



# FINAL Adak Restoration Advisory Board (RAB) Meeting Minutes April 8, 2021

Thursday, 8 April 2021  
5:00 PM Adak, via Teleconference

## 1. WELCOME AND INTRODUCTIONS

Mr. Peach called the meeting to order at 5 PM local time and, following roll call, welcomed attendees to the meeting.

Mr. Peach began the meeting by remembering and acknowledging Esther Bennet, who passed recently, and the years of dedication she provided to the Adak community and the RAB. Ms. Grady also acknowledged Esther and her contribution to the RAB. She noted it was an honor to work with her and she will be greatly missed.

The following persons were in attendance:

Name	Affiliation	Location
Justin Peach	RAB Member (Navy Co-Chair)*	Silverdale, WA
Elaine Smiloff	RAB Member	Adak, AK
Layton Lockett	RAB Member	Adak, AK
Mik Turnbull	RAB Member	Adak, AK
Tom Spitler	RAB Member	Adak, AK
Darren Mulkey	RAB Member (ADEC)*	Anchorage, AK
Chris Cora	RAB Member (EPA)*	Seattle, WA
JoAnn Grady	Grady and Associates	Ashland, OR
Doug Schicho	APTIM	New Jersey
Jody Lipps	Battelle	Columbus, OH
Tony Megliola	NAVFAC BRAC	San Diego, CA
Shawn Majors	Battelle	Eugene, OR
Dustan Bott	EPA	Seattle, WA
Cathy Weber	NAVFAC NW	Silverdale, WA
Judo Garcia-Lata	NAVFAC NW	Silverdale, WA
Greg Burgess	AECOM	Seattle, WA
Aaron Vernik	Sealaska	Poulsbo, WA
Aaron Timian	ADNR	Fairbanks, AK
Ben Leon-Guerrero	The Aleut Corporation (TAC)	Anchorage, AK
George Pollock	TAC	Anchorage

Name	Affiliation	Location
Judy Hollander	Alaska Public Health and Nursing	Anchorage, AK
Jeremy Craner	USACE	Anchorage, AK
Richard Ragle	USACE	Anchorage, AK
Steve Skeehan	NAVFAC NW	Adak, AK
Oscar Broadway	Battelle	Adak, AK
Angela Engelkes	City of Adak	Adak, AK

\*non-voting RAB member

Mr. Peach began the meeting confirming a quorum of the RAB membership was present (minimum 1/3 of RAB [i.e., 3 members]). A list of current RAB members is provided in Attachment A.

Mr. Peach indicated that Mr. Chris Cora is retiring from the EPA after working on the Adak project for nearly 30 years. The Navy would like to sincerely thank Mr. Cora for his efforts, institutional knowledge, commitment to public safety on Adak, and all the clean-up efforts. Mr. Dustan Bott will be taking over the EPA leadership role from Mr. Cora on July 1, 2021. Welcome to Mr. Bott. Mr. Bott looks forward to working with everyone. Mr. Cora noted his appreciation for the teamwork on this project during his duration on the project.

Mr. Peach further indicated that Mr. Melvin Smith has left his job as the Real Estate Manager at TAC. He has been replaced by Mr. Ben Leon-Guerrero. Welcome to Mr. Leon-Guerrero.

Mr. Peach indicated that there are many changes associated with RAB membership that will be discussed during this meeting and suggested that those discussions be held until the end of the meeting so that non-RAB members can drop off the call if they choose. He pointed out that the meeting may be a longer one than we have had in a few years, and it could be late for those joining from the East coast. Mr. Lockett motioned to discuss RAB membership at the end, and Mr. Spitler seconded the motion. Those present agreed.

Mr. Peach asked for any comments on the agenda and suggested that, as the agenda is tied to the presentation order in the distributed materials, the meeting start and comments be collected during the meeting.

Mr. Peach acknowledged that the RAB co-chair, Ms. Plant, was not on the call, and asked if a RAB member would like to run the meeting or he should proceed. Mr. Peach was asked to run the meeting.

## 2. APPROVAL OF PRIOR MEETING MINUTES / REVIEW OF PRIOR ACTION ITEMS

### Review and Approval of Prior Meeting Minutes

Draft minutes from the September 10, 2020 RAB Meeting were circulated to RAB members and interested parties on September 15, 2020 and again on March 13, 2021.

No edits were received. Mr. Peach inquired if there were any edits to the meeting minutes. There were none. Mr. Peach asked a motion be made to approve the minutes. Mr. Spitler motioned to approve the minutes. The motion was seconded by Mr. Lockett. The RAB voted to approve the minutes.

### Review of Actions Items

Six action items were established during the last RAB meeting.

**ACTION ITEM 1:** Identify and provide computer-aided design (CAD) files for wells in the area of City Hall and the elementary school where the power and water plants are intended to go – **Completed on September 22.**

**ACTION ITEM 2:** Ms. Weber will provide a draft of the Solid Waste Management Unit (SWMU) 60 oleophilic bio barrier (OBB) design document to the City of Adak coinciding with it being sent to the Alaska Department of Environmental Conservation (ADEC) and Environmental Protection Agency (EPA) for review – **Completed on December 4.**

**ACTION ITEM 3:** Mr. Garcia-Lata will follow-up with Mr. Lockett after he completes the review of the Marine Monitoring Report – **Completed on March 16.**

**ACTION ITEM 4:** Mr. Garcia-Lata will forward the historic Hammer Head Cove photograph to Mr. Spitler – **Completed on September 10.**

**ACTION ITEM 5:** Mr. Peach will schedule a meeting with Mr. Lockett to review the repository process – **Completed on February 12.**

**ACTION ITEM 6:** Mr. Peach will schedule a meeting with Ms. Plant to discuss how to bring the RAB vote requiring attendance to the United States Army Corps of Engineers (USACE) – **Completed on September 15.**

Mr. Peach indicated the Action Items to be complete, though one has evolved to additional meetings and effort. Mr. Peach asked whether a motion could be made to close the action items. Mr. Spitler motioned to approve the minutes. The motion was seconded by Mr. Lockett.

Mr. Lockett asked about the whereabouts of the CAD files and who they were sent to. Mr. Peach indicated they were sent to the contractor involved with the design and he can follow up with Mr. Lockett offline on the files sent. The RAB voted to close the Action Items.

### **3. USACE**

Mr. Richard Ragle of the USACE Alaska District presented a summary of the work planned for Great Sitkin Island and Ogliuga Island during the 2021 field season and an update on the 2022 activities planned for Tanaga Island. See Attachment B.

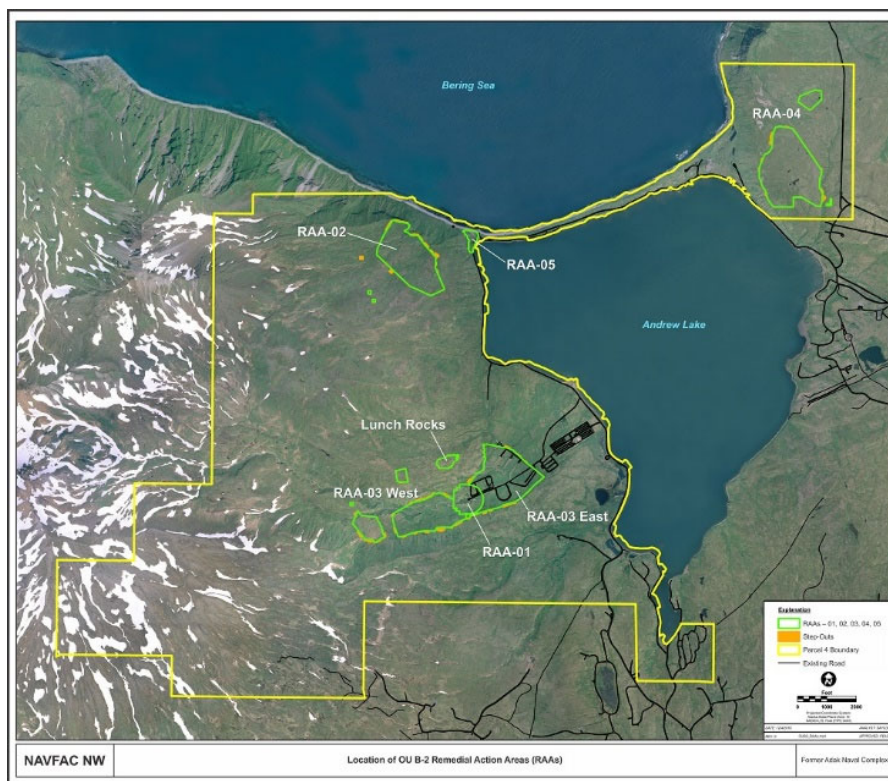
Mr. Ragle explained that he works in FUDS as a project manager. He is involved in several projects near Adak and is bringing visibility of the USACE work that will be based out of Adak to the RAB and interested residents. Contractors will kick off in about a month on Ogliuga (west of Adak). A crew will be completing a Phase 3 investigation and will be there for about a month. Starting in June, Jacobs will be on Great Sitkin most of the summer. A Phase 2 investigation is being conducted to determine the extent of release at that facility. The third project, Tanaga Island, is delayed until 2022.

Mr. Spitler thanked Mr. Ragle for the package he put together and for the greater visibility. Mr. Ragle indicated that he will attend the next RAB meeting and will give an update of what is found this summer.

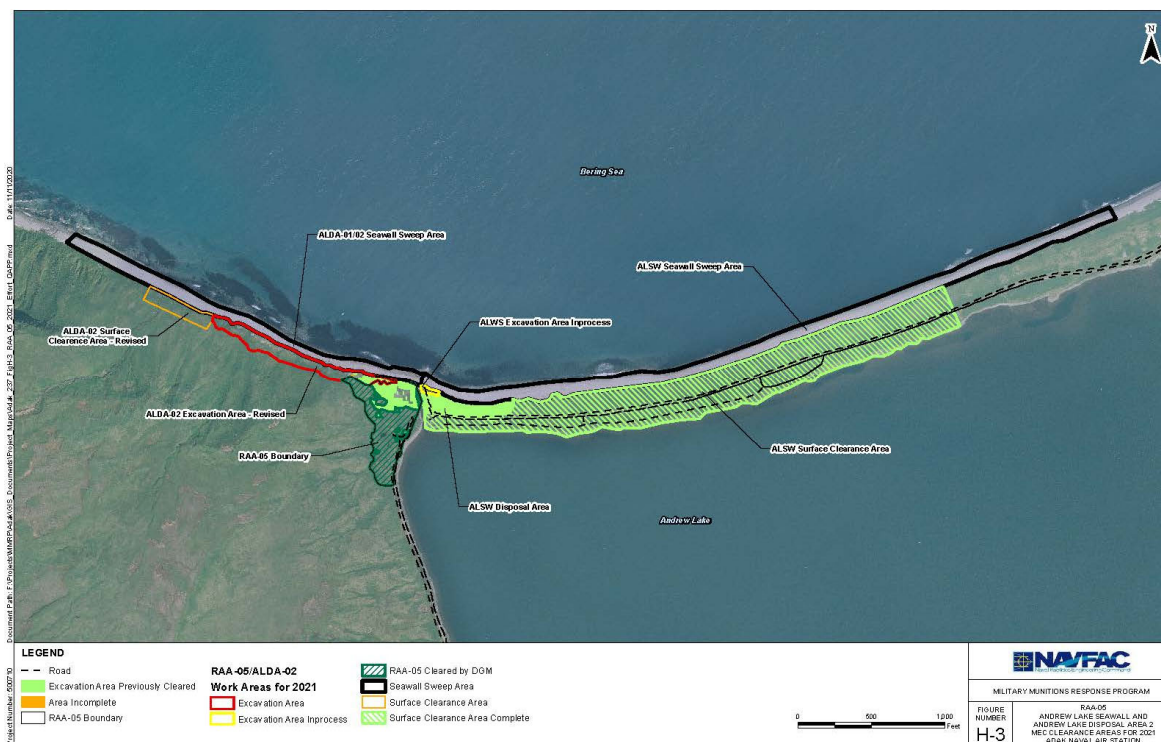


#### 4. MUNITIONS UPDATE

Mr. Peach began with a summary of the non-time critical removal action (NTCRA) in Operable Unit B-2 (OU B-2), also known as Parcel 4. The NTCRA began in 2013. Five Remedial Action Areas (RAAs) were established and have been completed as shown in the following figure. Additional disposal areas were identified east and west of RAA-05 and remain as active remediation areas.



As discussed in prior RAB Meetings, the 2020 field season was postponed due to COVID concerns. APTIM has mobilized to Adak for the 2021 field season to continue the remediation effort. The 2021 work areas are shown on the first figure below.



All of the areas designated for surface clearance are 100% complete. The excavation at Andrew Lake Seawall (ALSW) is approximately 90% complete. The excavation at Andrew Lake Disposal Area (ALDA)-02 was halted at 69% when the first of two 500-pound bombs was encountered in August 2019.

Mr. Schicho went through the presentation in Attachment C to bring everyone up to speed on the current project to explain what will be done in 2021 and 2022.

### EOD Mobile Unit 11

Mr. Peach summarized that EOD MU 11 from Naval Air Station (NAS) Whidbey Island postponed its 2020 site visit based on travel safety concerns related to COVID. EOD MU 11 did a quick site visit last month and is scheduled to return to Adak from May 10 to May 17, 2021. Its scope includes checking the Finger Bay shoreline for cartridge activated devices (CADs), performance of a seawall sweep, and opening the spillway.

## **5. Operable Unit B-2 Record of Decision**

Mr. Peach reported that the ADEC, EPA, and Navy are working to finalize the Record of Decision (ROD) for OU B-2. The ROD will establish the remediation goals and long-term management requirements for the areas within Parcel 4.

The ROD is the next step in the CERCLA process, following the Proposed Plan and Action Memorandum from early 2013 and the field work conducted under the NTCRA. Following completion of the NTCRA, the Navy will prepare a Remedial Action Completion Report (RACR). The RACRs for OU A and OU B-1 were completed in 2012 and 2014, respectively.

## **6. PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)**

Ms. Catherine Weber of NAVFAC NW provided a summary of the status of the PFAS work on Adak Island.

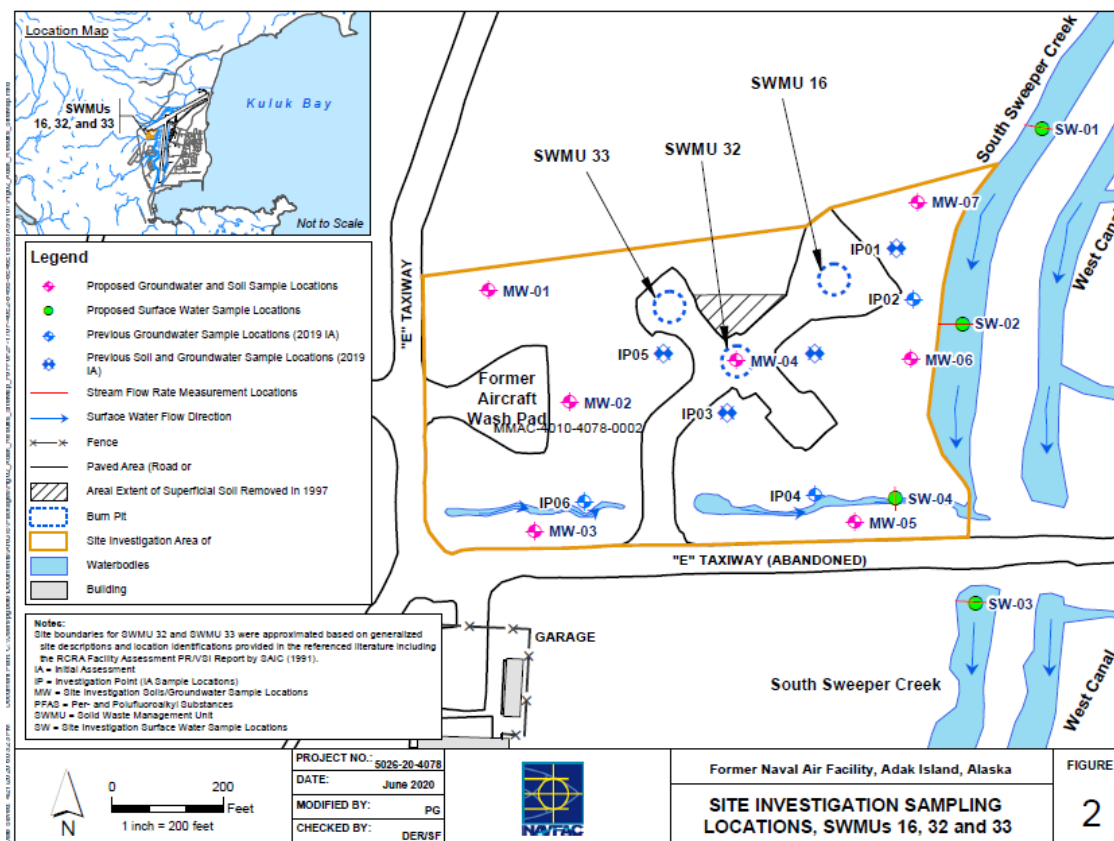
### **FOCUSED PFAS PRELIMINARY ASSESSMENT (PA) DOCUMENTATION**

A Draft PA for PFAS was provided to the EPA, ADEC, City of Adak, The Aleut Corporation (TAC), and the Alaska Department of Transportation (ADOT) for their review. Comments were received from ADEC and ADOT and will be addressed in a Final PA that will be submitted to all parties. The PA documents a comprehensive desktop and records review of Adak with respect to past uses of aqueous film-forming foam (AFFF, i.e., fire-fighting foam) on the island. The potential presence of PFAS was evaluated and further investigation is not recommended.

### **SOIL, GROUNDWATER, AND SURFACE WATER SAMPLING**

Sampling for the PFAS compounds in the soil, groundwater, and surface water at SWMUs 16, 32, and 33 (the former Fire Fighting Training Areas) was conducted in September 2020. PFAS compounds were detected in soil, groundwater, and surface water.

Investigation locations are shown in the below graphic:





**Investigation Area**



**Utility Markout**



**South Sweeper Creek Distributary**



**Soil Sampling**



**Monitoring Well Installation**



**On-Site Groundwater Treatment**



**PFAS Summary****Soil**

Detections of perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), and perfluorobutanesulfonic acid (PFBS) were below the current DoD and EPA screening levels, but were above ADEC comparison values. Current land use controls (LUCs) are in place through the Navy and City of Adak requiring approval before digging.

**Groundwater**

Detections of PFOA and PFOS in groundwater were above the DoD, EPA, and ADEC screening levels. Detections of PFBS in groundwater were below the DoD screening level. Current LUCs are in place through the Navy and City of Adak restricting domestic use of groundwater. Groundwater may still be used for industrial purposes, but the likelihood of this scenario is low due to salinity, low yield, turbidity, and contamination (Navy, 2000).

**Surface Water**

Low-level detections of PFAS in surface water compared to ecological reference documents do not indicate that surface water is a significant pathway.

A Draft Site Inspection Report summarizing investigation and results has been submitted to the EPA and ADEC for review.

Mr. Peach asked if the Navy anticipated the PA and SI to be final before the next RAB. Ms. Weber indicated that they will be.

Mr. Vernik asked if there is any additional groundwater sampling planned for wells in the area. Ms. Weber explained that the results have not been reviewed by EPA or ADEC yet, so they don't have an answer for that question at this time.

## 7. OU A and SAERA Closure Evaluation

The Navy is evaluating all of the OU A and State Adak Environmental Restoration Agreement (SAERA) sites on Adak to assess accelerating closure. This work was conducted in preparation for the Fifth Five-Year Review (FYR), which is currently underway.

### OU A and SAERA Sites

The Navy established site-specific cleanup levels for sites included in the CERCLA ROD for OU A and sites included in the SAERA. These levels were documented in a memo to ADEC and EPA. Closure goals for every site were evaluated for closure potential and provide recommendations to achieve closure, if feasible. Seventeen OU A sites were recommended for potential future closure and one SAERA site was recommended for closure.

A brief summary of the process for the SAERA site closure follows:

- The Navy calculated and documented Method 3 Alternative Cleanup Levels (ACLs) for Adak sites in accordance with 18 AAC 75.340(a)(3) for petroleum constituents for ADEC approval.
- ADEC approved new Method 3 ACLs on August 20, 2020.
- The Navy reviewed past site data for 32 SAERA sites for comparison to new ACLs and issued a Site Evaluation and Recommendations Report.
- Runway 5-23 Aviation Gasoline (AVGAS) Valve Pit was recommended for site closure (located within the Area 2 ACLs grouping).
  - Runway 5-23 AVGAS Valve Pit site was associated with an abandoned 6-inch-diameter AVGAS transfer pipeline that supplied fuel to the Runway 5-23 truck fill stand and the pipeline was abandoned after removal of the aboveground portions of the piping, draining fuel from the buried sections, and capping of the pipe ends. A product sheen was observed in 1994 on the groundwater surface in the excavation opened to remove the valve.
  - Monitored natural attenuation (MNA) was initiated in 1999 and ended in 2013. Benzene, aliphatic gasoline range organics (GRO), and total GRO concentrations in groundwater were greater than ADEC groundwater cleanup levels (CULs) between 1999 and 2002. Diesel range organic (DRO) analyses were discontinued in 2003, GRO fractions were discontinued in 2005, and benzene, toluene, ethylbenzene, and xylenes (BTEX) was discontinued in 2009 since concentrations met the monitoring endpoint criteria. GRO analysis was discontinued after the 2013 monitoring event because concentrations were below Table C CULs for three consecutive sampling events.



- Based on the available site soil data, this site meets the site-specific CULs for DRO, residual range organics (RRO), and GRO, and the most stringent Method Two CULs for other contaminants of concern (COCs). This site meets the 18 AAC 75.345(c) Table C groundwater CULs. Since all COCs are below applicable CULs, the site's status is adjusted from Cleanup Complete with Institutional Controls to Cleanup Complete.

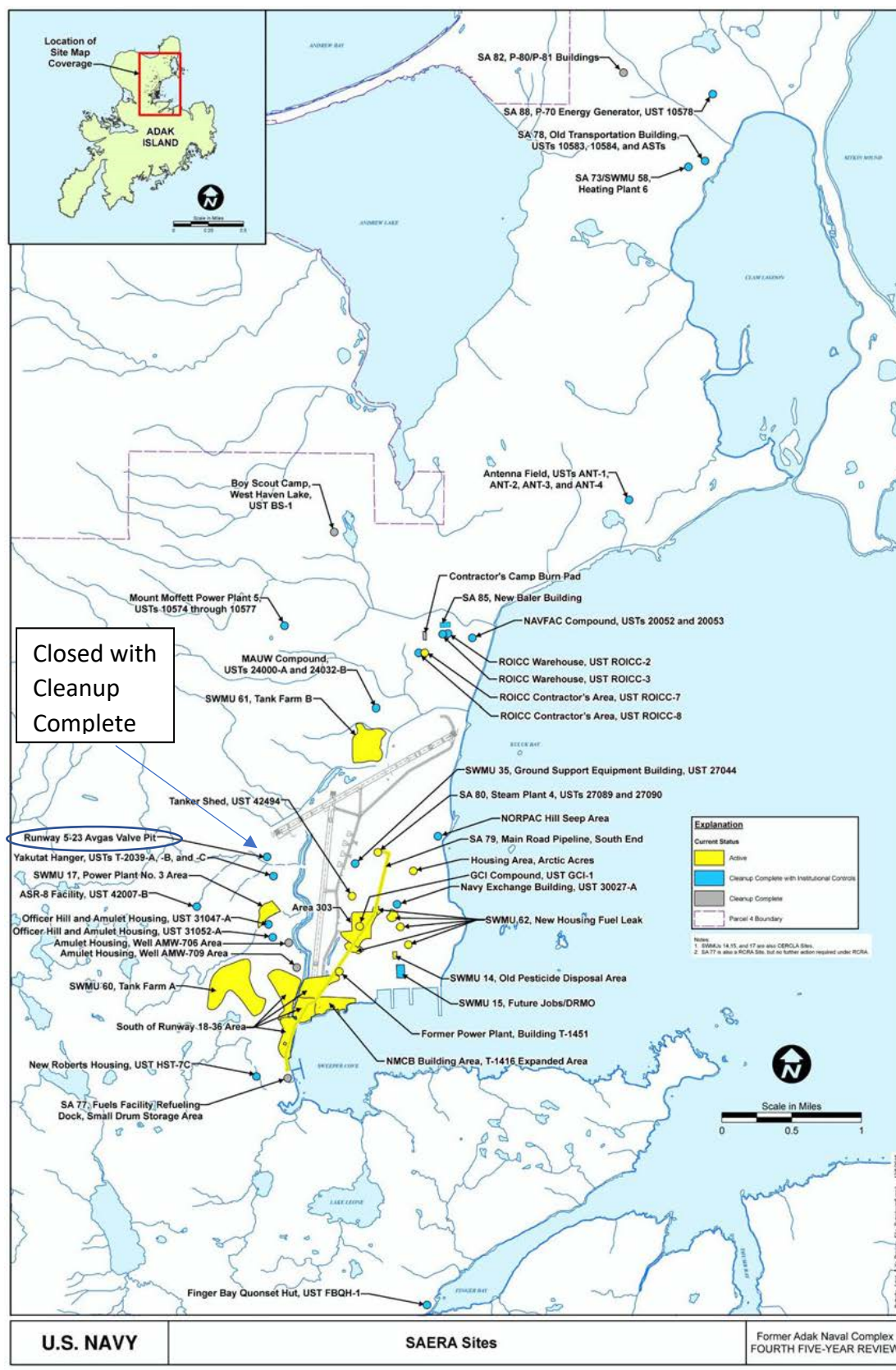
Follow-on Actions Planned to Collect Additional Data to Support Additional Site Closure Recommendations:

- Additional ACLs may be possible to establish for the remaining two areas through the collection of additional total organic carbon (TOC) soil samples (Summer 2021 field work) for use in potential additional site closure recommendations.
- Additionally, soil samples will be collected in Summer 2021 to supplement the existing site closure evaluations to assess where concentrations may have decreased or to fill in where data gaps were identified.

### **Well Decommissioning**

The closure evaluation has also evaluated monitoring wells that are no longer required for the groundwater monitoring program and recommended wells to be closed (i.e., decommissioned). The Navy has identified on the order of 150 monitoring wells that are no longer required. The field effort for well decommissioning is planned for the 2021 field season.





**8. FIFTH FIVE-YEAR REVIEW**

Ms. Weber explained that under the EPA CERCLA regulations, the Navy conducts a review of all CERCLA and SAERA sites that do not meet the unlimited use / unrestricted exposure (UU/UE) on Adak once every five years. The fifth FYR is underway this year and the Navy will document the FYR findings in a report to be completed by December 2021. Questionnaires for stakeholder participation have been sent for public feedback. The FYR includes visual inspections of all CERCLA and SAERA sites on the island to evaluate whether the remedy in place is still protective of human health and the environment. The process has been initiated and site inspections with the ADEC are planned for April 2021. Each site's status is updated in a Site Catalog to be included in the FYR report. The report will be finalized in December 2021.

Chris Cora mentioned that it was agreed by regulators and the Navy to include SAERA sites in the FYR, but it is not required to include them in the report. Ms. Weber agreed with Mr. Cora's distinction.

## 9. PETROLEUM UPDATE

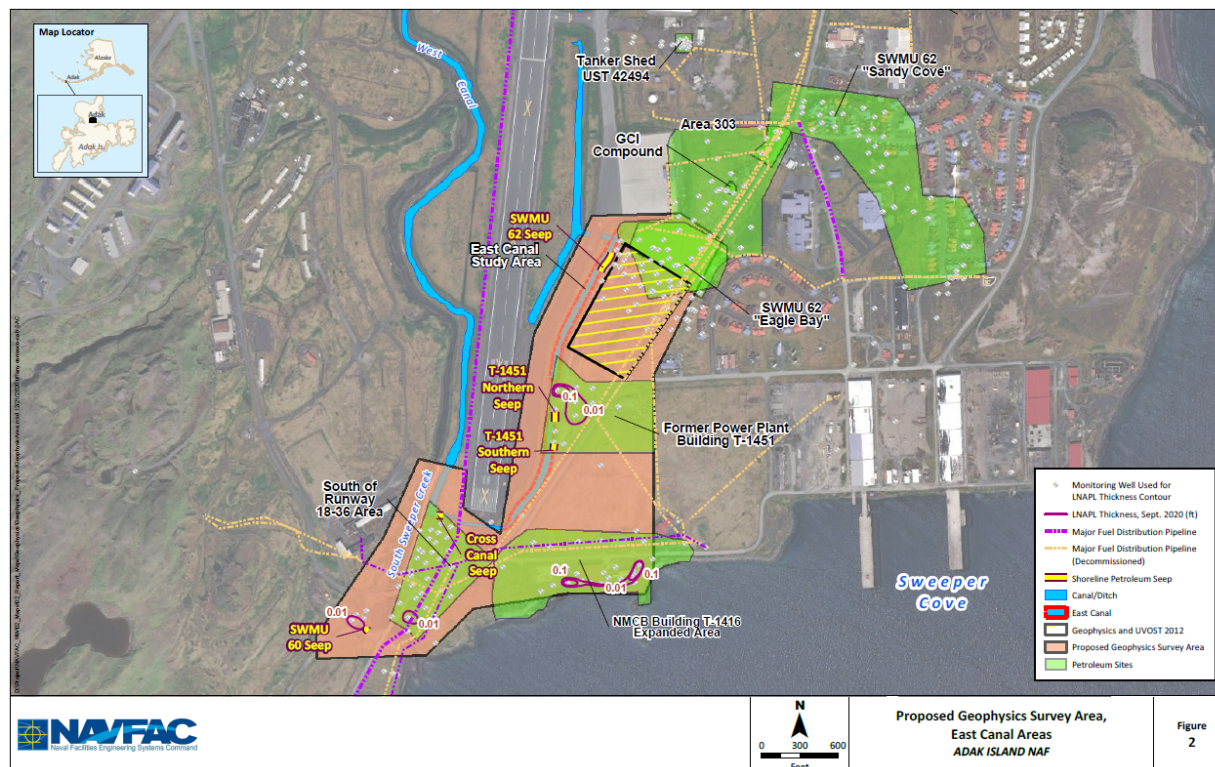
### A. East Canal

Ms. Weber explained the work to identify additional potential petroleum sources commenced this month and will continue through summer 2021 to include:

- a) Geophysical survey of East Canal and South of Runway areas;
- b) Fingerprinting the free product from South of Runway, T-1451, and SWMU 62;
- c) Evaluating whether a pipeline was missed in the pipeline cleaning and decommissioning efforts;
- d) Using a multi-gas meter to measure O<sub>2</sub>, CO<sub>2</sub> and methane in wells along East Canal; and
- e) Natural source-zone depletion (NSZD) evaluation, which is a remedy optimization approach, will be conducted as part of the evaluation to aid in establishing and / or updating endpoints for remediation and monitoring.

Mr. Lockett asked if the green areas shown on the figure are known petroleum sites not being looked at this year. Ms. Weber explained they are known sites and the geophysical will not expand to those areas. Mr. Lockett explained that there is scheduled utility work in 2022 so it will be good to be aware of what is going on and to know the results. Mr. Peach explained that the geophysical work is to understand the area along the canal to determine the source of the petroleum contamination in East Canal. The area to the north does not contribute much to the East Canal contamination and the groundwater is pretty flat in that area.

The following figure shows the areas planned for this investigation.

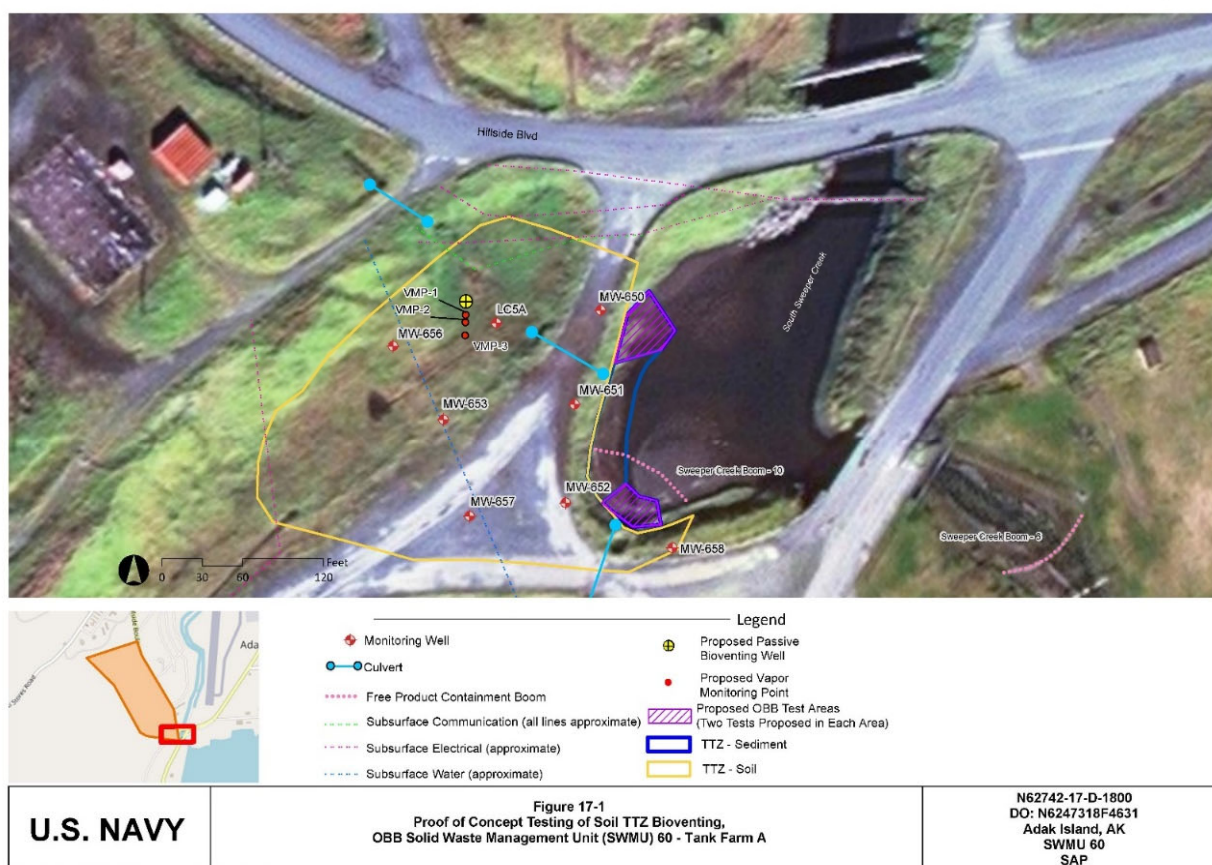




## B. SWMU 60: Remedial Design

Ms. Weber explained SWMU 60 is located at the bend in Sweeper Creek as it moves east towards Sweeper Cove. At present, the remedy that is in place as stated in the OU A ROD is MNA of petroleum in the groundwater at the site and institutional controls (ICs). In addition, booms are being used to control the sheen that is visible in surface water. The groundwater is monitored for free product six times a year as part of the Navy Free Product Recovery Program.

In April 2018 an Engineering Evaluation/Cost Analysis (EE/CA) was finalized and identified a preferred remedy enhancement alternative applying an OBB along the shoreline to mitigate sheen to surface water. Proof-of-concept testing was conducted at SWMU 60 for the OBB and a remedial design has been finalized and submitted to ADEC and EPA. Pre-construction work to support the implementation of the design will be conducted in 2021 and construction is targeted for Summer 2022.



### C. Free Product Recovery Program

Mr. Garcia-Lata explained that Sealaska Remediation Solutions (Sealaska) is the Navy contractor working on the Free Product Recovery Program. Sealaska staff are on-island once a month to maintain booms on East Canal and South Sweeper Creek and to monitor wells six times a year to recover free product. A total of **8.85 gallons** have been recovered from the period between October 2019 and September 2020. Also included is the reporting period from October 2020 to February 2021 which is **2.26 gallons** of recovered product. A new contractor will be taking over in October 2021.

Mr. Lockett asked who was taking over. Mr. Garcia-Lata said EA Environmental will be taking over.

Recovery volumes from previous 12-month periods and the current period to date:

Past 12-Month Recovery Periods	Total Product Recovered (gallons)
October 2014 to September 2015	66.5
October 2015 to September 2016	37.7
October 2016 to September 2017	11
October 2017 to September 2018	8.2
October 2018 to September 2019	12.7
October 2019 and September 2020	8.85
October 2020 to February 2021	2.26

## **10. LONG-TERM MONITORING UPDATE (LTM) AND INSTITUTIONAL CONTROLS (ICs)**

### **A. Marine Monitoring**

Mr. Garcia-Lata explained the marine monitoring event was conducted in June 2020. The purpose of the marine monitoring is to determine polychlorinated biphenyl (PCB) concentrations in Rock Sole and Blue Mussels from Sweeper Cove and Kuluk Bay. A consumption advisory is prepared based on the concentrations detected in the fish and mussels collected. In summary:

#### **2020 Monitoring Results, Sweeper Cove:**

Rock Sole (consumption advisory maintained)

Blue Mussels (consumption advisory maintained)

#### **2020 Monitoring Results, Kuluk Bay:**

Rock Sole (consumption advisory removed)

Blue Mussels (consumption advisory previously removed)

The report was finalized in December 2020. As with the prior efforts, a Fact Sheet has been generated and will be posted in Adak and distributed to the public. The Fact Sheet has also been posted on the Navy's BRAC PMO and City of Adak websites. Data collected will also provide input for the fifth FYR.

Mr. Aaron Vernik of Sealaska provided details on how and where the marine monitoring was conducted, and the basis of the changes to the consumption advisories as a result of the sampling. See Attachment D.

Mr. Peach asked if SW-28 is on the south side of Small Boat Harbor, opposite the quarry. Mr. Vernik explained that if you parked your boat at Small Boat Harbor and looked across where boats are parked, you can see SW-28. It is on the figure in Attachment D.

Mr. Lockett asked about Rock Sole and whether PCB concentrations correlate with the dredging project performed years ago. He also asked if it takes longer to recover from PCB contamination in Rock Sole compared to other species. Mr. Vernik said both species bioaccumulate PCBs from water or from other species. Rock sole are more affected by bioaccumulation. The dredging suspends the sediment where PCBs were present. Bottom feeders will accumulate more PCBs from the sediment. Once PCBs are in a fish, it stays there and will bioaccumulate. He added that the sampling program looks at similar sized fish (not too old or too young) for better comparison.

### **B. Dig Permits**

Mr. Peach summarized the six dig permits processed by the Navy since the last RAB meeting. Two additional permits were processed since the materials were circulated.

September 2020 – City of Adak – Seawall Road & Unnamed Street (Near LS12 & White Shed), verification of valve location and existence in preparation of upcoming water utility distribution work in 2021.

September 2020 – City of Adak – Public Works Road and Mechanic Road, verification of valve location and existence in preparation of upcoming water utility distribution work in 2021.

October 2020 – Green Paradise Production – Search for Gregory Dwargstof Stolen Gold Production.

November 2020 – TDX Power Services – Primary cable installations along Dike Road and Administration Road.

April 2021 – APTIM – 2021 NTCRA work in Parcel 4

April 2021 – APTIM – IC Repairs at Metals Landfill

Permits that are processed are forwarded to Mr. Lockett per Action Item 1 from the October 2016 RAB meeting. As always, the Navy would like to thank the groups that submit dig permits.

Mr. Vernik added the reason to require dig permits is for the health and safety of the people involved in construction activities. Mr. Peach added that the dig permits provide a summary of known contamination and remedial action being conducted in an area. The Navy also looks at munitions recoveries which also show what may have been found in a given area.



### C. Institutional Control (IC) Materials

Mr. Garcia-Lata explained that the Navy continues to make quarterly inquiries to provide IC materials to the community as requested. Additionally, the Navy would like to encourage community members to reach out at any time for materials if a need arises. Inquiries were sent to the community in September 2020, December 2020, and March 2021. Based on the responses received, the IC materials listed in the table below have been distributed. Groups represented are the City of Adak, Adak Airport, and Aleutian Outfitters.

Discontinued Items: Bookmarks, Informational Posters

New Items: Mugs and Small Magnets

Quarterly inquiries will now require requestors to fill out an order form to streamline communication and get materials to requestors on a more timely basis.

Item	Total Disbursed
Hiking Trail Maps	225
Laminated Hiking Posters	21
Boomer the Otter Posters	0
Mugs	0
Coloring Books	6
Large Magnets	0
Small Magnets	0
DVDs, Child	0
DVDs, Adult Visitor	2

Items are being shipped to the island right now and will be distributed soon.

Mr. Vernik suggested contacting Aleut Real Estate or Aleutian Outfitters to see if they would like magnets to place on the refrigerators for easy access to important phone numbers. Mr. Garcia-Lata agreed that was a good idea.

### D. Institutional Control Repairs and Inspections

#### Minor IC Repairs

Mr. Peach summarized IC repairs conducted in 2020. In September 2020, APTIM performed routine minor IC repairs, consistent with the efforts performed since 2017.

The work included:

- Replaced or repaired signs in various places adjacent to the City and outlying areas, including White Alice-Trout Creek and White Alice-PCB Site.

- Metals Landfill / Lined swale and spillway with new drainage rock.
- Sweeper Creek / Flattened end of oil trap adjacent to Sweeper Creek and placed rocks on top.
- White Alice Landfill / Reshaped spillway, installed additional check dams.

APTIM is again contracted to perform the minor repairs in late 2021, following the inspection to be conducted by Sealaska.

### Major IC Repairs

Mr. Peach explained the Navy is planning on extensive IC repair work in 2021. The Navy is currently planning to remove the fencing in Parcel 4 as well as armor the seawall at Metals Landfill. Mr. Doug Schicho of APTIM will summarize the work planned for 2021.



Work to be performed includes:

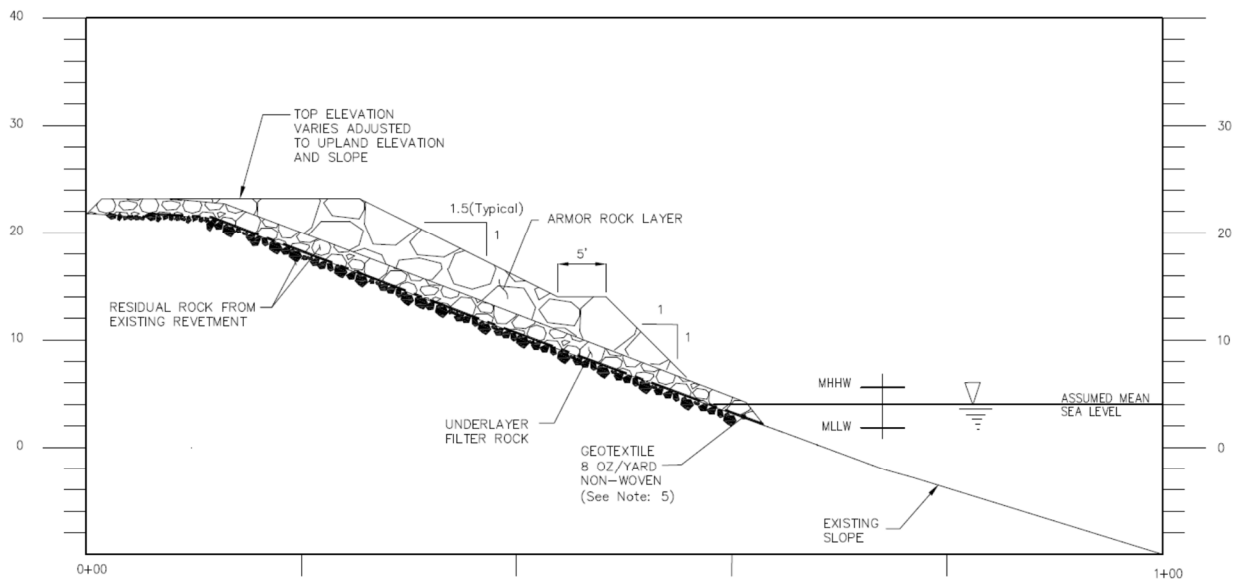
- Areas requiring repair will be evaluated by drone survey
  - Up to 1,000 feet of shoreline will be repaired
  - Filter stone will be placed where earth is exposed due to slumping
- Estimated to be 1,500 tons of filter stone
  - Each stone will weigh between 0.7 and 1.2 tons and have a 2.3 foot nominal diameter
- Armor stone will be placed in slumped areas
  - Estimated to be 2,400 tons of armor stone
  - Each stone will weigh between 7.5 and 12.5 tons with a 5-foot nominal diameter
- Large, heavy equipment will be barged to the project to safely handle the stone

- 35-ton off-road dump, Cat 349 excavator with thumb, Cat 988 loader

Mr. Schicho explained that APTIM will repair slumped areas and re-armor the landfill. The hope with larger stones is that they stand up for a longer period of time. There is also some metal protruding from the landfill which will be removed.

Mr. Peach explained the new work includes using larger rock to have a more robust seawall similar to what is used in the jetty between Sweeper Cove and Kuluk Bay. Mr. Schicho explained the heavy equipment will be arriving at the same time as the equipment for the munitions job.

Mr. Pollock asked if there is a plan to offload the barge with rock and materials. Mr. Schicho explained they are still working with the Quarry barge company but thinks the materials will be offloaded at the same location as the heavy equipment. Mr. Pollock also asked if there is any impact to the roads from the large equipment. Mr. Schicho explained that they are using the most direct route and will be bringing in a road grader for the project to create a wider, more stable road to metals landfill. Mr. Pollock asked if they are going to add overburden to the existing road (Seawall Road) and is that going to be taken down to original grade. There is a significant drainage issue in front of the plant when crossing the Seawall Road to Pier 5. Mr. Schicho said they are not going to add overburden there, but will add overburden where it transitions to Metals Landfill.



TYPICAL SHORELINE REPAIR DETAIL  
NTS

Work at South Davis Road Landfill was originally planned for 2021, but has been pushed a year and is currently scheduled for 2022.

## **Inspections**

Mr. Garcia-Lata explained that Sealaska performed the 2020 annual inspections of ICs in August/September 2020. Work included:

- Annual IC activities,
- Modified IC evaluation surveys, modified classroom presentation/surveys, and downtown area groundwater use canvassing, and
- Excavation restriction monitoring.

A technical memorandum was prepared that summarizes the activities conducted in September. The report concludes that ICs appear to be effective for children, visitors, and adult residents. Appreciation to all who submitted an Education Evaluation Survey online due to the COVID-19 pandemic.

Distribution of the Education Evaluation Surveys will most likely be conducted in the same manner (i.e., electronically). The Navy will be utilizing the City of Adak website for distribution. The Navy is looking for additional contacts to disseminate the survey.

Mr. Vernik asked about plans to repair signage and barbed wire fencing around landfills. Mr. Peach indicated that they know there is fencing that is down and that discussions regarding the fencing have been held with the ADEC and EPA. The Navy is waiting until the work for the NTCRA is winding down before tackling fencing. It is in the budget for the next major IC repairs, but he is not sure of the scope or specific date.

## **E. Groundwater / Surface Water / Soil Sampling**

Mr. Garcia-Lata explained that during the 2020 monitoring event, groundwater, surface water, and sediment samples were collected from 82 monitoring locations from 15 sites. The summary report for 2020 will be finalized in June 2021 and recommendations will be made to alter the sampling program based on the results of laboratory analyses.

The Navy annual sampling for 2021 has been contracted to Sealaska. The 2021 monitoring event is scheduled to begin in August 2021.

**11. COMMUNITY REPORT / RAB MEMBERSHIP**

Mr. Peach summarized the current status of RAB Membership, asking if Ms. Plant is staying on the RAB or resigning. Mr. Lockett and Mr. Spitler summarized that her not being on the call may indicate she is resigning. Mr. Lockett motioned to remove Carrie Plant, April Smiloff, Melvin Smith, and Esther Bennett from the RAB. He motioned to add Mr. Leon-Guerrero to the RAB. Mr. Spitler seconded. Motion passed.

Mr. Chris Cora noted that he is retiring from the EPA after working on the Adak project for nearly 30 years. He said he greatly appreciates the involvement of the RAB members over the years. Mr. Peach asked about replacing Mr. Cora on the RAB, and Mr. Lockett said he doesn't think that needs to be voted on. He indicated that EPA can appoint whomever they want. Mr. Bott will replace Mr. Cora. Mr. Spitler forgot to talk to Mr. or Ms. Holsinger about today's RAB meeting and will make sure they are invited in the fall. Mr. Lockett volunteered and Mr. Spitler seconded having Mr. Lockett serve as Community Co-Chair. The motion passed.

**12. REVIEW OF NEW ACTION ITEMS**

There are no new action items.

**13. NEXT RAB MEETING**

Mr. Peach asked if the community would like to keep with the 5 PM local time for the next RAB, or move it earlier in the day. Mr. Lockett suggested 1:00 pm. Ms. Smiloff and Mr. Spitler agreed with 1:00 pm.

The next RAB will be held on Sept 23<sup>rd</sup> at 1:00 pm. Motioned by Mr. Lockett and Mr. Spitler seconded the motion. Motion passed.

**14. ADJOURN**

Mr. Lockett motioned to adjourn the RAB meeting. It was seconded by Mr. Spitler at 6:51 pm.

**Attachment A****Current RAB Membership  
April 2021**

<b>Name</b>	<b>Affiliation</b>	<b>Location</b>	<b>Voting Member</b>
Layton Lockett	RAB member (Community Co-Chair)	Adak, AK	1
Ben Leon-Guerrero	RAB member	Anchorage, AK	2
Elaine Smiloff	RAB member	Adak, AK	3
Jack Stewart	RAB member	Adak, AK	4
Kim Turnbull (Mik)	RAB member	Adak, AK	5
Tom Spitler	RAB member	Adak, AK	6
Dustan Bott	RAB member (USEPA)*	Seattle, WA	
Darren Mulkey	RAB member (ADEC)*	Anchorage, AK	
Justin Peach	RAB member (Navy Co-Chair)*	Silverdale, WA	

\* Non-voting member

A quorum to take action will consist of 1/3 of the RAB members.

Action items will be reviewed and approved by a 2/3 vote of RAB members participating in the meeting.

Additional members may be added to the RAB by a quorum present and a 2/3-majority vote of present RAB member.

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Adak website:

[https://bracpmo.navy.mil/brac\\_bases/other\\_west/former\\_naf\\_adak.html](https://bracpmo.navy.mil/brac_bases/other_west/former_naf_adak.html)

**Attachment B**  
**USACE Fact Sheets**





# FACT SHEET

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

March 2021

**Subject:** Great Sitkin Island (F10AK0114-03)  
Formerly Used Defense Site (FUDS), Alaska.

## Introduction

The US Army Corps of Engineers (USACE) – Alaska District conducted an environmental site inspection at the Great Sitkin Formerly Used Defense Site located on Great Sitkin Island, Alaska during the summers of 2019/20. The project assessed the site logistics and various field screening technologies for the upcoming remedial investigation to determine if there is risk to human health and the environment resulting from past military activities. Further remedial investigation field work will be conducted during the summer of 2021.



## Site Background

The U.S. Navy started operating the Great Sitkin Island Naval Advance Fueling Station and Anti-submarine Net Depot at Sand Bay on land annexed from the Aleutian Islands National Wildlife Refuge on May 15, 1943. Construction of the fueling station was essentially complete by spring 1944. The Great Sitkin FUDS had a fuel storage capacity in excess of 14 million gallons connected by more than 3 miles of pipeline. Present at the facility were numerous bulk fuel storage tanks, underground fuel pipelines, pump houses, heating plants, piers, ammunition bunkers, living quarters, and warehouses. More than 170 structures were constructed to accommodate the 680 personnel stationed at the site. Fueling records indicate that the facility was probably deactivated soon after the end of the war in 1948, except for a brief period of use between 1957 and 1962 when the facility was used for temporary petroleum storage. Based on historical imagery the Navy made no attempt to reconstruct damage done by a large tsunami that damaged the shore facilities July 1957. In 1970s Navy attempted to burn the abandoned fuel and drums using flame-throwers. This created major releases and caused the storage tanks to have massive structural failure. Portions of the site are on lands designated as Wilderness. The site is currently part of the Aleutian Islands Maritime Wildlife Refuge, under the jurisdiction of the United States Fish and Wildlife Service.

## 2021 Planned Activities

A site visit was conducted during the summer of 2020 to perform treatability testing of several different in-situ petroleum technologies to help determine the best method to characterize Bunker C and Diesel fuel in the subsurface. Road improvements, culvert replacement, and ditch work was performed to allow the historical roads to dry out for the Summer 2021 field effort. During 66 days of planned field work during the summer of 2021 Jacobs Engineering and Geosyntec plan on mapping miles of historical fuel distribution pipeline system, remove and sample lead acid batteries, remove and sample transformers, installing 500+ UVOST probes, 115+ soil borings, 55 monitoring wells, and sampling 100s of other locations. This sampling will be used to plan for future remedial investigations and to determine potential actions to address FUDS-eligible risks to human health and the environment.

## Contact Information

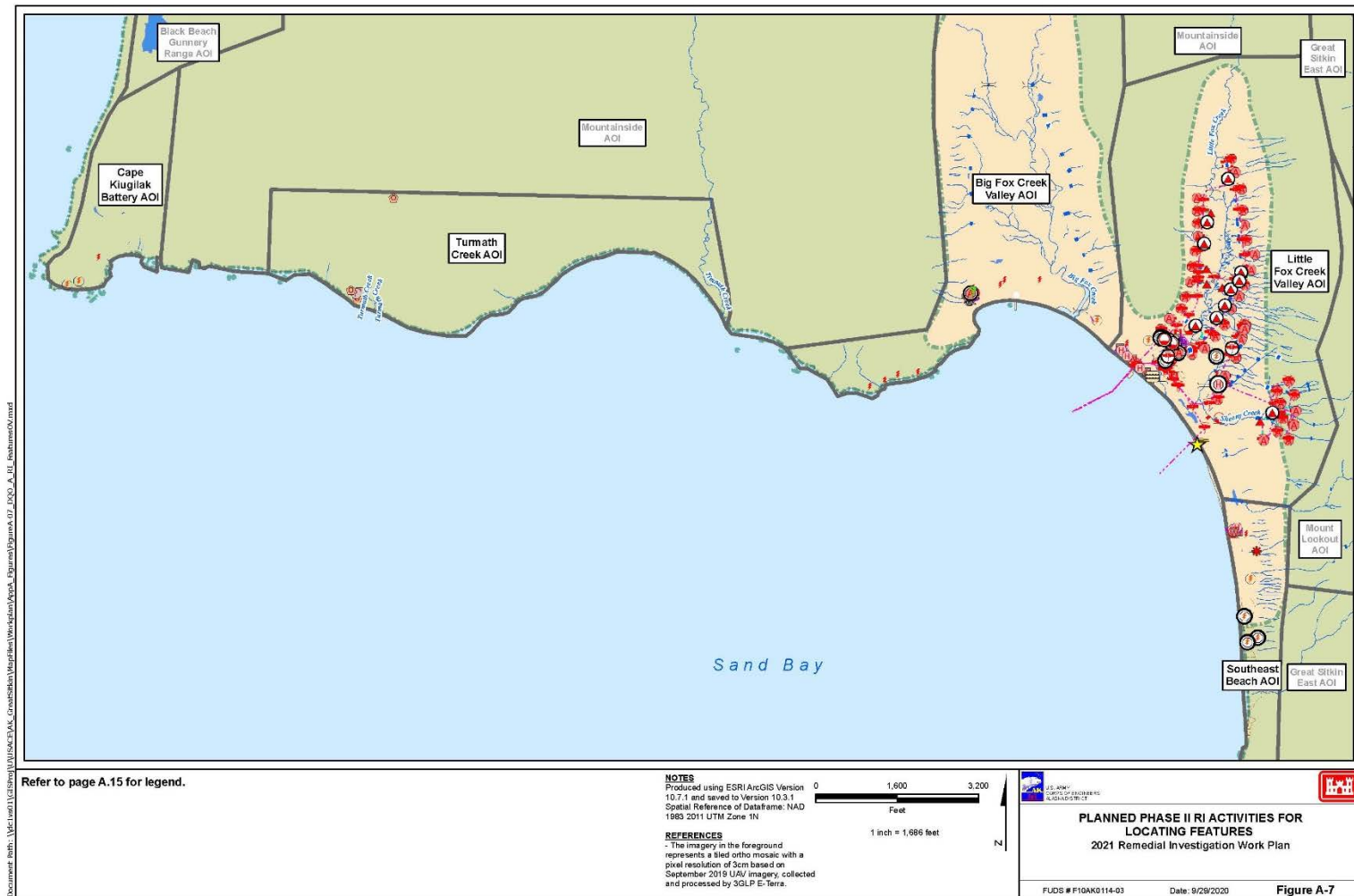
Richard Ragle, Project Manager US Army Corps of Engineers, Alaska District  
Office: (907) 753-2683 or email [Richard.A.Ragle@usace.army.mil](mailto:Richard.A.Ragle@usace.army.mil)

U.S. ARMY CORPS OF ENGINEERS – ALASKA DISTRICT

Environmental and Special Programs Branch (CEPOA-PM-ESP), P.O. Box 6898, Elmendorf AFB, Alaska 99506

<http://www.poa.usace.army.mil>







# FACT SHEET

**U.S. ARMY CORPS OF ENGINEERS**

**BUILDING STRONG®**

**March 2021**

**Subject:** Ogliuga Island – (F10AK0180-02)  
Formerly Used Defense Site (FUDS), Alaska.

## **Introduction**

The U.S. Army Corps of Engineers (USACE) - Alaska District executed remedial investigations at Formerly Used Defense Sites (FUDS) on Ogliuga Island, Alaska during the summers of 2009, 2017, and 2020. This uninhabited island is part of the Alaska Maritime National Wildlife Refuge and is located approximately 90 miles southwest of the former Adak Naval Air Station, and ~1,400 miles from Anchorage. The focus of the project is to identify the extent of environmental contaminants dating back to World War II, and the determination on how to decrease risk to human health and the environment.



## **Site Background**

A U.S. Navy auxiliary air station was established on Ogliuga Island in 1943 and operated until 1945. Facilities included a 100 x 3,000-foot steel-mat runway, aircraft parking areas and Pacific Huts and Quonset huts that served as camp support facilities. Additional facilities housed AWS radar and radio communication equipment.

When the Navy abandoned the facility, it appears that most of the equipment was left in place and is still present in a deteriorated state. None of the former structures are currently present and only the revetments remain. A removal action was undertaken in 2007 to remove batteries and drums of product to reduce the risk to human health and the environment.

The site is currently part of the Aleutian Islands Maritime Wildlife Refuge, under the jurisdiction of the United States Fish and Wildlife Service, and portions are designated wilderness area.

## **2021 Planned Activities**

A contract was awarded to Ahtna for a multiphase RI field effort in 2018. The information collected during the summer of 2020 is being used to guide the collection of environmental samples during the summer of 2021 Final Phase 3 RI and Risk Assessment. The Phase 3 RI will collect sufficient data to close remaining data gaps left from the previous RI field events. The Phase 3 RI will collect sufficient data that a Risk Assessment can be successfully conducted to determine the potential risks to human health and the environment from the contamination that is currently present on site.

## **Contact Information**

Richard Ragle, Project Manager US Army Corps of Engineers, Alaska District  
Office: (907) 753-2683 or email [Richard.A.Ragle@usace.army.mil](mailto:Richard.A.Ragle@usace.army.mil)

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**U.S. ARMY CORPS OF ENGINEERS – ALASKA DISTRICT**

Environmental and Special Programs Branch (CEPOA-PM-ESP), P.O. Box 6898, Elmendorf AFB, Alaska 99506

<http://www.poa.usace.army.mil>



Yellow and Read Areas requiring further Remedial Investigation to close data gaps from past sampling.





# FACT SHEET

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

March 2021

**Subject:** Tanaga Island – (F10AK0228-01 & 02)  
Used Defense Site (FUDS), Alaska.

## Introduction

The U.S. Army Corps of Engineers (USACE) - Alaska District executed remedial investigations at Formerly Used Defense Sites (FUDS) on Tanaga Island, Alaska during the summers of 2009 and 2017. This uninhabited island is part of the Alaska Maritime National Wildlife Refuge and is located approximately 65 miles southwest of the former Adak Naval Air Station, and 1,350 miles from Anchorage. The focus of the project is to identify the presence of environmental contaminants dating back to World War II, and determination on how to decrease risk to human health and the environment.



## Site Background

A U.S. Navy auxiliary air station was established on Tanaga Island in July 1943 and operated until 1945. Facilities included a 200 x 5,000-foot steel-mat runway, living quarters for 720 people, a pier, mooring area, hardstands, office and storage buildings, airway radio communications, galley and mess facilities, a dispensary, gravel roads and utilities.

When the Navy abandoned the facility almost all of the equipment on site was abandoned in place or on the airfield to demilitarize it. Lead acid batteries were left in equipment, transformers were left (in storage, on poles and in the power plant), and the drum dump was also abandoned. Currently all of the former structures have collapsed. Several removal actions have been undertaken to remove gross sources of contamination; removal of full drums, transformers, batteries, and grossly contaminated soils to reduce the risk to human health and the environment.

The site is currently part of the Aleutian Islands Maritime Wildlife Refuge, under the jurisdiction of the United States Fish and Wildlife Service, and portions are designated wilderness area.

## 2021/22 Planned Activities

A contract has been awarded to AECOM to perform the final Remedial Investigation (RI) and conduct a Risk Assessment. Unfortunately, the schedule has slipped from summer of 2021 to the summer of 2022 due to planning challenges. The Phase 3 RI will collect sufficient data to close remaining data gaps left from the previous RI field events. The Phase 3 RI will collect sufficient data that a Risk Assessment can be successfully conducted to determine the potential risks to human health and the environment from the contamination that is currently present on site.

We had hoped to conduct the field work during the summer of 2021 but due to planning challenges the field work is now planned to be conducted during the 2022 field season.

## Contact Information

Richard Ragle, Project Manager US Army Corps of Engineers, Alaska District  
Office: (907) 753-2683 or email [Richard.A.Ragle@usace.army.mil](mailto:Richard.A.Ragle@usace.army.mil)

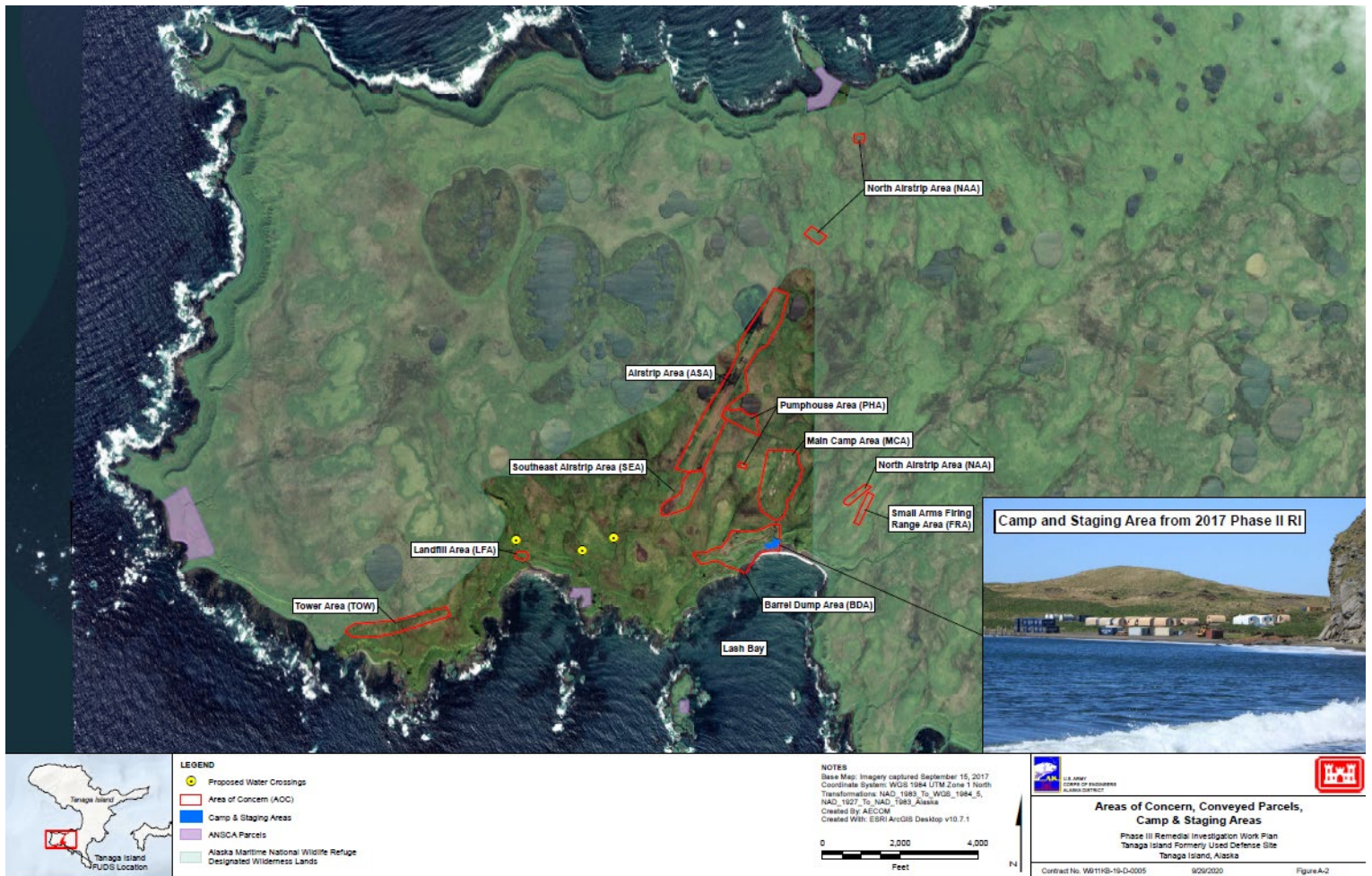
U.S. ARMY CORPS OF ENGINEERS – ALASKA DISTRICT

Environmental and Special Programs Branch (CEPOA-PM-ESP), P.O. Box 6898, Elmendorf AFB, Alaska 99506

<http://www.poa.usace.army.mil>



Areas requiring further Remedial Investigation to close data gaps from past sampling.



# **U.S. ARMY CORPS OF ENGINEERS – ALASKA DISTRICT**

Environmental and Special Programs Branch (CEPOA-PM-ESP), P.O. Box 6898, Elmendorf AFB, Alaska 99506

<http://www.poa.usace.army.mil>



# FACT SHEET

**U.S. ARMY CORPS OF ENGINEERS**

**BUILDING STRONG®**

**March 2021**

**Subject:** Tanaga Island – MMRP (F10AK0228-03)  
Formerly Used Defense Site (FUDS), Alaska.

## **Introduction**

The U.S. Army Corps of Engineers (USACE) - Alaska District executed remedial investigations at Formerly Used Defense Site (FUDS) on Tanaga Island, Alaska during the summer of 2009 and 2017. This uninhabited island is part of the Alaska Maritime National Wildlife Refuge and is located approximately 65 miles southwest of the former Adak Naval Air Station, and 1,350 miles from Anchorage. The focus of the project was to identify the presence of environmental contaminants associated with ordnance disposal, unexploded ordnance, and buried munitions dating back to World War II.



## **Site Background**

A U.S. Navy auxiliary air station was established on Tanaga Island in July 1943 and operated until 1945. Facilities included a 200 x 5,000-foot steel-mat runway, living quarters for 720 people, a pier, mooring area, hardstands, office and storage buildings, airway radio communications, galley and mess facilities, a dispensary, gravel roads and utilities.

In the late 1970's there were reports of ammunition being present on site and during a reconnaissance the Navy found that there were 230 cases of 20-mm and 50 cases of .50-caliber present. Several unsuccessful attempts were made to dispose of the munitions via burning. Which was followed by a demolition event that used approximately 2,000 pounds of C-4 during two detonations undertaken by the Navy, with support from the Coast Guard, September 1984.

## **Planned Activities**

A contract has been awarded to HydroGeoLogic, Inc to perform the final Phase 3 Remedial Investigation to confirm/determine the lateral and vertical extent of Munitions of Explosive Concern (MEC) on the site. Field work is planned for the Summer of 2022.

## **Previous Investigations**

A 2008 MMRP Site Inspection (SI) report was generated from historical documentation and determined that there was sufficient information to document sufficient risk that a Remedial Investigation was warranted.

A 2009 historical photographic analysis (HPA) was performed by the Army Geospatial Center to help determine the locations of potential munition impacts. Based on the SI and HPA, Phase 1 RI fieldwork was conducted. The Phase 1 RI found no evidence of MEC at ammunition storage areas, Aerial Rocket and Bombing Range or 29 of the Antiaircraft emplacements. MEC was found associated with both 1984 Demolition locations and the potential for MEC was indicated at 3 of the Antiaircraft emplacements.

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**U.S. ARMY CORPS OF ENGINEERS – ALASKA DISTRICT**

Environmental and Special Programs Branch (CEPOA-PM-ESP), P.O. Box 6898, Elmendorf AFB, Alaska 99506

<http://www.poa.usace.army.mil>

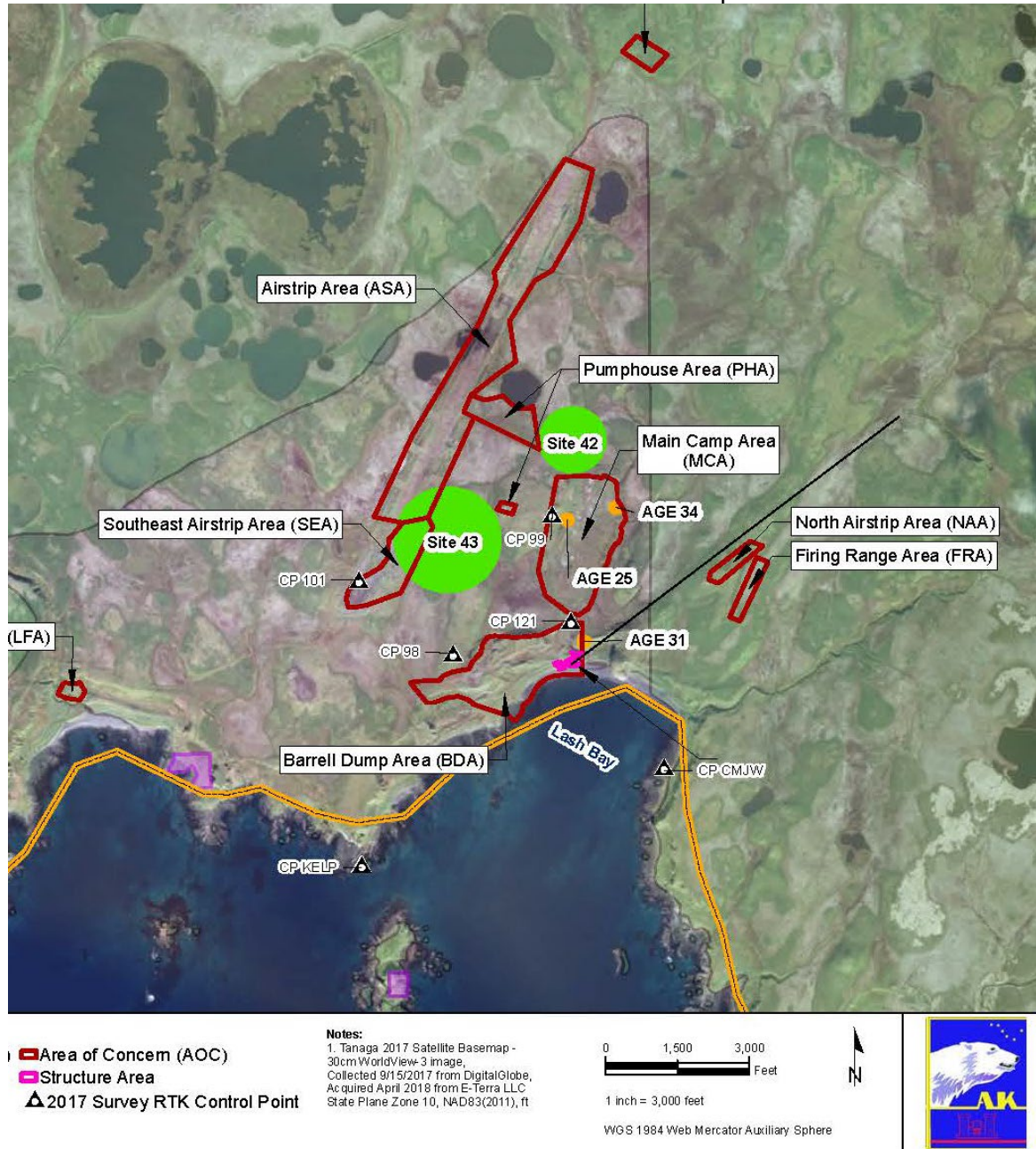


A 2017 Phase 2 RI field season was conducted to close data gaps left from the previous investigation. Not all of the Phase 2 objectives were achieved. While the digital geophysical mapping was completed for the two demolition sites more mapping is required to determine the lateral extent, and more information is needed to complete the vertical delineation of MEC.

### Contact Information

Richard Ragle, Project Manager US Army Corps of Engineers, Alaska District  
Office: (907) 753-2683 or email [Richard.A.Ragle@usace.army.mil](mailto:Richard.A.Ragle@usace.army.mil)

Locations of current Phase 3 field work in relation to the main portion of the site.

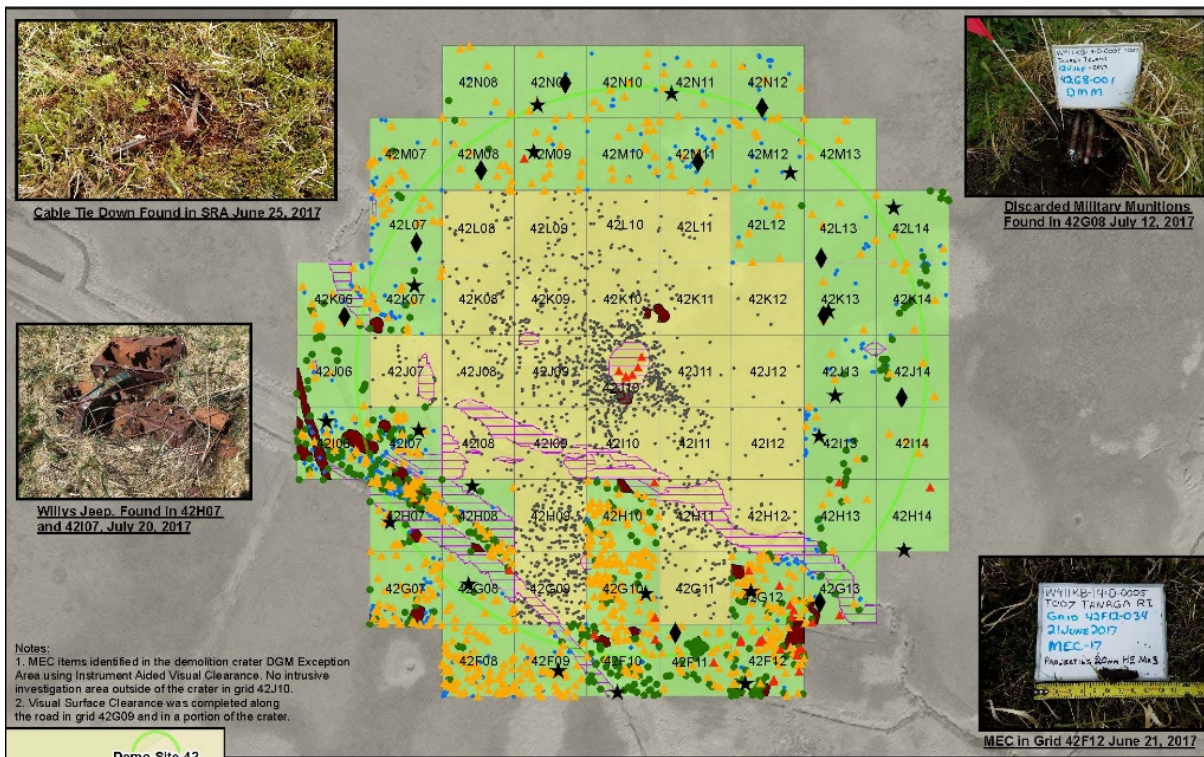


### U.S. ARMY CORPS OF ENGINEERS – ALASKA DISTRICT

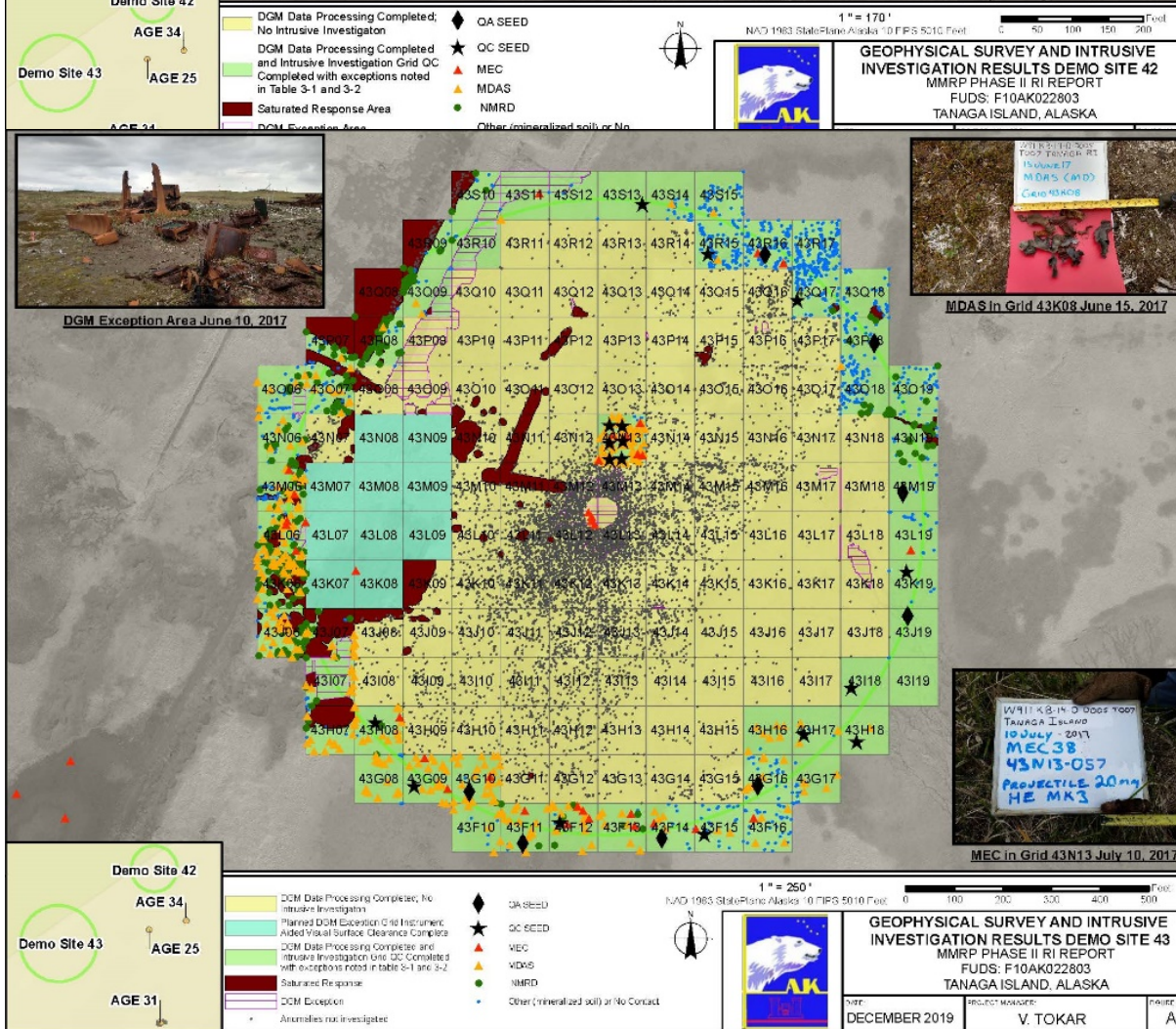
Environmental and Special Programs Branch (CEPOA-PM-ESP), P.O. Box 6898, Elmendorf AFB, Alaska 99506

<http://www.poa.usace.army.mil>





**Demo Site 42 –**  
 Results of 2017  
 digital geophysical  
 mapping results.



**Demo Site 43 –**  
 Results of 2017  
 digital geophysical  
 mapping results.



**Attachment C**  
**Munitions Presentation**

# ADAK OPERABLE UNIT (OU) B-2 NON-TIME CRITICAL REMOVAL ACTION AND INSTITUTIONAL CONTROL MAINTENANCE

CTO-4977 – 2021-2022 Path Forward

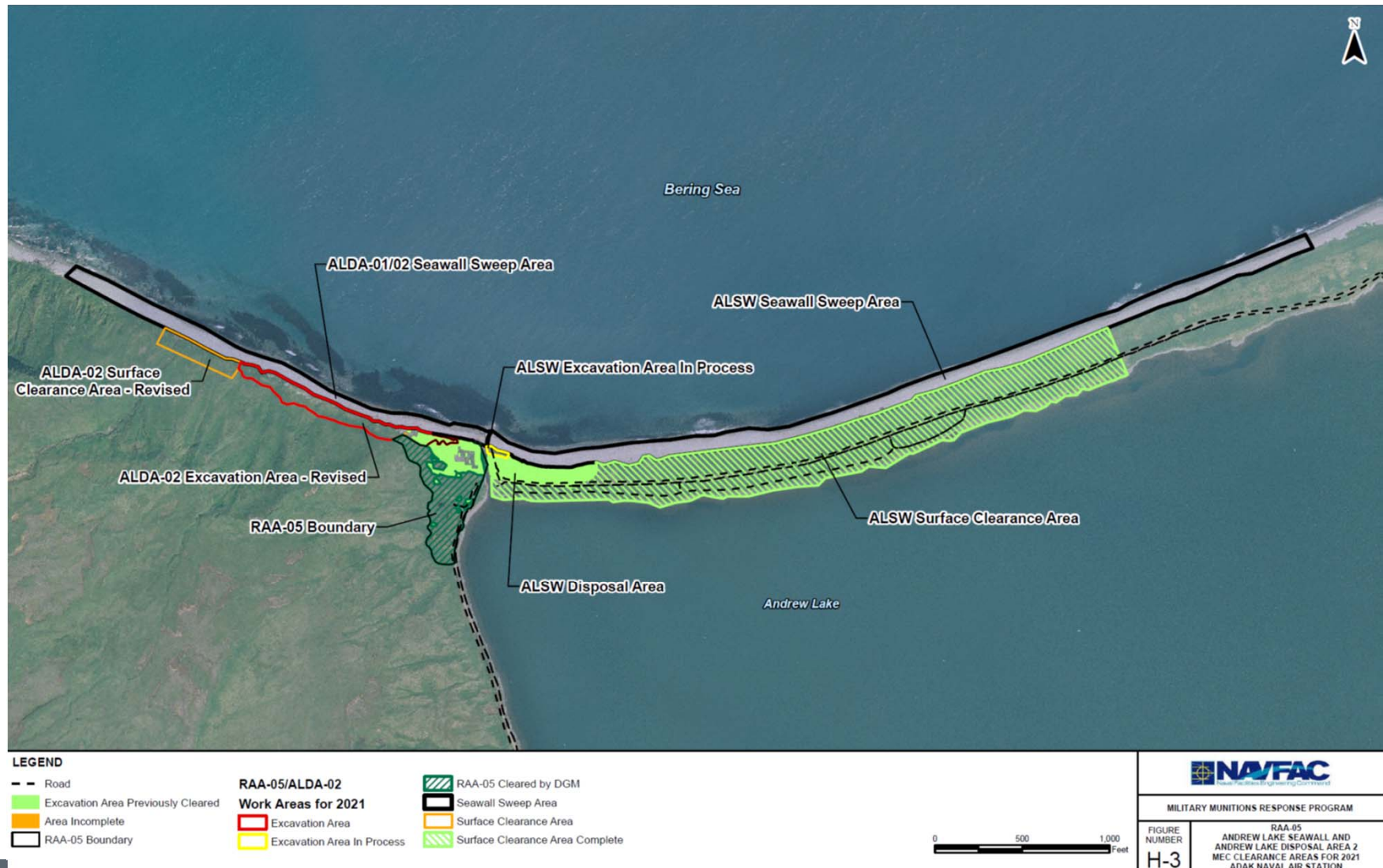


# CTO-4977 PROJECT SCOPE (2019-2022)

- ▶ Planning document revisions
  - > Munitions and Explosives of Concern (MEC) Quality Assurance Project Plan (QAPP) submitted and approved prior to 2019 field season
  - > MEC QAPP changes required in 2020 due to discovery of 500 lb. bomb
  - > MEC QAPP changes required in 2021 for schedule and personnel changes
- ▶ Scope of Field Work
  - > Excavation and clearance of disposal areas to depth of detection on both sides of Andrew Lake Spillway (ALDA-02 and ALSW)
  - > Surface clearances beyond the excavation areas on ALDA-02 and ALSW
  - > Monthly seawall sweeps
  - > Metals Landfill Repair (2021)
  - > Barbed Wire Fence removal where fencing is no longer needed (2021)
  - > Culvert and road removal to reduce access to RAAs after completion of NTCRA (2022)
  - > Routine repairs to landfill drainage features and signage
- ▶ Reporting



# CTO-4977 NTCRA



## CTO-4977 SCOPE OF WORK AND 2019 WORK COMPLETED

### Acreage Completed

Site	Excavation Area Total (acres)	Excavation Area Completed 2019 (acres_%)	Surface Clearance Area Total (acres)	Surface Clearance Area Completed 2019 (acres_%)	Seawall Sweep Area Swept Monthly (acres)
RAA-05 ALDA-02	2.38	0.27 11%	2.32	1.26 54%	4.73
RAA-05 ALSW	1.00	0.9 90%	20.94	20.94 100%	10.07
Totals	3.38	1.17 35%	23.26	22.20 95%	14.80

### Munitions and Metallic Scrap Removed

	Total Completed	MPPEH (each)	MEC (each)	MDAS (lbs.)	Other Debris (lbs.)
2019 Totals		459	1,367	30,422	59,765





## CTO-4977 2019 ALDA-02 FINDINGS

- ▶ Deep burial trenches with a significant number of MEC items
- ▶ 500 lb., general purpose bomb, AN-M64
  - > Largest live munition encountered on Adak to date



# ENCOUNTER OF 500 POUND BOMB – PROJECT IMPACT

- ▶ This item is larger than any MEC item previously found or anticipated in our explosive safety submission.
  - > The explosive safety submission was amended and approved in 2020
- ▶ This item is larger than can be safely mechanically excavated with an armored excavator in the manner APTIM has been excavating since 2016
- ▶ APTIM will use robotic excavators so the excavations in ALDA-02 can be safely completed in 2021 and 2022





# ALSW APPROACH

- ▶ Armored Long-Reach Excavator with Screening/Sorting Tables
- ▶ One crew in this area



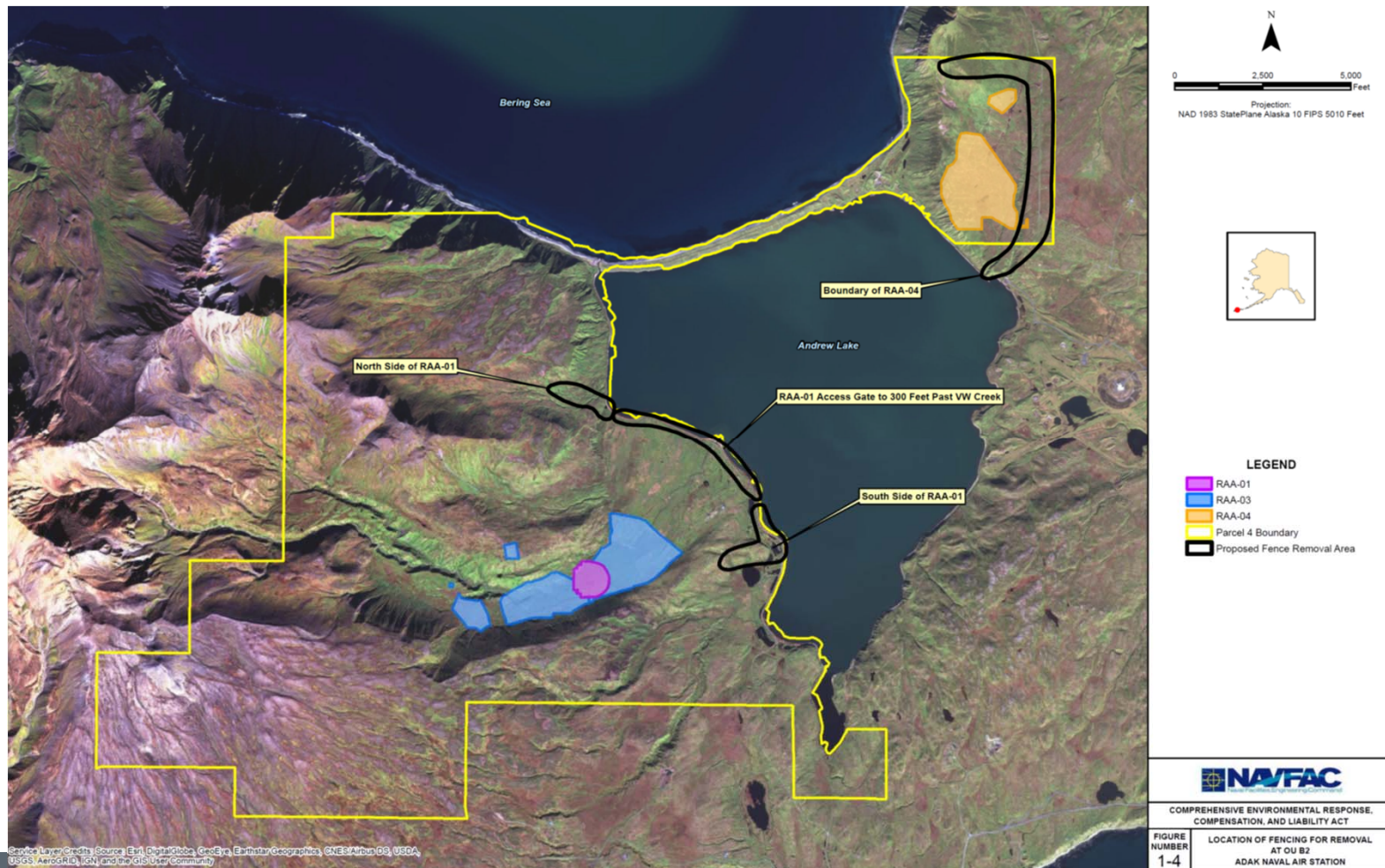
# ALDA-02 APPROACH

- ▶ Excavation and clearance of remaining square footage in ALDA-02 Excavation Area
  - > Two robotic excavators each supported by two teams of UXO techs
  - > Excavator operators must work within blast shelters
  - > Teams will start at opposite sides and work toward one another





# BARBED WIRE FENCE REMOVAL



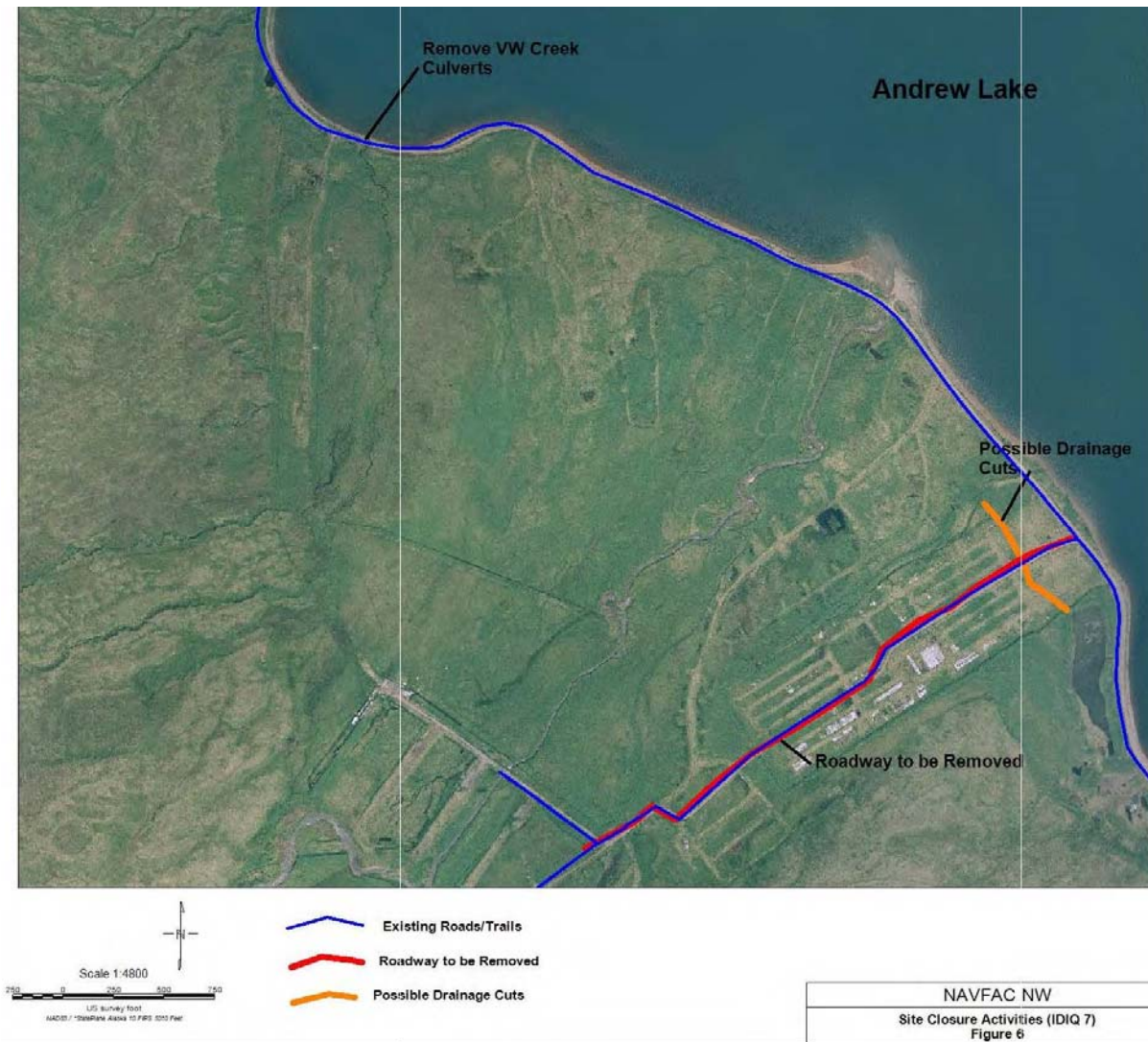


# FENCE REMOVAL APPROACH

- ▶ Removal of over 17,000 linear feet of barbed wire fencing
- ▶ Dakota Wire Winder to facilitate pulling of barbed wire and fence posts



# 2022 SITE CLOSURE ACTIVITIES



## IN SUMMARY

- ▶ Remobilize in April 2021
- ▶ Robotic Excavation in ALDA-02
  - > Two Robotic Excavators each staffed with two 7-person UXO teams
  - > 2021 and 2022
- ▶ Armored Long-Reach Excavator in ALSW
  - > One Long-Reach Excavator staffed with a 7-person UXO team
  - > 2021
- ▶ Separate construction team for fence removal and Metals Landfill
  - > 2021
- ▶ Roadway and culvert removal
  - > 2022
- ▶ Total 2021 staffing: Approximately 60 personnel including field management and medic



# QUESTIONS

**Justin Peach**  
**Senior Project Manager - Adak**  
**NAVFAC NW**  
[justin.e.peach@navy.mil](mailto:justin.e.peach@navy.mil)  
360-535-4594

**Douglas Schicho**  
**Project Manager**  
**Aptim**  
[douglas.schicho@aptim.com](mailto:douglas.schicho@aptim.com)  
908-854-5235



**Attachment D**  
**Marine Monitoring Presentation**





2020 Adak Marine Monitoring Review  
RAB Meeting - April 8, 2021

# 2020 Marine Monitoring

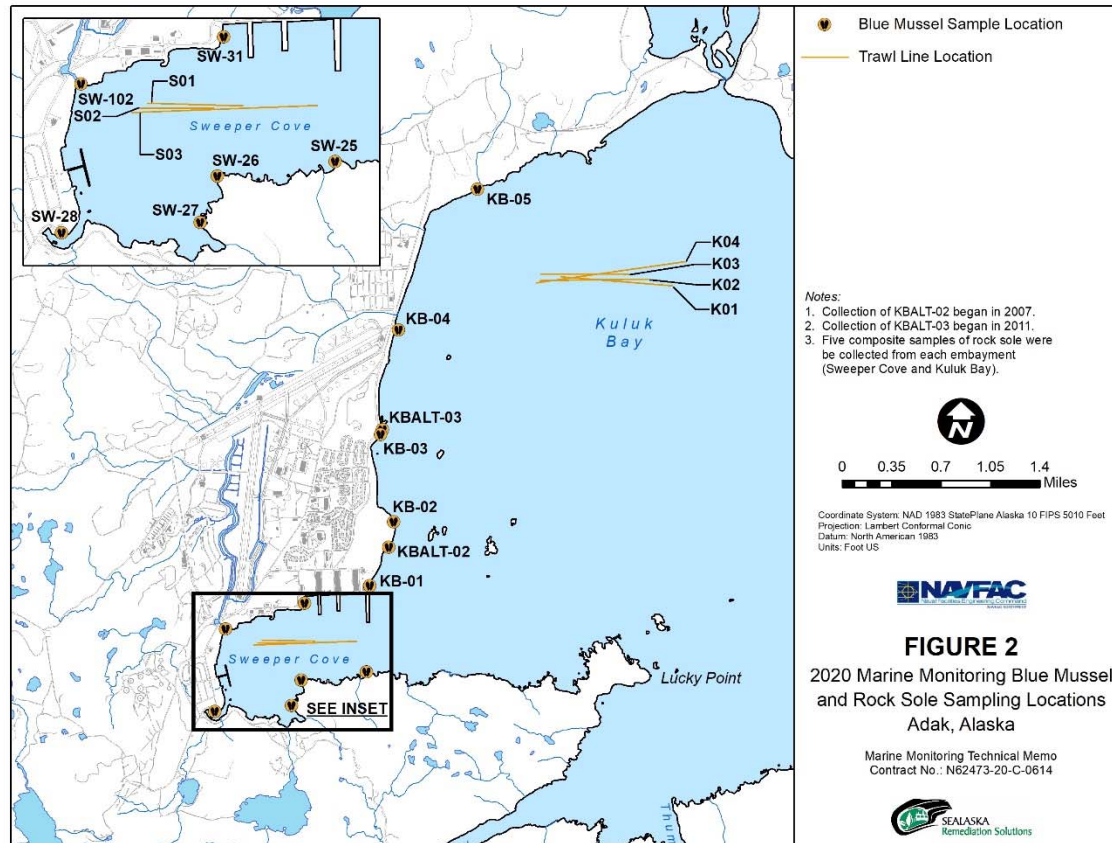
- Objective: Determine temporal trends in PCB concentrations in fish and shellfish that may be consumed by humans
- Frequency: Monitoring first conducted in 1996 then annually from 1999 – 2003 and every 2 years from 2003 – 2017.
- Sampling was conducted in 2020 to align with the FYR and now is planned every 5 years to coincide with future FYRs.
- Species: Rock Sole and Blue Mussels
- Locations: Sweeper Cove and Kuluk Bay



# Risk Based Action Levels (RBALs)

- The OU A ROD established the Risk Based Action Levels (RBALs) as 6.5 µg/kg PCB for fish and 31 µg/kg PCB for blue mussels.
- The RBALs were updated since the OU A ROD was signed because the EPA revised exposure parameters in 2014. These changes were memorialized in an Explanation of Significant Differences signed in 2018.
- The updated RBALs of 11.1 µg/kg PCB for fish and 53.8 µg/kg for blue mussels were first used in 2020.

# Rock Sole and Blue Mussel Sampling Locations

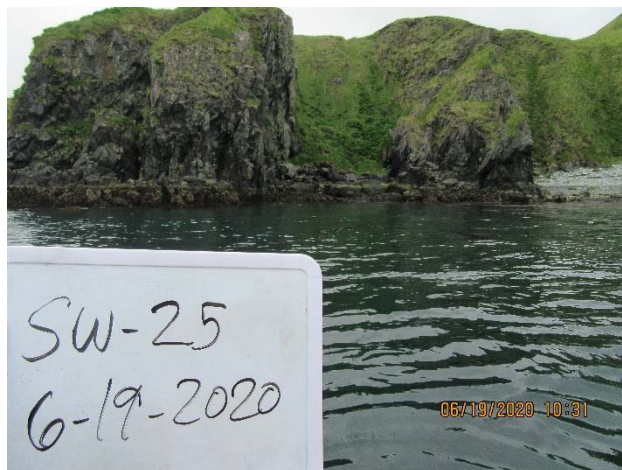


Document Path: E:\Adak\20C0614\MM Tech Memo\XDs\Adak\_MMTM\_Fig\_2\_Mussel\_Sole\_smp\_loc.mxd  
Date: 8/31/2020 Author: W. Kaage



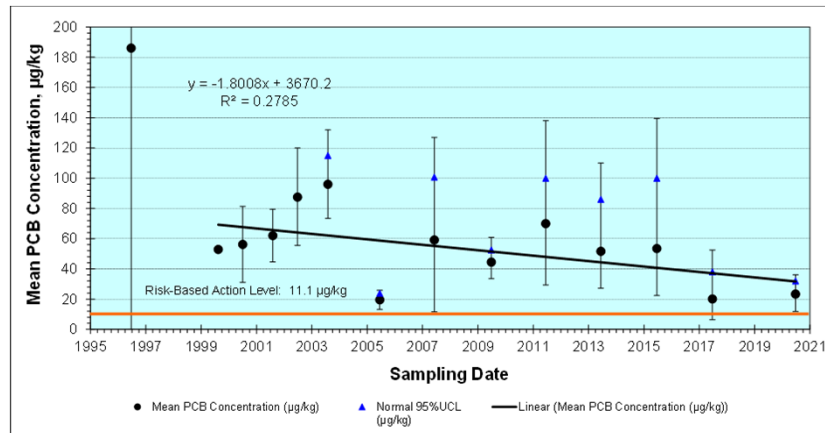
# 2020 Sweeper Cove Marine Monitoring Results

- Rock Sole (consumption advisory maintained): Highest PCB concentrations in rock sole were found in Sweeper Cove. The PCB concentrations have remained above the mean total RBAL since monitoring began in 1999.
- Blue Mussels (consumption advisory maintained): Highest PCB concentrations in blue mussels were found in Sweeper Cove. The PCB concentrations were below the mean total RBAL, except for one location (SW-28) in 2020. PCB concentrations were above the initial mean total RBAL from 2003 through 2013 but below the mean total RBAL since 2013.

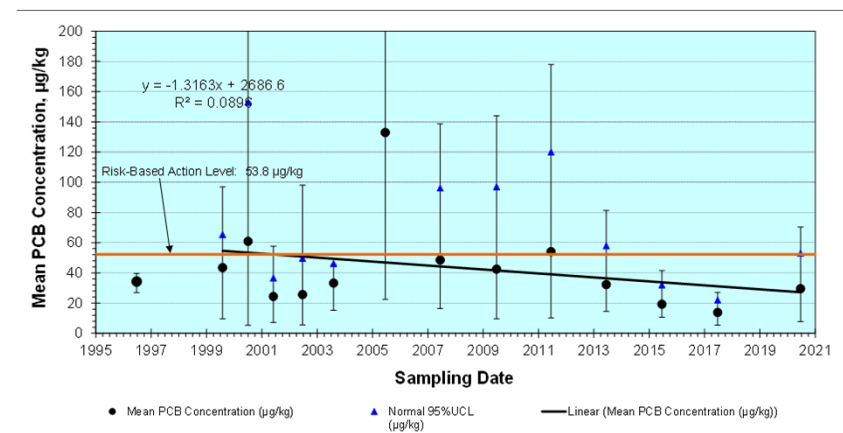


# Sweeper Cove Mean PCB Concentrations

## Rock Sole



## Blue Mussel



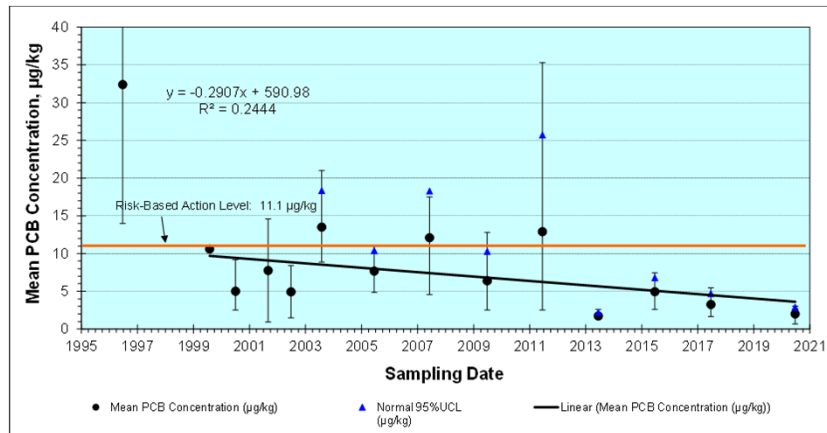
# 2020 Kuluk Bay Marine Monitoring Results

- Rock Sole (consumption advisory removed): The PCB concentrations were below the mean total RBAL and have been since 2013. Monitoring has been discontinued following recommendations in the 2020 Marine Monitoring Tech Memo.
- Blue Mussels (consumption advisory previously removed): The PCB concentrations have been below the mean total RBAL since sampling began. Monitoring has been discontinued following recommendations in the 2020 Marine Monitoring Tech Memo.

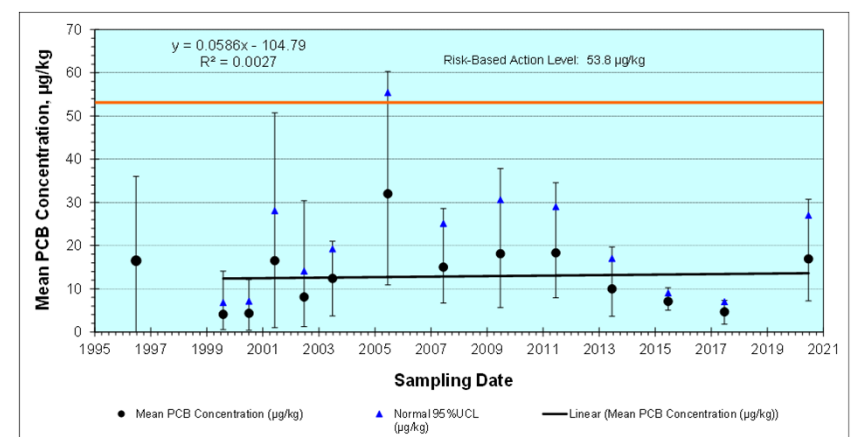


# Kuluk Bay Mean PCB Concentrations

## Rock Sole



## Blue Mussel





# Marine Monitoring Fact Sheet


- The Fact Sheet will be presented to the Restoration Advisory Board during the April 8, 2021 meeting.
- The Marine Monitoring Technical Memorandum will be made public in May 2021 following the finalization of the Groundwater and Landfill Monitoring Report.
- The document repository will be updated with these new documents when they are final.

### Health Advisory

#### PCB Levels in Rock Sole and Blue Mussels

March 2021

- The health advisory for Adak fish consumption includes rock sole caught in and blue mussels gathered in Sweeper Cove.
- Suggested limits for the amount of rock sole and blue mussels are shown below.
- Women of childbearing age and children through six years of age should carefully follow the meal limits.
- The advisory does not apply to other species of fish, such as salmon or halibut caught in these or other waters around Adak.
- For more information, please visit the Adak Information Repository by navigating the City of Adak website: <https://adak-ak.us/#>
- The Adak Information Repository can be accessed by scanning the QR code with your phone's camera.





Sweeper Cove

Krib Bay


Shoreline Area Under Shellfish Advisory

#### Recommended Meal Limits for Rock Sole and Blue Mussels Gathered in Sweeper Cove\*

	
<b>Rock Sole</b>	<b>Blue Mussels</b>
About 1 Meal Every 2 Weeks	About 1 Meal Every 2 Weeks

\* One meal equals 8 ounces of fish or shellfish for the average adult.

For more information: Justin Peach  
(360) 396-0082 | [justin.e.peach@navy.mil](mailto:justin.e.peach@navy.mil)



# Questions and Points of Contact

## Questions?

### Points of Contact

- NAVFAC NW RPM  
Judo Garcia-Lata  
(360) 396 – 0597  
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- SRS PM  
Robert Boyd  
(360) 298 – 4872  
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- SRS Senior Technical Lead  
Aaron Vernik  
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