Final Meeting Minutes
Restoration Advisory Board (RAB) Meeting
Former Galena Forward Operating Location (FOL), Alaska
Galena, Alaska
23 October 2024

Time/Place: Larsen Charlie Community Hall, Galena, Alaska at 7:00 pm

Attendees: Twenty (20) people attended the RAB meeting including representatives from the Air Force Civil Engineer Center (AFCEC), the Galena RAB, the US Fish and Wildlife Service (USFWS), Alaska Department of Environmental Conservation (ADEC), Tanana Chiefs Conference, Louden Tribal Council, the City of Galena, community members, and Air Force remediation contractors. A copy of the sign in sheet is included as **Attachment 1**. The following is a partial list of those attending the meeting.

Christiana Hewitt, AFCEC
Connie Crossley, Booz Allen Hamilton
Brian Blicker, Parsons
Jennifer Benning, Parsons
John Jones, EA Engineering
Win Westervelt, CH2M/Jacobs
Tim Bodony, Community Member, RAB Co-chair
Jamie McKellar, ADEC
Shannon McClenahan, Tanana Chiefs Conference
Greg Gangnuss, AFCEC
Joe Reyna, AFCEC
Tim Sharp, ADEC
Larry Hausmann, Community Member
Jenny Bryant, Louden Tribal Council Secretary/Treasurer
Shirley Cleaver, Community Member
Carolyn Sam, City of Galena
Susie Sam, Community Member
Erica Frankson, Community Member
Doug Calvin, USFWS
Ranch Burgett, Louden Tribal Council, Second Chief

Introduction:

Tim Bodony opened the RAB meeting by thanking everyone for attending. Introductions were made by all attendees.

Christiana Hewitt presented an overview of the BRAC Environmental Construction and Optimization Services (BECOS) Contract and activities completed during the 2024 field season.

Presentation

Administrative Record for the Former Galena Forward Operating Location (FOL), Alaska

Christiana Hewitt gave a presentation (**Attachment 2**) summarizing how to access the Air Force Administrative Record and where to find documents for the Galena sites.

The link to the Air Force Administrative Record was given and it was noted that there are currently 1,710 documents available. Screenshots of the record with notations on how to use it were shared.

Presentation

Remedial Process Optimization (RPO) Evaluation Contracts

Brian Blicker gave a presentation (**Attachment 3**) with an update on the RPO contracts. Thirteen (13) of 32 sites are closed and 19 sites remain open. RPO evaluations are being conducted at 18 sites with a remedy in place. The objective of the RPO effort is to evaluate remediation systems regularly, monitor progress, and optimize systems to accelerate cleanup.

Sites with small sources and/or small plumes were closed in the early years, while remaining sites are more challenging to remediate but are progressing towards closure.

The locations of the RPO sites (closed and open) are shown on Slide 4 in **Attachment 3**.

Brian presented the progression of remedial activities (Slide 5). The activities timeline involved investigations to identify areas needing cleanup pre-2015, remedy implementation and construction from 2015 to 2019, and operation of remediation systems from 2020 and beyond.

RPO activities were summarized (Slide 6). These include supplemental evaluation of background levels of arsenic and manganese in groundwater, evaluation of groundwater sampling methods, supplemental soil sampling to evaluate progress of remediation, optimization of the remediation systems, supplemental soil and grab groundwater sampling to identify areas that may need additional treatment, and annual groundwater monitoring to evaluate if remedies are working as designed. Slide 7 summarizes the on-going remedies on a map.

Slides 8 through 12 highlights some results of on-going remedies. Brian presented a figure showing the annual removal of volatile organics by soil vapor extraction systems. A total of 56.8 tons have been removed through 2023. As source areas are cleaned up the amount of volatile organics removed each year decreases. Win Westervelt presented a summary of remedial results at Site CST014, Building 1859 Dining Hall (Slide 9), which was a former underground storage tank for diesel fuel. Vertical well air sparging and SVE systems were operated for 6 years, from November 2016 to May 2022, and currently only one groundwater monitoring well exceeds the ADEC cleanup levels (CULs). Win explained that since 2015 the petroleum compounds have all decreased to below CULs, but evaluating diesel-range organics is difficult because it transforms into soluble compounds as it ages and weathers (Slide 10). Brian showed the reduction of the SS015 TCE groundwater plume (Slide 11), which has decreased from 750 ft in length to less than 100 feet in length since 2018. Brian also showed the SS006 TCE groundwater plume reduction (Slide 12), which has decreased from 5 acres to less than 1 acre since 2018.

Brian presented a summary of the Five-Year Review (Slide 13). The purpose of the Five-Year Review is to evaluate whether the remedies selected to clean up contaminated sites at the former FOL are operating as designed and continue to remain protective of human health and the environment. The draft report has been prepared and is currently being evaluated by the AF. The report will be available in the spring of 2025.

ADEC also participates in the Five-Year Review. Public participation is welcomed throughout the Five-Year Review process. Points of contact were provided (Slide 14).

Questions and Answers:

A question was asked about how sites are closed. Jamie McKellar explained if contamination has been identified at a site, then an investigation determines the extent of contamination. Measured concentrations are compared against ADEC's cleanup levels for migration to groundwater, which are the most stringent, as well as human health cleanup levels. DEC reviews the data and information. If the data and information presented meets regulatory requirements for site closure ADEC will approve the closure request. Jamie said that her supervisor reviews all closure requests across the state. Christiana Hewitt explained that the Air Force legal teams also perform internal review for all documents requesting site closure.

A question was asked by Larry Hausmann about the groundwater plume at SS015. He remembered from prior presentations that the earlier data has shown that the SS015 TCE plume may have dove deeper. He asked about the injections and the depths. Brian said that the plume does dive near the river. Clusters of multiple monitoring wells screened across different vertical intervals have been installed at many locations to track the vertical extent limits of the plumes. Data from these well clusters were used to select the vertical intervals for the injections. At Site SS015 the vertical intervals were about 25 to 30 feet in total thickness and were deeper at locations closer to the river.

Jamie McKellar asked about presenting the community with the opportunity to be interviewed and to have their concerns voiced and in the record as part of the Five-Year Review. She encouraged all community members to participate in the process.

Tim Bodony said that he appreciated the slides with the time lapse of plumes. They are a good message that the cleanup is working and very clear.

Presentation

Remedial Investigation (RI) for Per- and Poly-Fluoroalkyl Substance (PFAS) Compounds at the Former Galena Forward Operating Location, Alaska

Brian Blicker of Parsons presented an Air Force project for a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) RI for two Air Force sites at the Former Galena FOL (**Attachment 4**). Brian provided some background information on PFAS, including what PFAS are, why they are of interest now, the human health and ecological risks, and how PFAS were used at the former Galena FOL (Slides 3 and 4).

The two PFAS sites at Galena are Site FT001 (former Fire Protection Training Area) at the east end of the airfield (shown on Slide 4) and Site CG109 (Aqueous Film Forming Foam [AFFF] Release Areas) in the “Triangle” area. The source areas for Site CG109 include the former Fire Station, the Building 1556 Fire Station, and the Vehicle Maintenance Facility (now the Alaska Department of Transportation & Public Facilities [ADOT & PF] building). The sanitary sewer system outfall to the west is also being evaluated as part of Site CG109.

Brian explained the CERCLA process that PFAS investigations at Galena follow (Slide 5) and highlighted that they are currently in the RI phase. The objective of the RI is to determine the nature and extent of PFAS contamination in the environment by comparing concentrations to screening levels (SLs) and to conduct baseline ecological and human health risk assessments

(Slide 6). The results of the RI will be used to determine if and where cleanup is needed. If cleanup is needed, a Feasibility Study (FS) will be conducted.

Brian discussed PFAS screening levels (Slide 7) and that they are based on regulatory guidance and limits that are rapidly changing. DoD evaluates regulatory guidance and limits and sets policy. The current screening levels for the RI are based on the November 2023 EPA Regional Screening Levels (RSLs), but as science and understanding of PFAS evolves, the screening levels may change in the future. A list of the PFAS analytes and the November 2023 RSLs for residential soil and tap/groundwater that are currently applied in the RI were presented (Slide 8).

Slides 9 to 14 are figures that show extent of PFOS results compared to extent SLs in groundwater and soil for human health. PFOS is a single, specific PFAS compound that is detected at high frequency and at high concentrations relative to its SL at the Galena sites. Therefore, it is a good indicator for defining the PFAS extent. A summary of the PFOS delineation slides is presented below:

- Surface soil at Site FT001 (Slide 9) – PFOS is delineated to the extent SL of 13 parts per billion (ppb) for residential soil to the north, south, and east (towards the ball field and the community garden).
- Shallow groundwater (less than 45 feet below ground surface [bgs]) at Site FT001 (Slide 10) – PFOS is delineated in groundwater to the east and west of FT001. Permafrost is present in the undeveloped land to the north. There are some exceedances to the west near Site ST010 that may be associated with the FT001 or another source such as a historical civilian airplane crash that occurred near the west end of the runway.
- Surface soil at Site CG109 (Slide 11) – PFOS is delineated at the small northern area where an aqueous film forming foam (AFFF) tank from the ADOT shop was stored. At the other release areas, PFOS is not fully delineated. There is evidence of transport along drainages, but it is delineated to the west (general direction of surface water flow). PFOS was discovered in the RAPCON yard in 2024.
- Shallow groundwater (less than 45 feet bgs) at Site CG109 (Slide 12) – PFOS is widespread in groundwater near and downgradient of the release areas. There was a slight exceedance of the PFOS SL in the northern part of the “Triangle”. PFOS is not delineated to the west. To the east, there are some data gaps for delineating the PFOS extent in the mid-airfield location.
- Deep groundwater (greater than 70 feet bgs) at Site CG109 (Slide 13) – PFOS concentrations are at lower concentrations in deeper groundwater than shallow groundwater and PFOS is delineated to its extent SL in the northern “Triangle”. PFOS is not delineated to west.
- Surface soil and sediment at Site CG109 Area 9 (sewer outfall, Slide 14) – PFOS is delineated along the length of the wetland to the soil extent SL. The 2024 samples improved the delineation.

The PFAS RI evaluation is documented in the RI Reports for Site FT001 and Site CG109. The FT001 RI Report is final and has been accepted by ADEC, while the CG109 RI Report is in the draft stage and under Air Force review. Supplemental RI field work performed in 2023 and 2024 will be reported in an RI report addenda that will be completed in the spring of 2025. Baseline human health and screening level ecological risk assessments are planned for completion in the spring of 2025 (Slide 15).

Communications on the PFAS RI include semi-annual RAB meetings (April/October). Anyone interested in becoming a member of the RAB should contact Christiana Hewitt. Additional information on Air Force remediation at Galena can be obtained from the Galena Administrative Record (https://ar.afcec-cloud.af.mil/, Slide 16).

Questions and Answers:

Tim Bodony asked if AFFF was preemptively sprayed on the runway for an aircraft in distress (e.g., landing gear will not deploy) landing. There is a rumor that this happened. Brian commented that he had heard of foams (not necessarily AFFF) being used at other airports for approaching aircraft in distress, but no one was aware of this happening at Galena.

Tim Bodony asked if screening levels could be explained. Brian explained screening levels are used in the RIs to delineate the extent of contamination because it is not feasible to delineate PFAS to zero concentrations. Tim Sharp explained the challenges of measuring to new, very low screening levels, as they keep decreasing. A community member asked who sets the RSLs. Connie explained that the EPA develops and sets the MCLs and RSLs, not the DoD. Greg Gangnuss talked about the history of the sites and the evolution of RSLs.

A community member asked if the PFAS concentrations of compounds other than the ones listed with RSLs were being measured and if sources other than AFFF would be considered. Brian responded that the EPA Method 1633 that is used for PFAS analyses by laboratories measures 40 PFAS compounds and that reports will contain the results for all of these. It was also explained that the laboratories are increasing the number of PFAS compounds that can be measured.

A community member was asked if the public drinking water is tested before and after municipal treatment. Brian responded that it is tested before treatment. Christiana explained that the City of Galena is responsible for testing the treated water.

Ranch Burgett asked about what methods are available to treat PFAS at the sites. Brian explained that treatment methods are being developed, but for groundwater used as drinking water, the current treatment methods include granular activated carbon and ion exchange. Greg Gangnuss referred back to the chart with CERCLA stages and explained that the next phase, a Feasibility Study, would be used to evaluate potential treatment methods.

A community member expressed that the community is concerned about the PFAS data and especially about whether or not their drinking water is safe to drink. Tim Sharp reiterated that PFAS has not been detected in any of the public supply wells, but only in a couple of private wells. There was discussion about the public health meeting focused on PFAS that was planned for 6 November 2024 in Galena.

There was a question about the potential for PFAS moving via soil vapor as well as potential issues with dust and inhalation. Brian explained that most PFAS are not volatile but inhalation of dust is a potential pathway. Surface soil data from the fire training area show that concentrations outside the dike are very low indicating transport of PFAS through dust is minimal.

A question was asked about the depth of the private drinking water wells relative to the depths of what is measured in monitoring wells. Brian Blicker said he did not know the depths of the private drinking water wells and discussed that at many of the monitoring wells, there are a

network of clustered wells that allow measurements at different depths. The deepest are down to 120 feet below ground surface.

A question was asked about the plans to hire local labor. Greg Gangnuss explained that the Air Force contractors are responsible for hiring labor but that the Air Force encourages hiring local labor when possible. He explained that much of the work requires specialized skills.

A community member asked if this site qualifies as a Superfund site. Christiana Hewitt explained that it had not qualified as a National Priority List (NPL) site under CERCLA.

A community member voiced a concern about outside contractors that rarely give back to the community. She discussed the importance of this as the site is on tribal lands. There was a discussion of giving to the community through scholarships. Greg Gangnuss said he would discuss this with Air Force contracting.

Jamie McKellar talked about the history of the RPO and PFAS projects and the benefits of continuity with contractors and strong internal reviews from the Air Force. Christiana Hewitt also mentioned the internal review process within the Air Force, including legal teams, prior to documents being submitted to ADEC.

Tim Bodony discussed his concerns about the purpose and effectiveness of the RAB. He feels that the RAB does not really have the power to influence the work, and he feels that the Tribe or the City of Galena should be more involved, as they have the power to request Agency for Toxic Substances and Disease Registry (ATSDR) involvement, as has been done at Moose Creek in response to the Eielson AFB PFAS plume. He indicated that they were going to evaluate whether the RAB would continue, and also whether RAB meetings should be held at a different time of year.

Tim Bodony reminded the group about the upcoming meeting for the community with representatives of the Alaska Department of Health.

Closing Remarks

Christiana Hewitt gave an update on new contracts, which include Site CS001/Remedial Process Optimization and Remedial Action-Operation contracts. The Remedial Action-Operation contract includes Landfarm Operations.

Christiana thanked the Galena community for attending and contributing to the meeting, and to contact her or the Air Force Public Affairs if they have any questions. Christiana asked if there were any additional questions (there were none) and closed the RAB meeting.

Attachments:

1. Sign In Sheet
2. Presentation: Administrative Record for the Former Galena Forward Operating Location (FOL), Alaska
3. Presentation: Remedial Process Optimization (RPO) at the Former Galena Forward Operating Location (FOL), Alaska
4. Presentation: Remedial Investigation (RI) for PFAS Compounds at the Former Galena Forward Operating Location, Alaska

Attachment 1

Sign In Sheet

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Date: October 23, 2024

Please sign in:

	NAME/ORGANIZATION	ADDRESS	PHONE	E-MAIL
1.	John Jones/EA			JJONES@EAEST.com
2.	Jamie McKellar/ADEC	Fairbanks	(907) 451-5175	jamie.mckellar@alaska.gov
3.	Jennifer Benning/Parsons			jennifer.benning@parsons.us
4.	Tim Boddy RAB co-chair	POBox 84 Galena	907 656 7264	tim@thecutbank.net
5.	Brian Blicker Parsons		406 224.2163	brian.blicker@parsons.us
6.	Connie Crossley		919-280 9424	Crossley-Crush@Bah.com
7.	Shannon McClenahan	Fairbanks (TCC)	907-371-0720	shannon.mcclenahan@tananachiefs.org
8.	GREG GANGNESS	AFCEC San Antonio TX	2103820611	gregory.gangness@us.af.mil
9.	Joe Reyna	AFCEC San Antonio TX	210-383-9825	jose.reyna.4@us.af.mil
10.	Tim Sharp	Fairbanks	(907) 451-2131	tim.sharp@alaska.gov
11.	Larry Hausman	Gal Bx 18	907-656 7095	larry_hausman@hotmail.com
12.	Jenny Bryant	Galena	656-7600	jenny_bryant@fws.gov
13.	Shirley Cleaver	Box 113		gal_999@yahoo.com

	NAME/ORGANIZATION	ADDRESS	PHONE	E-MAIL
14.	Carolyn Sam City of Galena	PO Box 154	907 656 7260	CSam@ci.galena.ak.us
15.	Susie Sam	" "	907 656 7215	
16.	ERICA L FRANKSON	Box 91	6567042	erica_c15@hotmail.com
17.	Doug Galvin	PO 262	656-7021	dgalvin wildgalena
18.	Rach Bryant			
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Attachment 2

Administrative Record for the Former Galena Forward Operating Location (FOL), Alaska

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Air Force Installation & Mission Support Center

Administrative Record for the Former Galena Forward Operating Location (FOL), Alaska

Restoration Advisory Board (RAB) Meeting
23 October 2024

1

Administrative Record

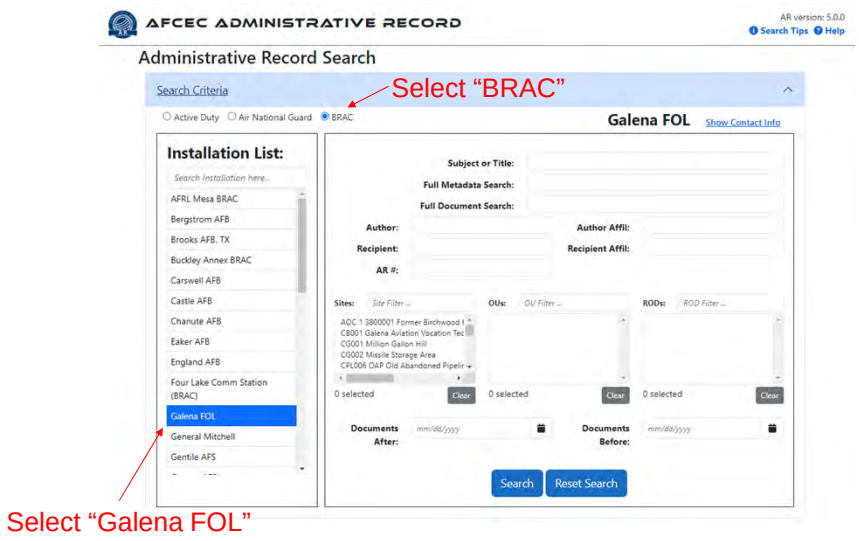
- **The Galena Administrative Record is an online resource for obtaining copies of all final work plans and reports for the Air Force investigation and remediation activities.**

  https://ar.afcec-cloud.af.mil/

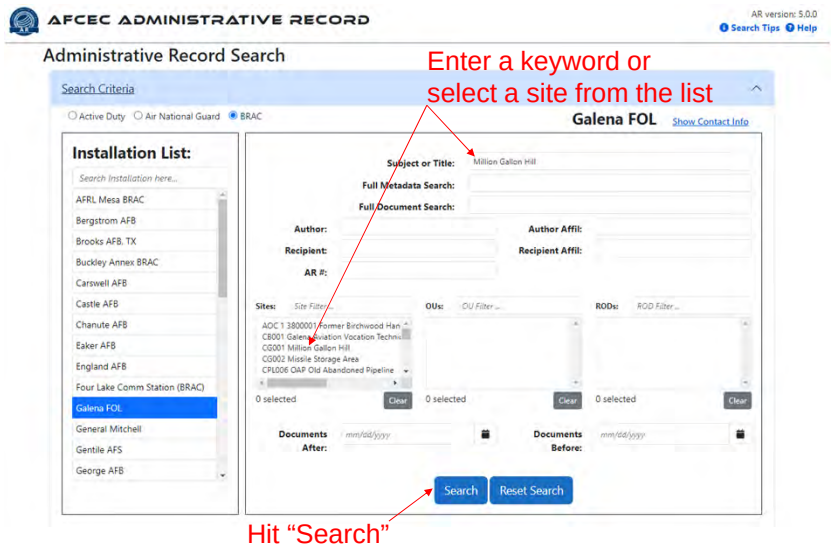
- **The are currently 1,710 documents available on the admin record.**

2

Administrative Record



Administrative Record



Administrative Record

Search Results — Scroll down and all the documents are listed

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10 per page — Filter...

Hit the "Eye" to view a document

View	AR #	Subject or Title	Author / Author Affiliation	Document Date	KBs
	459049	Final 2014 Remediation System Annual Report - Million Gallon Hill (CG001), Missile Storage Area (CG002), POL Tank Tank Farm (ST005), GAVTC (CB001)	John Doe / CH2M Hill	05/05/2015	9162
	459049.1	Final 2014 Remediation System Annual Report - Million Gallon Hill (CG001), Missile Storage Area (CG002), POL Tank Tank Farm (ST005), GAVTC (CB001) (Appendix F)	CH2M Hill	05/05/2015	11287
	451809	ADEC approval for the Screening Level Ecological Risk Assessment (SLERA) for Million Gallon Hill and Missile Storage Area (Sites CG001 and CG002)	Alaska Department of Environmental Conservation / Alaska Department of Environmental Conservation	11/28/2014	264
	451812	Final Screening Level Ecological Risk Assessment for Million Gallon Hill (Site CG001) and Missile Storage Area (Site CG002)	CH2M HILL / CH2M HILL	11/28/2014	2478
	451802	ADEC approval for the Final Addendum Site Characterization Results Report. Million Gallon Hill (Site CG001) and Missile Storage Area (Site CG002)	Alaska Department of Environmental Conservation / Alaska Department of Environmental Conservation	11/24/2014	303
	451763	Final Supplemental Site Characterization Investigation Results Report Million Gallon Hill (Site CG001) and Missile Storage Area (Site CG002)	CH2M HILL / CH2M HILL	10/06/2014	17499
	451763.2	Final Supplemental Site Characterization Investigation Results Report Million Gallon Hill (Site CG001) and Missile Storage Area (Site CG002) (Attachment 10a. Stats)	Ch2M Hill	10/06/2014	152
	451763.3	Final Supplemental Site Characterization Investigation Results Report Million Gallon Hill (Site CG001) and Missile Storage Area (Site CG002) (Attachment 10b. Stats)	Ch2M Hill	10/06/2014	158
	451763.4	Final Supplemental Site Characterization Investigation Results Report Million Gallon Hill (Site CG001) and Missile Storage Area (Site CG002) (Attachment 10c. Stats)	Ch2M Hill	10/06/2014	130
	451763.5	Final Supplemental Site Characterization Investigation Results Report Million Gallon Hill (Site CG001) and Missile Storage Area (Site CG002) (Attachment 10d. Stats)	Ch2M Hill	10/06/2014	708

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Administrative Record

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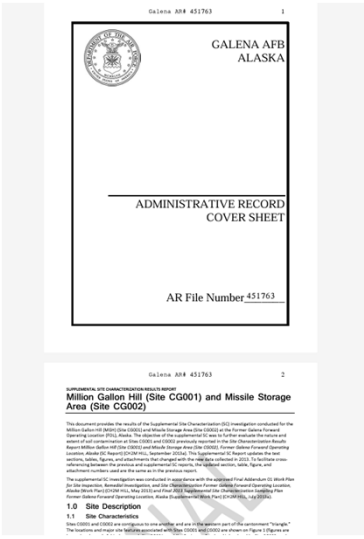
Galena AR# 451763 1

GALENA AFB
ALASKA

ADMINISTRATIVE RECORD
COVER SHEET

AR File Number 451763

Galena AR# 451763 2

Million Gallon Hill (Site CG001) and Missile Storage Area (Site CG002)

1.0 Site Description

1.1 Site Characteristics

6

Questions?

Air Force Installation and Mission Support Central (AFIMSC) Public Affairs

AFIMSC/Public Affairs
2261 Hughes Ave., Suite 155
JBSA Lackland, TX 78236-9853
Toll Free (866) 725-7617
afimsc.pa.workflow@us.af.mil

7

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8

Attachment 3

Remedial Process Optimization (RPO) at the Former Galena Forward Operating Location (FOL), Alaska

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Air Force Installation & Mission Support Center

Remedial Process Optimization (RPO) at the Former Galena Forward Operating Location (FOL), Alaska

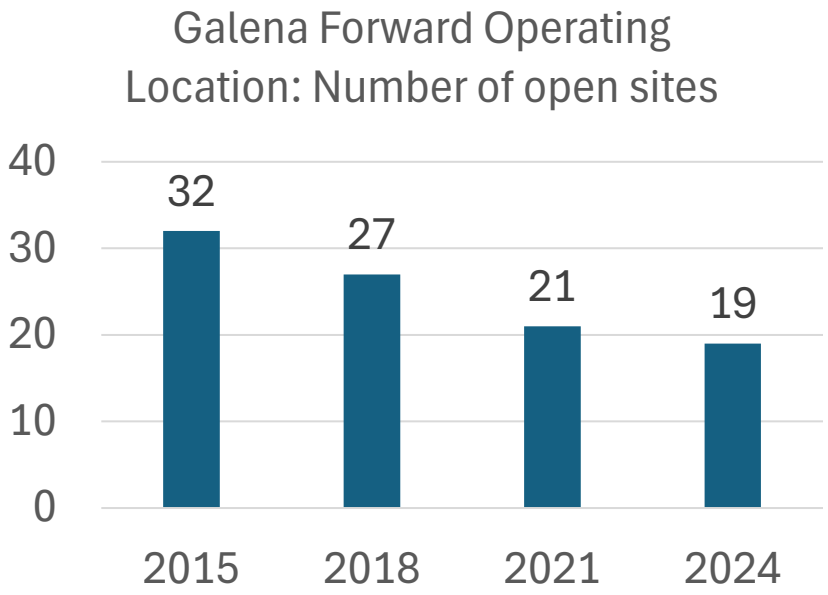
Restoration Advisory Board (RAB) Meeting
23 October 2024

Former Galena FOL
Remedial Process Optimization

- **13 of 32 environmental sites have been closed and 19 sites remain open**
- **Overall objectives of a Remedial Process Optimization are to:**
  - **Evaluate operating remedies regularly**
  - **Monitor progress**
  - **Optimize systems to accelerate cleanup**

Chronology of Open Sites

- **Sites with small sources and/or small plumes closed in early years**
- **Remaining open sites are more challenging to remediate but are progressing towards closure**



Site Closure Progress Since 2015

Progression of Remedial Actions

- **Pre-2015 – Investigations to identify areas needing cleanup**
- **2015 to 2019 – Remedy implementation/construction**
  - **Lots of site activities (soil excavation, system installation, groundwater injections)**
- **2020 and beyond – Operation of remediation systems**
  - **Regular monitoring and optimization**
  - **Less construction activity**

Remedial Process Optimization Activities Summary

- **Supplemental evaluation of:**
  - **Background arsenic and manganese levels in groundwater**
  - **Evaluation of groundwater sampling and analytical methods for diesel range organics**
- **Supplemental soil sampling to evaluate progress of remediation**
- **Supplemental soil and grab groundwater sampling to identify areas that may need additional treatment**
- **Annual groundwater monitoring will continue at all open sites until site closure requirements are met**
  - **Data evaluated to see if remedies are working as designed**

On-Going Remedies

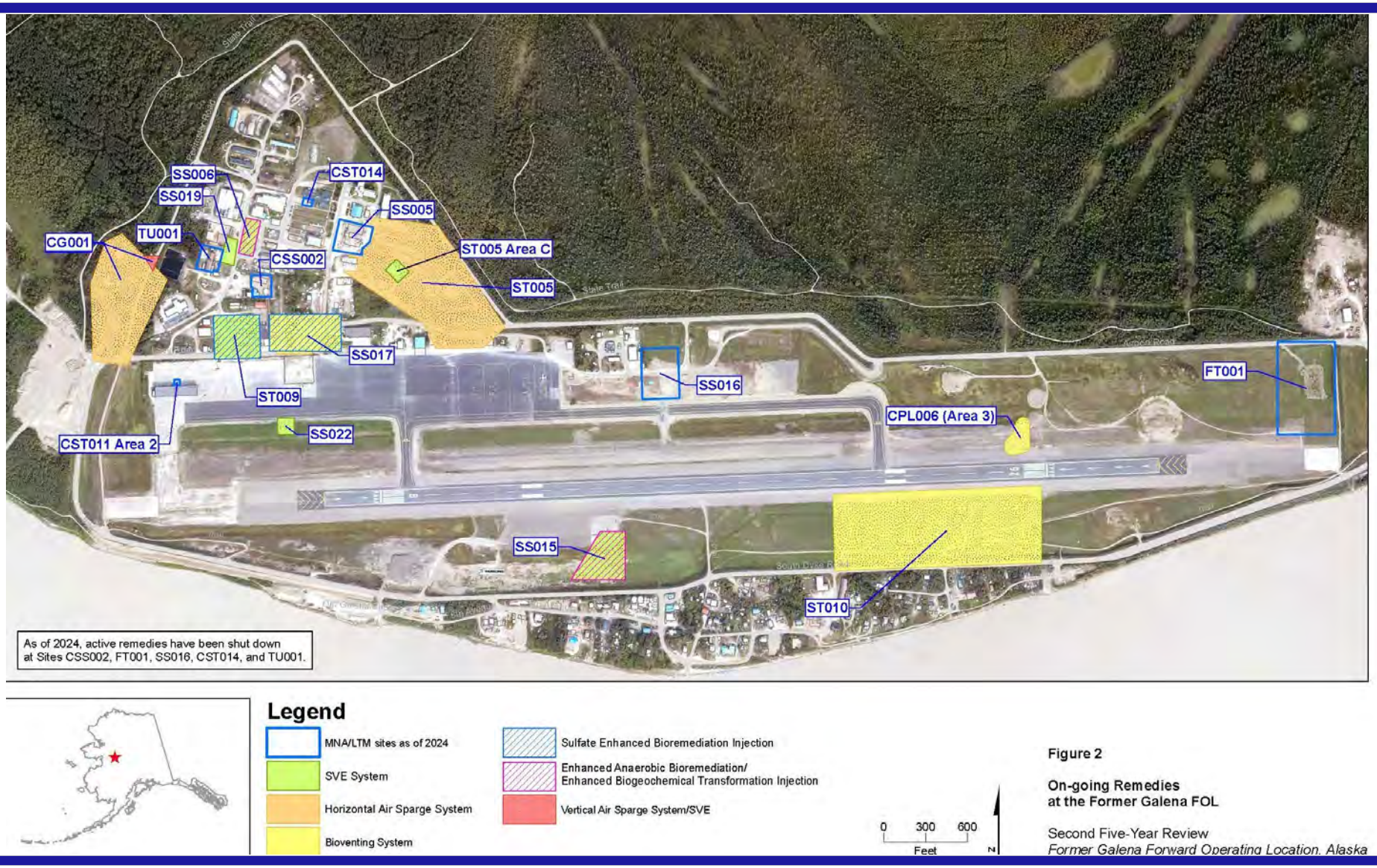


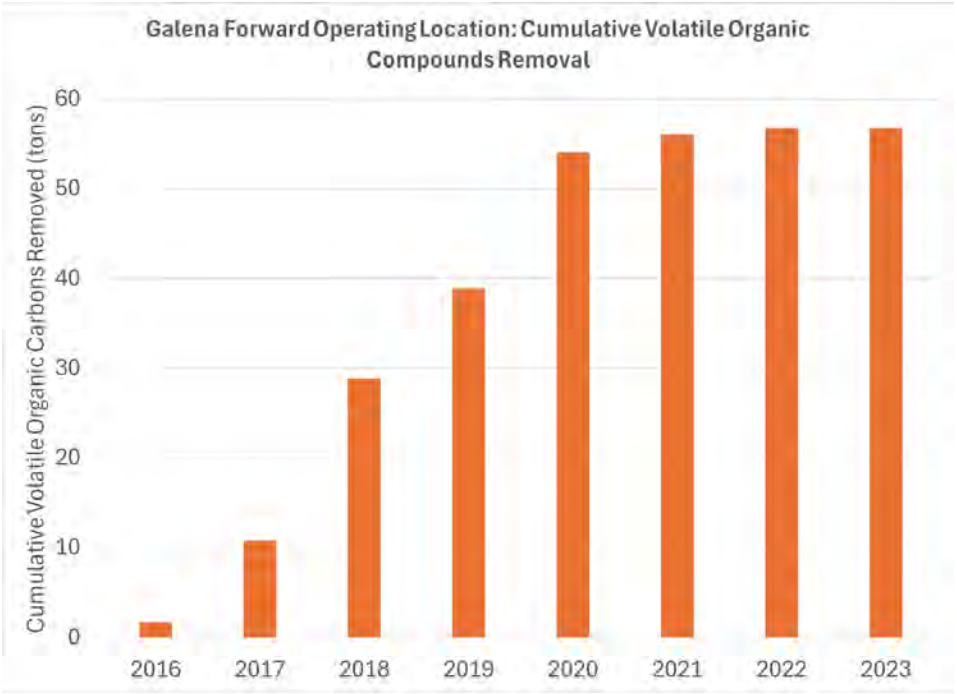
Figure 2

On-going Remedies at the Former Galena FOL

Second Five-Year Review
Former Galena Forward Operating Location, Alaska

Volatile Organics Removed by Soil Vapor Extraction Systems

- **Total of 56.8 tons removed through 2023**
- **As source areas are cleaned up the amount removed each year decreases**

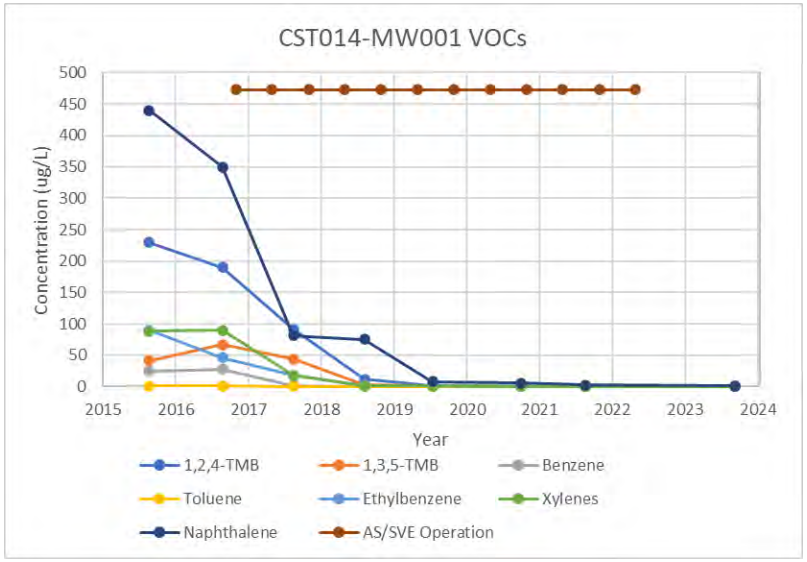


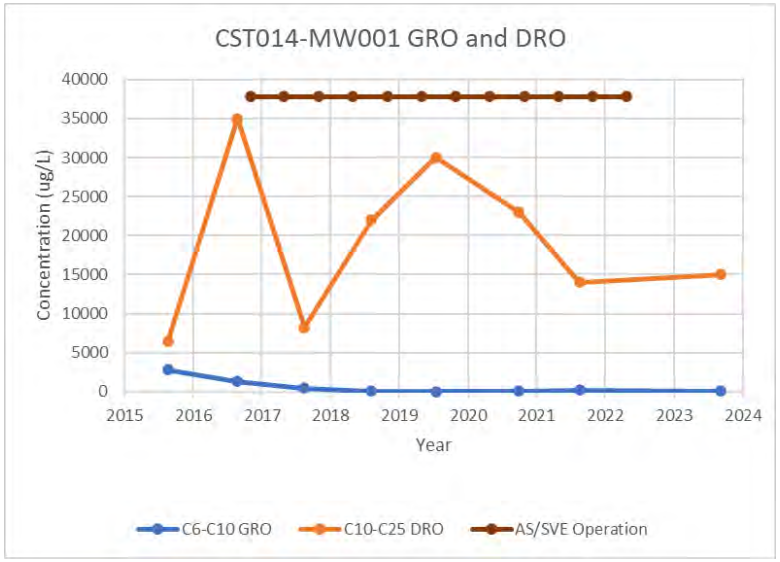
Site CST014 (Building 1859 Dining Hall)

- Diesel fuel release from a former underground storage tank.
- Vertical well air sparging and SVE system operated for 6 years (Nov 2016 to May 2022).
- Only one groundwater monitoring well currently exceeds the ADEC cleanup levels (CULs).

Site CST014 (Building 1859 Dining Hall)

- **Annual groundwater monitoring since 2015 shows that the petroleum compounds (e.g., benzene, toluene, xylenes, naphthalene) have all decreased to below CULs.**
- **Evaluating diesel-range organics (DRO) is difficult because as the fuel ages and weathers, it transforms into other compounds that are highly soluble. May require different sampling and analysis approaches to evaluate risk and achieve site cleanup.**



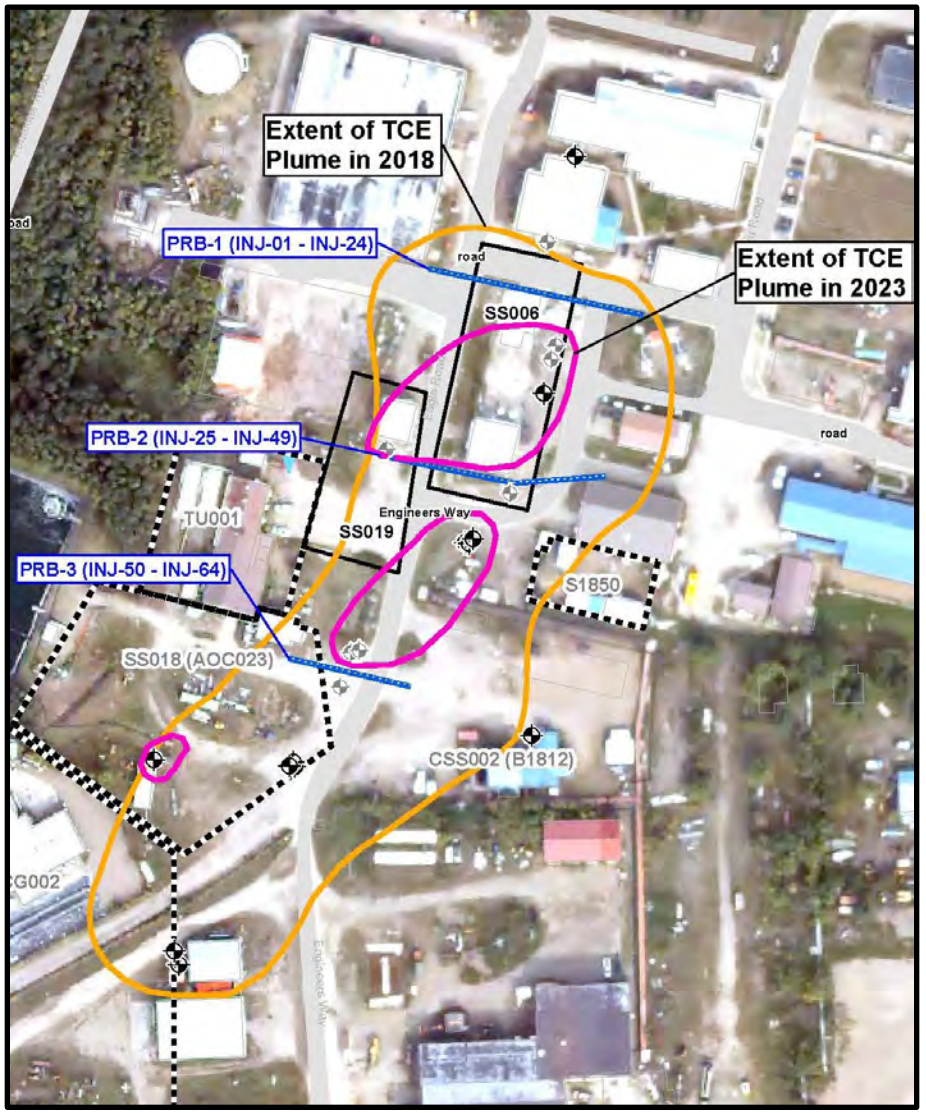


RPO Site Progress Maps

- **SS015 TCE Plume Reduction**
  - **Remedies implemented in summer 2018**
  - **TCE plume has shrunk from 750 feet to <100 feet in length**

RPO Site Progress Maps

- **SS006 TCE Plume Reduction**
  - **Remedies implemented in 2018**
  - **TCE plume has decreased from 5 acres to < 1 acre**



Five-Year Review

- **Purpose**
  - **Evaluate whether remedies selected to clean up contaminated sites are operating as designed and continue to remain protective of human health and the environment**
    - Five Year Review includes assessing impact of changes to cleanup levels and toxicity values, the status of remediation systems, and effectiveness of institutional controls
    - Note: Remedial Process Optimization is complimentary process but also makes recommendations to optimize and accelerate cleanup
- **Current Status**
  - **The FYR report has been drafted and the AF is currently reviewing and evaluating the protectiveness of the remedies.**
- **Upcoming**
  - **Spring 2025 - Five Year Review Report**

Five-Year Review

- **The Alaska Department of Environmental Conservation (ADEC) also participates in the Five-Year Review**
- **Public participation welcomed throughout the process**
  - **Mrs. Christiana Hewitt at:**
    - Address: 2261 Hughes Ave, Ste 155 JBSA Lackland, TX 78236-9853
    - Email: christiana.hewitt.1@us.af.mil
  - **General questions/comments may also be referred to the Air Force Installations and Mission Support Center Public Affairs office at:**
    - Address: 2261 Hughes Ave, Ste.155 JBSA Lackland, TX 78236-9853
    - Email: afimsc.pa.workflow@us.af.mil
    - Phone: Toll Free (866) 725-7617

Communications

- **Semi-annual RAB Meetings (April/October) to continue**
- **Anyone interested in becoming a member of the RAB should contact Christiana Hewitt**
- **Air Force maintains Administrative Record for Final Documents at:**

  https://ar.cce.af.mil/

Questions?

Air Force Installation and Mission Support Command (AFIMSC) Public Affairs

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2261 Hughes Ave., Suite 155
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Attachment 4

Remedial Investigation (RI) for PFAS Compounds at the Former Galena Forward Operating Location, Alaska

Air Force Installation & Mission Support Center

Remedial Investigation (RI) for PFAS Compounds at the Former Galena Forward Operating Location, Alaska

Restoration Advisory Board (RAB) Meeting
23 October 2024

What are PFAS Compounds?

- **PFAS are fluorinated chemicals (9,000+) used in industry and commercially since the 1940's**
  - **Nonstick cookware**
  - **Some food wrappers**
  - **Stain resistant fabrics, carpet, clothing (e.g., Gore-Tex)**
  - **Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)**
  - **Aqueous Film Forming Foam (AFFF) used by the Air Force beginning in the early 1970s to fight fires**

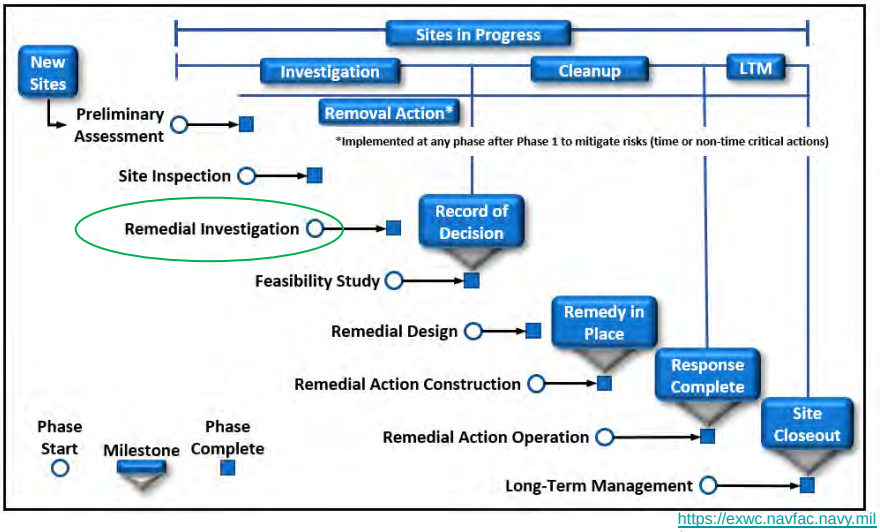
- **Health and environmental impacts of PFAS began to be recognized in 1990's and 2000's**
- **Persistence and mobility of some PFAS, combined with decades of widespread use, resulted in their presence in the environment at trace levels across the globe**

How was AFFF used at Galena?

- Air Force used AFFF for fire-fighting
- Potential release areas identified, including:
  - Fire-fighter training area at east end of the runway
  - AFFF used to fight fire at crash site on runway in 2003
  - AFFF stored at old and new Fire Stations
  - AFFF fire suppression system in Vehicle Maintenance Facility
  - Runoff discharged to sewage treatment system

AFFF Release Areas

PFAS Investigations at Galena
CERCLA Process



https://exwc.navfac.navy.mil/

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PFAS Investigations at Galena

- **Currently in Remedial Investigation (RI)**
- **RI Process:**
  - **(1) Determine nature and extent of PFAS**
    - During RI, screening levels (SLs) used to define extent
  - **(2) Following delineation, conduct a baseline ecological and human health risk assessments**
- **Use results to determine if and where cleanup is needed**
- **If cleanup is necessary, conduct Feasibility Study (FS)**

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PFAS Screening Levels

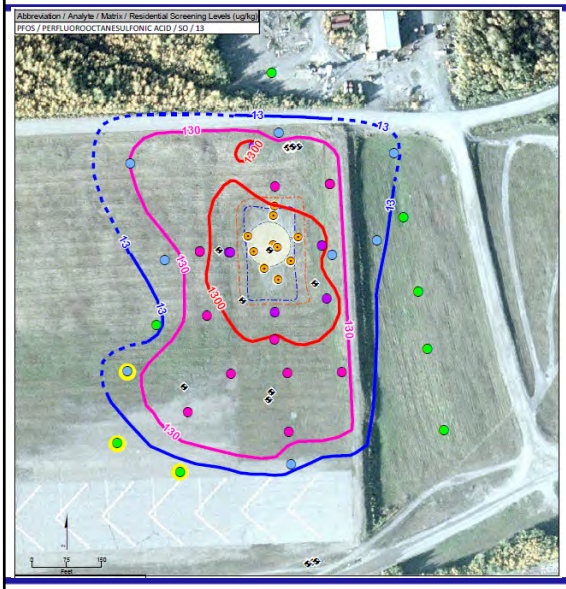
- Screening Levels are based on regulatory guidance and limits – all rapidly changing
- DoD evaluates regulatory guidance/limits and sets/updates policy
- As science and understanding of PFAS evolve, screening levels have changed and may change again in the future
- Current screening levels based on November 2023 EPA Regional Screening Levels (RSLs)

Current DoD PFAS Screening Levels

EPA November 2023 RSLs, HQ=0.1

Analyte	Residential Soil (µg/kg)	Tap Water (Groundwater) (ng/L)
PFBA	7,800	1,800
PFHxA	3,200	990
PFOA	19	6.0
PFNA	19	5.9
PFBS	1,900	600
PFHxS	130	39
PFOS	13	4.0
HFPO-DA (GenX)	23	1.5

Site FT001 Surface Soils Delineation for PFOS

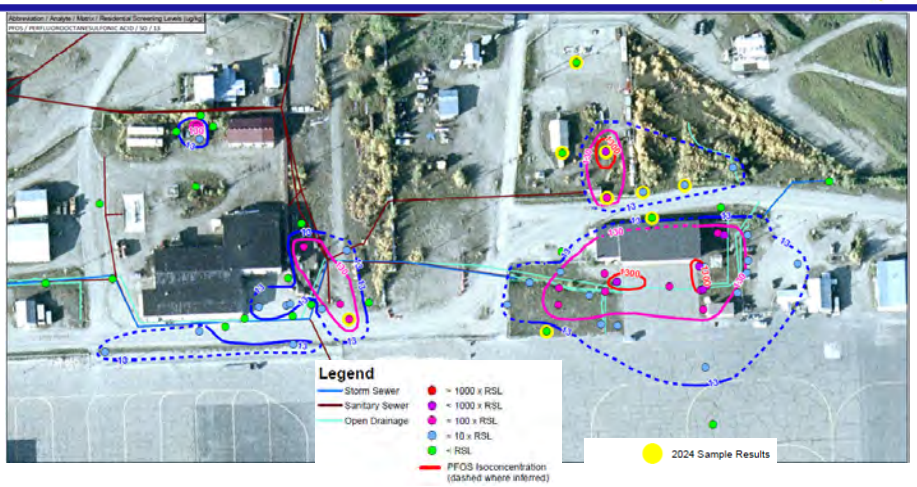


- **PFOS delineated to RSL of 13 ppb for residential soil in surface soil at FT001 to the north, south, and east**

Site FT001 Groundwater Delineation for PFOS

- **PFOS delineated in groundwater to east and west of FT001**

Site CG109 Surface Soil Delineation of PFOS



- Small northern area delineated; other areas not fully delineated
- Evidence of transport along drainages but delineated to west

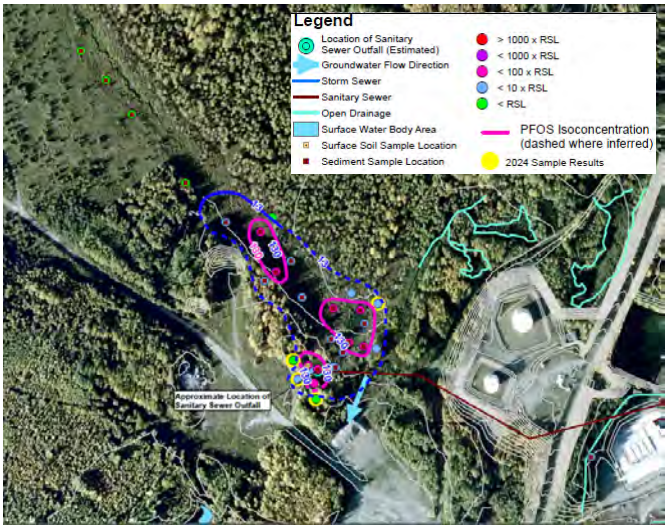
Site CG109 Shallow (<45 feet) Groundwater Delineation for PFOS

- Slight exceedance of PFOS RSL in groundwater in northern part of "Triangle"
- Not delineated to west; some uncertain areas in mid-airfield

Site CG109 Deep (> 70 feet) Groundwater Delineation for PFOS

- Delineated to RSLs in groundwater in northern "Triangle"
- Lower concentrations in deeper groundwater

Area 9 Surface Soil and Sediment Delineation for PFOS



- Delineated along length of wetland using soil RSLs
- 2024 samples improved delineation

PFAS Reports

- Site FT001 RI Report (2022 data) – Final accepted by ADEC
- Site CG109 RI Report (2022 data) – Draft in Air Force review
- RI Report Addenda (both sites) – Initial drafts in preparation (Spring 2025)
  - Will incorporate data from 2023 and 2024 RI sampling
- Baseline Human Health and Screening Level Ecological Risk Assessments (2025)

Communications

- Semi-annual RAB meetings (April/October) to continue
- Anyone interested in becoming a member of the RAB should contact Christiana Hewitt
- Air Force maintains Administrative Record for Final Documents at:

  https://ar.cce.af.mil/

Questions?

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