations of asbestos warning signs posted at the site.

Notification to the ADEC is required for approval prior to commencing any subsurface excavation or digging activities within the boundaries of Tract 40, as required by 18AAC 75.325(i). Any work/dig permit must comply with Pacific Air Force (PACAF) Center OI 32-7001 Land Use Control Management.

In the event that the remaining landfill debris becomes accessible by land use activities, or other information becomes available which indicates that the site may pose an unacceptable risk to human health, safety, welfare or the environment, the land owner and/or operator are required under 18 AAC 75.300 to notify ADEC and evaluate the environmental status of the contamination in accordance with applicable laws and regulations; further site characterizations and cleanup may be necessary under 18 AAC 75.325-.390.

Pursuant to 18 AAC 75.325(i)(1) and (2), DEC approval is required prior to moving soil or groundwater that is, or has been, subject to the cleanup rules found at 18 AAC 75.325-.370. At this site, in the future, if soil is removed from the site or groundwater is brought to the surface it must be characterized and managed following regulations applicable at that time.


Charlie Crawford
CES-Insight

Return To: Charlie Crawford, CES-Insight, 1701 Shenandoah Avenue, NW, Roanoke, VA 24017



NOTICE OF ENVIRONMENTAL CONTAMINATION

Recording District: Aleutian

As required by the Alaska Department of Environmental Conservation, Grantee, pursuant to 18 AAC 75.375 the U.S. Air Force, Grantor, as the owner of the subject property, hereby provides public notice that the property located at: Northing 1,211,987 feet, Easting 5,246,235 feet (Zone 10 Alaska State Plane), East of the Airfield Runway, Unalaska Island, Alaska, 99692, and more particularly described as follows:

T. 72 S., R. 119 W., Section 3, Tract 37, Seward Meridian

has been subject to a discharge or release and subsequent cleanup of oil or other hazardous substances, regulated under 18 AAC 75, Article 3, as amended June 17, 2015. This release and cleanup are documented in the Alaska Department of Environmental Conservation (ADEC) contaminated sites database at http://www.dec.state.ak.us/spar/csp/db_search.htm under Hazard ID number 96.

ADEC reviewed and approved, subject to this and other institutional controls, the cleanup as protective of human health, safety, welfare, and the environment. No further cleanup is necessary at this site unless new information becomes available that indicates to ADEC that the site may pose an unacceptable risk to human health, safety, welfare, or the environment. ADEC determined, in accordance with 18 AAC 75.325 - 390 site cleanup rules, that cleanup has been performed to the maximum extent practicable even though residual fuel contaminated soil and/or groundwater exists on-site. Further cleanup was determined to be impracticable as a result of findings generated documented in the Site Characterization Report for Driftwood Bay RRS, dated September 2009.

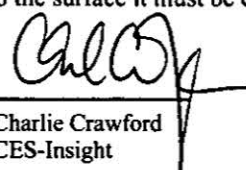
Attached is a site survey or diagram drawn to scale that shows the property boundaries, the area which was addressed during the 2015 Remedy Implementation at Site SS007, and locations of warning signs posted at the site.

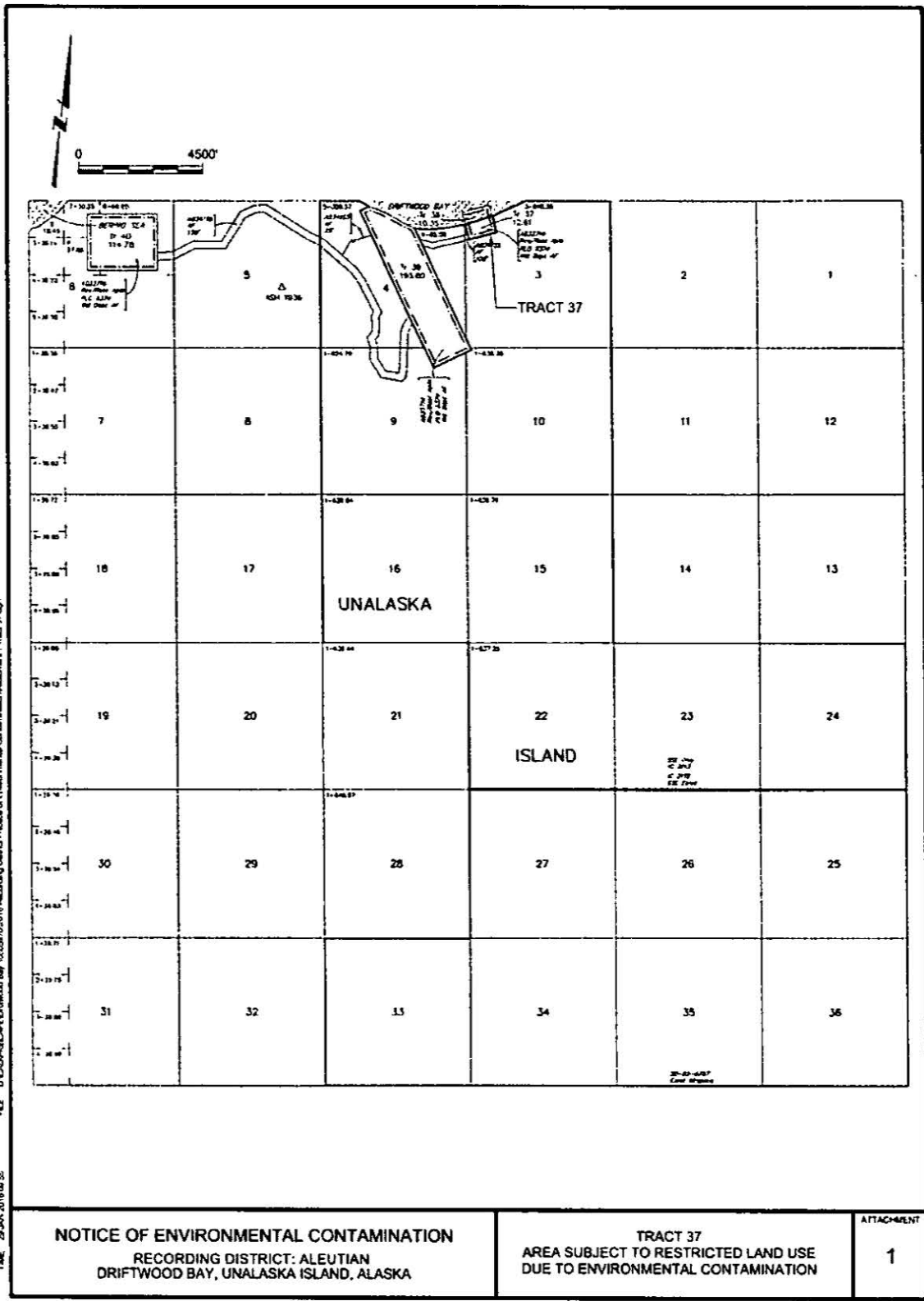
Notification to the ADEC is required for approval prior to commencing any subsurface excavation or digging activities within the boundaries of Tract 37, as required by 18AAC 75.325(i). Any work/dig permit must comply with Pacific Air Force (PACAF) Center OI 32-7001 Land Use Control Management.

In the event that the remaining contaminated soil or groundwater becomes accessible by land use activities, or other information becomes available which indicates that the site may pose an unacceptable risk to human health, safety, welfare or the environment, the land owner and/or operator are required under 18 AAC 75.300 to notify ADEC and evaluate the environmental status of the contamination in accordance with applicable laws and regulations; further site characterizations and cleanup may be necessary under 18 AAC 75.325-.390.

Pursuant to 18 AAC 75.325(i)(1) and (2), DEC approval is required prior to moving soil or groundwater that is, or has been, subject to the cleanup rules found at 18 AAC 75.325-.370. At this site, in the future, if soil is removed from the site or groundwater is brought to the surface it must be characterized and managed following regulations applicable at that time.

Return To: Charlie Crawford, CES-Insight,
1701 Shenandoah Avenue, NW, Roanoke, VA 24017


Charlie Crawford
CES-Insight



FILE: 2018-000147-0016 Recording District: Aleutian, Unalaska Island, Alaska





NOTICE OF ENVIRONMENTAL CONTAMINATION

Recording District: Aleutian

As required by the Alaska Department of Environmental Conservation, Grantee, pursuant to 18 AAC 75.375 the U.S. Air Force, Grantor, as the owner of the subject property, hereby provides public notice that the property located at: Northing 1,207,773 feet, Easting 5,242,384 feet (Zone 10 Alaska State Plane), Along the road to High Camp, Unalaska Island, Alaska, 99692, and more particularly described as follows:

T. 72 S., R. 119 W., Section 4, 150 foot Air Force Right-of-Way, A034155, Seward Meridian

has been subject to a discharge or release and subsequent cleanup of oil or other hazardous substances, regulated under 18 AA 75, Article 3, as amended June 17, 2015. This release and cleanup are documented in the Alaska Department of Environmental Conservation (ADEC) contaminated sites database at http://www.dec.state.ak.us/spar/csp/db_search.htm under Hazard ID number 131.

ADEC reviewed and approved, subject to this and other institutional controls, the cleanup as protective of human health, safety, welfare, and the environment. No further cleanup is necessary at this site unless new information becomes available that indicates to ADEC that the site may pose an unacceptable risk to human health, safety, welfare, or the environment. ADEC determined, in accordance with 18 AAC 75.325 - 390 site cleanup rules, that cleanup has been performed to the maximum extent practicable even though residual fuel contaminated soil and/or solvent contaminated groundwater exists on-site. Further cleanup was determined to be impracticable as a result of findings of the Site Characterization Report for Driftwood Bay RRS, dated September 2009.

Attached is a site survey or diagram drawn to scale that shows the property boundaries, the area which was addressed during the 2015 Remedy Implementation at Site SS010, and locations of warning signs posted at the site.

Notification to the ADEC is required for approval prior to commencing any subsurface excavation or digging activities within the boundaries of Tract 38A and Tract 38B, as required by 18AAC 75.325(i). Any work/dig permit must comply with Pacific Air Force (PACAF) Center OI 32-7001 Land Use Control Management.

In the event that the remaining contaminated soil or groundwater becomes accessible by land use activities, or other information becomes available which indicates that the site may pose an unacceptable risk to human health, safety, welfare or the environment, the land owner and/or operator are required under 18 AAC 75.300 to notify ADEC and evaluate the environmental status of the contamination in accordance with applicable laws and regulations; further site characterizations and cleanup may be necessary under 18 AAC 75.325-.390.

Pursuant to 18 AAC 75.325(i)(1) and (2), DEC approval is required prior to moving soil or groundwater that is, or has been, subject to the cleanup rules found at 18 AAC 75.325-.370. At this site, in the future, if soil is removed from the site or groundwater is brought to the surface it must be characterized and managed following regulations applicable at that time.

Return To: Charlie Crawford, CES-Insight
1701 Shenandoah Avenue, NW, Roanoke, VA 24017


Charlie Crawford
CES-Insight

APPENDIX D

COMMUNITY INVOLVEMENT MATERIALS

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CASE/PO/AIO: AHTNA ENGINEERING SERVICES, INC.
AD# or identifier: 31517

REMIT TO: Anchorage Daily News
300 W 31st Ave
Anchorage, AK 99503
Ph: (907) 257-4251
Fax: (907) 279-7579

INVOICE(S):

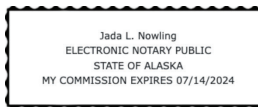
AFFIDAVIT OF PUBLICATION

UNITED STATES OF AMERICA
STATE OF ALASKA, THIRD DISTRICT
BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC
THIS DAY PERSONALLY APPEARED Lisi Misa WHO,
BEING FIRST DULY SWORN, ACCORDING TO LAW, SAYS
THAT S/HE IS Legal Sales OF The Bristol Bay
Times/Dutch Harbor Fisherman PUBLISHED AT 300 W
31ST AVE, ANCHROAGE AK, IN SAID THIRD DISTRICT
STATE OF ALASKA AND THAT THE ADVERTISEMENT, OF
WHICH THE ANNEXED OR ATTACHED IS A TRUE COPY,
WHICH WAS PUBLISHED IN SAID PUBLICATION The
Bristol Bay Times/Dutch Harbor Fisherman AND
THEREAFTER FOR A TOTAL OF 1 CONSECUTIVE ISSUE(S),
THE LAST PUBLICATION APPEARING ON September 22,
2022.

Lisi Misa
LISI MISA
LEGAL SALES

SUBSCRIBED AND SWORN BEFORE ME THIS 26th DAY OF
September, 2022

Jada L. Nowling
JADA L NOWLING
NOTARY PUBLIC STATE OF ALASKA
MY COMMISSION EXPIRES ON JULY 24, 2024



ATTACH PROOF OF PUBLICATION HERE

The reality and fantasy of life under totalitarianism

Truth is stranger than fiction. Or so we are told. But there are moments when fiction is stranger than truth — and on occasion, it is difficult to tell the difference between them.

Vassily Aksyonov's novel "The Burn" is autobiographical fiction. In the book, Aksyonov (1932-2009) writes about the Stalinist and post-Stalinist Soviet Union, but often his story gives way to hallucinatory nightmare.

During the 1930s, the Soviet security forces arrested his parents as dissident Trotskyites and sent Aksyonov to an orphanage. The parents were shipped to Magadan in the Soviet far east, where for years they were political prisoners in varying forms of confinement.

Magadan, a city of more than 90,000, is well known to many Daily News readers. After Mikhail Gorbachev opened the Soviet far east to commerce and travel some 30 years ago, Magadan residents and Alaskans went back and forth in an exploratory and at times celebratory mood.

In 1991, Magadan and Anchorage became sister cities. Young men and women of Magadan came to study in

Anchorage. Some stayed.

After a few years in the orphanage, Aksyonov was reunited with his mother and allowed to live with her in Magadan. He describes Magadan of the early 1950s this way:

"The center of Magadan ... looked thoroughly respectable and, indeed, by the standards of the time, quite splendid; there were five-story buildings at the intersection of Stalin Prospect and Kolyoma Highway, grocery stores, a pharmacy, a movie theater built by Japanese prisoners of war, a school built with large square windows, the large villa belongs to the boss of Dalstroy — the Far Eastern Construction Company — General Nikishov."

The Gornyak Movie Theater was especially important to Aksyonov the boy as it brought his imagination to life — particularly John Wayne in "Stagecoach," a pirated version with an introductory text explaining that Soviet viewers would see American Indians valiantly struggling against white colonizers. John Wayne was, in this telling, a villain.

"It didn't matter that the audience's sympathies were inevitably enlisted against the



BY MICHAEL CAREY

For the Bristol Bay Times -
Dutch Harbor Fisherman

freedom-loving Indians who peppered the little stagecoach with arrows, and they applauded the white colonizer, the Ringo Kid, who jumped from the roof of the coach onto the back of a horse and then at a gallop brought down two Apache warriors with his Winchester.

"What was important was that the outward forms of propaganda were observed, and the spectator, willy-nilly, was supposed to have been given yet another dose of serum labeled 'struggle for national liberation.'"

"For the seventh time, (the boy) had come to see how the Ringo Kid walked across the screen, how he sauntered with his long legs in those amazing cowboy pants, with those metal rivets, how he wiped the dust from his face, how he caught in the air the Winchester thrown to him by the sheriff, how he showed his white teeth in a slow, cautious smile, how he kissed a woman....

"A hero of incredible valor and boldness who would not think twice about giving his life for freedom! The Ringo Kid inspired the boy with self-assurance; he imagined seeing his tall figure on the streets of Magadan, and naturally, as he came out of the theater, he felt a little like the Ringo Kid himself."

Aksyonov, recast in the novel as young Tolya, has spent the afternoon in a fantasy, but he soon returns to the reality of the Soviet world. In the morning, on his way to school, he meets prisoners in chains shuffling along to work camps under armed guard.

Before long, Tolya's mother is rearrested and the two are separated again. The state security officer who comes to their house makes the arrest with efficient nastiness, mocking mother and boy. Before this hairy brute, Tolya is no longer the Ringo Kid but a helpless Soviet child in the hands of an all-powerful police state.

"His mother was being taken away to an unknown place, for an unknown reason, and for an unknown length of time," Aksyonov writes. This is the essence of a totalitarian government's power over its

people.

The hairy state security officer appears later in the novel to sexually assault his grown daughter before giving her away in marriage to a member of the Soviet elite, a cosmonaut destined to circle the earth.

Conventional morality is a failure in Soviet Russia, and there is no social stability. What is permitted one day is banned the next and vice versa. People live in fantasy, particularly the fantasy of escape — to Paris, London, Rome for Muscovites and to Japan and Alaska for those in the far east. One Aksyonov character actually escapes to Fairbanks where he winds up in a fictional navy hospital.

Throughout the novel, many characters are routinely drunk. The pain of Soviet life must be dulled. If you are hung over on Tuesday and do not remember Monday, so much the better.

A reader of "The Burn" can be forgiven for confusing fact and fiction — just as the characters do.

Michael Carey is an occasional columnist and the former editorial page editor of the Anchorage Daily News.

HEUVEL

FROM PAGE 4

in-state issues — including, most significantly, fish. An Alaska Yup'ik Native, Peltola can point to a lifetime of fishing on the Kuskokwim River and boasts such professional titles as "Salmon Fellow," so she offered practical expertise about a resource that provides subsistence, sport and sales for her constituents.

And those constituents need help: Last year's salmon returns were down a whopping 87%, and rising water temperatures have meant more than 100 mass salmon die-offs in the state. Peltola cut through the intraparty squabbling of her opponents and became the definitive voice on an issue that mattered to her prospective constituents. Strong fish policy might not capture the imagination

of out-of-state donors, but it took hold in a district that borders three oceans.

Third, Alaska's special election demonstrated the power of ranked-choice voting to pull a consensus candidate from the fray. Among first-choice votes, Peltola led the pack by nine points, but she crossed the critical 50% threshold thanks to people whose first choice was Begich — 29% of these voters crossed party lines to rank Peltola over Palin.

Despite what opponents of ranked-choice voting (a group that, no surprise, includes Palin and Begich) say, ranked-choice is good for democracy. It rewards candidates who build consensus instead of catering to their party's fringe and allows people to indicate support for multiple candidates instead of strategically voting based on (often

inaccurate) perceptions about who is likely to win.

Thanks to efforts by advocates nationwide, the system is reaching more voters. According to the nonpartisan electoral reform organization FairVote, 55 cities, counties and states will adopt ranked-choice voting by their next election — and a November ballot initiative could put Nevada on the

path to doing so.

But the state's Democratic Party is mobilizing against the initiative — even though Democrats used ranked-choice voting themselves for the 2020 presidential caucus. Perhaps the party that has lately positioned itself as singularly committed to democracy ought to be more supportive of reforms that give

voters more control.

Ultimately, a politician succeeds by genuinely connecting on the issues that matter most to their community — like "pro-jobs, pro-fish, pro-family, and pro-choice" Peltola.

Katrina vanden Heuvel, editor and publisher of the Nation magazine, writes a weekly column for The Washington Post.

Solutions to page 10 puzzles

3	1	4	9	2	7	8	5	6
7	9	2	6	5	8	1	4	3
8	5	6	4	1	3	7	2	9
1	6	7	3	8	2	5	9	4
9	8	3	5	6	4	2	7	1
2	4	5	1	7	9	3	6	8
4	2	9	7	3	1	6	8	5
5	7	1	8	4	6	9	3	2
6	3	8	2	9	5	4	1	7

OKRA	NAG	AAH
FOES	TALL	NACRE
FLAP	RAGE	ITEMS
AMERICAN	OLDS	
COUPE	ABA	
BOSTON	AGENDAS	
ART	MENAGE	TILT
SLAYS	ILO	PASTE
TOGA	ENIGMA	CHA
ENSNARE	UNCOOL	
KIR	FAKIR	
TIES	WILDCARD	
LABEL	AXLE	NAOH
OBESSE	TEEN	NILE
TUX	TRY	YLEM

Public Notice

United States Air Force Environmental Restoration Program Five-Year Review

The Air Force Civil Engineer Center announces the beginning of the Five-Year Review process for Driftwood Bay Radio Relay Station (RRS), Alaska. This process will document whether the remedies implemented at Sites SS002 (Composite Building Landfill), SS007 (Former Fuel Storage Area at Beach), SS010 (Former Water Supply Pump House), LF006 (Old Disposal Area), and WP003 (POL Waste Pit) remain protective of human health and the environment. The remedy selected under Alaska State regulations for SS002, SS010, and WP003 is that of Institutional Controls (ICs), the remedy selected for SS007 is Monitored Natural Attenuation with ICs, and the remedy selected for LF006 is Offsite Disposal and ICs. This will be the second Five-Year Review for SS002, SS007, and SS010, and the first Five-Year Review for LF006 and WP003.

Reviews are conducted at least once every five years until contaminant levels allow unlimited use of the site and unrestricted exposure to the air, soil, and water. Detailed information concerning Driftwood Bay RRS cleanup efforts are available electronically on the Air Force Administrative Record at <https://ar.afcecc-cloud.af.mil/>. Findings from the Five-Year Review will be placed on the Administrative Record website upon completion of the report.

Interested persons can participate in the Five-Year Review process through October 22, 2022, by responding to a questionnaire available from the following representative:

Leslie Davis, Ahtna Solutions, LLC
714 4th Avenue, Suite 303
Fairbanks, AK 99701
ldavis@ahnta.net
(907) 301-6992

APPENDIX E
INTERVIEW RECORDS

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INTERVIEW RECORD Driftwood Bay LRRS		
Site Name: SS002, SS007, SS010, LF006, WP003		EPA ID No.: AK3570028644
Subject: 2022 Five Year Review		Time: Date: 10/28/2022
Type: <input type="checkbox"/> Telephone <input type="checkbox"/> Visit <input checked="" type="checkbox"/> Email Location of Visit: n/a		<input type="checkbox"/> Incoming <input type="checkbox"/> Outgoing
Contact Made By		
Name: Leslie Davis	Title: Deputy Project Manager	Organization: Ahtna Solutions, LLC
Individual Contacted		
Name: Cascade Galasso	Title: Environmental Program Specialist	Organization: ADEC
Telephone: 907-451-2181 Email: Cascade.galasso-irish@alaska.gov		Street Address: 610 University Avenue City, State, Zip: Fairbanks, AK 99709
SUMMARY OF CONVERSATION		
What is your overall impression of the project? (general sentiment) Positive. ICs, LUCs, and LTM appear to be functioning correctly.		
Has the USAF reported on the status of the ICs and LTM as required? Yes.		
Do you know of any problems or difficulties that have been encountered that have impacted remedy implementation or progress at any of the sites? Access, remoteness, and weather are difficulties at Driftwood Bay. Signs documenting land use controls are sometimes missing or weathered during annual site inspections. Burrowing animals and erosion have compromised the integrity of the cap at the SS002 site, which underwent landfill repair in 2022. Road repair for top camp may have been needed due to erosion issues, and site SS010 has been observed in the past to be exposed to seasonal sloughing.		
Have any problems been encountered or changes in State laws and regulations that may impact protectiveness and required, or will require, changes to the RODs or Decision Documents? In 2017, site LF006 was approved for Cleanup Complete with Institutional Controls, with the requirements for Land Use Control implementation, and NEC to be placed in the ADNRR records within 180 days, and warning signs to be placed at the property boundaries. According to ADEC records, an NEC was never filed with ADNRR, and the ICs have been determined to have not been implemented in a timely manner. The remaining contamination present at the site will require a ROD amendment to re-evaluate the remedy, and a Decision Document for the remaining petroleum contamination at the site. Because the LF006 site is located on Ounalashka Corporation land, an Environmental Covenant (EC) under the United Environmental Covenant Act (UECA) with landowner concurrence is required to be recorded with ADNRR. This site should be re-evaluated during the 2023 5YR.		
Have there been routine communications or activities (site visits, inspections, reporting activities, etc.) conducted by your office regarding the site? If so, please give purpose and results. Routine communication has occurred between ADEC and the RP, primarily regarding work plan and report review.		

Have there been any complaints, violations, or other incidents related to the site requiring a response by your office? If so, please give details of the events and results of the responses.

No.

Do you have any general comments, suggestions, or recommendations regarding the management of these sites, remedy implementation, or ongoing work at the site?

[See answer to question #4.](#)

Do we have your permission to use your name in the Five-Year Review report and document the results of your interview in the report?

Yes.

INTERVIEW RECORD Driftwood Bay RRS		
Site Name: SS002, SS007, SS010, LF006, WP003		EPA ID No.: AK3570028644
Subject: 2022 Five Year Review		Time: n/a Date: 11/3/2022
Type: <input type="checkbox"/> Telephone <input type="checkbox"/> Visit <input checked="" type="checkbox"/> Email Location of Visit: n/a		<input type="checkbox"/> Incoming <input type="checkbox"/> Outgoing
Contact Made By		
Name: Leslie Davis	Title: Deputy Project Manager	Organization: Ahtna Solutions, LLC
Individual Contacted		
Name: Robert Johnston	Title: Remedial Project Manager	Organization: AFCEC/CZOP
Telephone: 907-552-7193 Email: robert.johnston.17@us.af.mil		Street Address: 10471 20th St. Ste. 326; PO Box 6898 City, State, Zip: JBER, AK 99506-2201
SUMMARY OF CONVERSATION		
Are the ICs at Sites functioning as expected? yes		
Do you know of any problems or difficulties that have been encountered that have impacted remedy implementation or progress at the sites? No only access to site is by plane or boat.		
Have any problems been encountered that required, or will require, changes to the RODs or Decision Documents? no		
Are you aware of any community or contractor concerns regarding these sites? If so, please give details. no		
Are you aware of any events, incidents, or activities at the sites such as vandalism, trespassing, or emergency responses from local authorities? If so, please give details. no		
Site SS002 and the roadway were the subjects of cap improvements and repairs. What is the current status of construction (e.g., percent complete and schedule)? The repair for SS002 is complete, Air Force is waiting for the report.		
Have any problems or difficulties been encountered which have impacted construction progress or implementability of repairs at SS002 and the roadway? no		
Do you have any general comments, suggestions, or recommendations regarding the management of these sites, remedy implementation, or ongoing work at the sites? No		
Do we have your permission to use your name in the Five-Year Review report and document the results of your interview in the report? yes		

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