**Final Meeting Minutes**
**Restoration Advisory Board (RAB) Meeting**
**Former Galena Forward Operating Location (FOL), Alaska**
**Galena, Alaska**
**24 October 2018**

**Time/Place**: Wednesday at 7:00 pm, 24 October 2018 – Larson Charlie Hall, Galena, Alaska

**Attendees:**

Fifteen people attended the RAB meeting including representatives from the Air Force Civil Engineer Center (AFCEC), the Alaska Department of Environmental Conservation (ADEC), the Alaska Department of Transportation (ADOT), Galena RAB members, community members, and Air Force remediation contractors (Parsons and CH2M/Jacobs). The following is a list of those attending the meeting.

Christiana Hewitt, AFCEC
Donna Kozak, Booz Allen Hamilton (BAH)
Bruce Henry, Parsons
Ed Heyse, Parsons
Win Westervelt, CH2M/Jacobs
Jamie McKellar, ADEC
Sam Myers, ADOT
John Stam, Community RAB Member
Luis Echenique, Louden Tribal Council
Ranch Burgett, Community Member
Cecilia Grant, Community Member
Russ Sweetsir, Community Member
Terry Webb, Khotol Services, Inc.
Scott Elkind, Sealaska
Andy Lewis, Sealaska

**Agenda:** See Attachment 1

**Introduction:**

Christiana Hewitt opened the RAB meeting by having the audience introduce themselves and introducing the presentation on Performance-Based Remediation (PBR) cleanup efforts.

**Presentation**

*Performance-Based Remediation*

Bruce Henry (Parsons) and Win Westervelt (CH2M/Jacobs) gave a presentation (Attachment 2) with an update on the PBR contract. The PBR contract is for the cleanup of 32 sites at the Former Galena FOL. Installation of remedial systems started in 2015 and will continue through 2019. Maintenance and operation of the remedial systems will continue through the summer of 2020.

Bruce provided an overview of the six sites that have been closed to date, which includes the following:

- Site CST009 Building 1400 Former Ammunition Storage UST (UST1400) – achieved Cleanup Complete in September 2015
- Site CST013 Former Incinerator USTs (UST1770) – Achieved Cleanup Complete in December 2016
- Site CSS005 Refueling Pads (PADS) – Achieved Cleanup Complete in June 2017
- Site CSS001 Electric Power Station AST (AST1569) – Achieved Cleanup Complete in June 2017
- Site SS021 Building 1549 Old Fire Station – Achieved Cleanup Complete in September 2017
- Site SS013 Control Tower Drum Storage Area South – Achieved Cleanup Complete in August 2018

Bruce said that five of the closures were for sites contaminated with petroleum hydrocarbons. Several of these petroleum hydrocarbon sites were closed by excavating contaminated soil. Site SS013 included other potential contaminants but more recent sampling indicated there is no unacceptable risk at this site. All these sites have obtained a status of “Cleanup Complete”, which means there are no restrictions on the use of the site.

Bruce reviewed a summary list of the remedial technologies implemented in Galena in 2018, which included the following:

- Subsurface Aeration (Vertical Well) Air Sparging (Site CG001)
- Soil Vapor Extraction (SVE) (Sites SS015, Site ST005 Area C, and Sites SS006/SS019)
- Bioventing (Site FT001)
- Enhanced Anaerobic Bioremediation/Enhanced Biogeochemical Transformation (EAB/EBT) Injections (Site SS015 and Site SS006)
- Excavations (Site SS014, Site ST005 Area D, and Site SS006)
- In Situ Chemical Oxidation (ISCO) Injection (Site CPL006 Area 2 and Site CST011 Area 1)

Other work performed in 2018 included removal of a drywell at Site SS019; inspection of old abandoned pipeline (OAP) at Site CPL006 Area 3 and Site FT001; remediation of stockpiled soil with low levels of trichloroethene (TCE); system modifications (e.g., expand remediation systems or replace vent wells); annual groundwater monitoring; and operation and expansion of the Galena Landfarm. Bruce presented a figure showing the 2018 work site locations and a description of each activity followed.

Win Westervelt described the 2018 remedial actions at Sites CG001, ST005 Area C, ST005 Area D, and CST001 Area 1. At Site CG001 (Million Gallon Hill). Win showed a site map where 10 vertical air sparge wells were added to the northern portion of the Million Gallon Hill remediation system to supplement subsurface aeration treatment from four horizontal wells.

At Site ST005 (Petroleum, Oil, and Lubricants [POL] Yard) Area C, an SVE system consisting of seven vent wells was installed around former aboveground storage tanks to treat fuel-contaminated soil. The system will be operated from November to April when groundwater levels are low.

At Site ST005 Area D, 75 cubic yards of fuel-contaminated soil were excavated from a former aviation gasoline (AVGAS) truck fill stand. Win explained that contaminated soil remains below the thick concrete fill stand and that further evaluation of this site is required.

At Site CST011 (former Combat Alert Cell [CAC]) Area 1, an ISCO reagent (sodium persulfate) was injected into a small area at 5 feet below ground surface to oxidize remaining gasoline-contaminated soil from former fuel underground storage tanks (USTs). Soil at this site will be sampled next summer to determine if the site meets cleanup objectives.

Bruce Henry then described the remediation activities at sites managed by Parsons. SVE systems were installed at Site SS015 (South Apron Maintenance Area) and at Site SS006 (Building 1845 TCE Area). The SVE system at Site SS015 was started in early October. This site is on the south side of the Galena airfield and has a TCE groundwater plume that migrates under Old Town Galena. SVE is being used to extract TCE and other chlorinated compounds from unsaturated soil. The system at Site SS006 still needs to be connected to the blower shed in the spring of 2019. Startup of this system will occur in the summer of 2019. The SVE pilot system at Site SS019 (Building 1700 Refueler Maintenance Shop) will be expanded in 2019 to capture several of the vent wells in the western portion of Site SS006. The pilot SVE system at Site SS019 will continue to operate over the winter of 2018/2019.

John Stam (community RAB member) asked what the blue line on the SVE figure (Slide 11) was. Bruce explained that the blue line represented the high-water table elevation, and that the interval below the blue line was the thickness of the variably saturated zone (VSZ) between the annual high and low water table elevations. The SVE system is only effective when the soil is unsaturated; therefore, the system is typically run over the winter when the water table is low.

John also asked how did TCE get to the south side of the runway (i.e., at Site SS015). Bruce explained that there were former maintenance buildings along the south side of the runway. TCE was usually used for cleaning parts and the TCE was from a release from maintenance activities.

Bruce described a bioventing system installed at Site FT001 (Former Fire Protection Training Area). Soil and groundwater at this site are contaminated with petroleum hydrocarbons from fire training exercises. Per- and polyfluoroalkyl substances (PFAS) are also present in soil and groundwater but are being addressed in a separate Air Force project. Bioventing was selected to treat petroleum hydrocarbons in unsaturated soil as an interim remedy. Twelve (12) shallow and 2 deep vent wells were installed under an impermeable cover. The cover was installed to limit infiltration and enhance the area of influence of the bioventing system.

EAB/EBT was applied at Site SS015 (South Apron Maintenance Area) and at Site SS006 (Building 1845 TCE Area) to remediate TCE in groundwater. TCE degrades in groundwater by both biological and abiotic processes under anaerobic conditions.

Sam Myers asked Bruce to explain what “aerobic” and “anaerobic” means. Bruce responded that anaerobic means a lack of oxygen and aerobic means oxygen is present. Bruce noted that the microbes that degrade TCE are only active under anaerobic conditions.

The injected amendments included emulsified vegetable oil to stimulate anaerobic conditions for biological degradation of TCE. A bioaugmentation culture was injected that is capable of complete anaerobic degradation of TCE to ethene. Sulfate was also added, which is reduced to sulfide that precipitates with iron to form reactive iron sulfide minerals that can degrade TCE. The amendments were mixed with water at the surface and injected directly into groundwater through direct-push tools. The amendments were injected into three rows of injection points to form permeable reactive barriers (PRBs) oriented perpendicular to groundwater flow. A total of

7,300 gallons of emulsified vegetable oil was injected into 3 PRBs at Site SS006, and a total of 6,500 gallons of emulsified vegetable oil was injected into 3 PRBs at Site SS015.

Luis Echenique (Louden Tribal Council) asked if the treatment chemicals or reaction byproducts from Site SS006 treatment of TCE in groundwater can impact the water supply well in the Triangle Area? Bruce replied that the amendments were only injected down to about 75 feet, and the water supply wells are screened much deeper at 180 feet or more. The amendments are not harmful and are eventually used up. In any event, the amendments will stay within the groundwater contaminant plume and not migrate to depths that could potentially impact the water supply wells. Win Westervelt also explained that CH2M had modeled the TCE plume at Site SS006 and the modeling results indicated the plume was not within the capture zone of the water supply wells. Donna Kozak pointed out that the drinking water well has been monitored in the past and no contaminants have ever been detected.

Two excavations were completed in 2018 at Site SS014 (Former Birchwood Hangar) and Site SS006 (Building 1845 TCE Area Excavation). Approximately 30 cubic yards of soil contaminated with pentachlorophenol (PCP) and polycyclic aromatic hydrocarbons (PAHs) were removed from the Utility Pole Storage Area at Site SS006. The soil was staged at RAPCON Yard for disposal outside of Galena in 2019. Soil with petroleum hydrocarbons remaining after a 2017 excavation of a former floor drain at the Former Birchwood Hangar (Site SS014) was excavated and transported to the landfarm for treatment.

Sam Myers asked what pentachlorophenol (PCP) is and what it has to do with creosote? Ed Heyse said that it was a component of the chemicals used to treat utility poles. ***Post Meeting Note****: PCP has been used as an herbicide, insecticide, fungicide, algaecide, and disinfectant. One application includes wood preservation. Its use has declined due to its high toxicity and slow biodegradation. There are two general methods for preserving wood with PCP. The pressure process method involves placing wood in a pressure-treating vessel where it is immersed in PCP and then subjected to applied pressure. In the non-pressure process method, PCP is applied by spraying, brushing, dipping, and soaking. In Alaska the latter method was likely used at remote locations such as Galena.*

A former drywell was excavated at Site SS019 (Building 1700 Refueler Maintenance Shop). The drywell was constructed of a perforated 55-gallon drum filled with gravel and was used to drain water from a former oil/water separator in Building 1700 that was used for vehicle maintenance. The drywell material and contaminated soil are being characterized for disposal.

Luis Echenique asked was the buried drum (dry well) at Site SS019 the source of contamination, or was it something from the building leading into the drum? He noted that they run into a lot of crushed drums that had been used for construction (e.g., this summer when Campion Road was repaired at Beaver Creek), and whether there was any chance they are sources of contamination? Bruce responded that the drum itself was not the source of contamination. The petroleum hydrocarbons from maintenance activities in Building 1700 were the source of contamination. Sam Myers said that ADOT screened the crushed drums found at Beaver Creek and found no evidence of contamination.

Treatment was performed on soil excavated from Site CSS002 (Building 1812) and soil cuttings lightly contaminated with TCE (below human health but above migration to groundwater standards) that was staged at Million Gallon Hill from 2015 to 2017. Approximately 90 cubic yards of this soil were tilled at the Missile Storage Yard to remove TCE by volatilization. The breathing zone air was monitored to ensure no exposure occurred. After treatment, the soil was transported to the Galena Landfarm to treat residual petroleum hydrocarbons.

Luis Echenique noted and was thankful that Parsons had done the TCE soil treatment work at Missile Storage Area quickly and cleaned up thoroughly after the work. He asked if there were any problems (presumably exposure issues) to the workers in the area while Parsons was treating the soil. Bruce replied that Parsons staff monitored air quality with a photoionization detector to make sure working conditions were safe.

Old abandoned pipelines (OAP) were inspected for two former fuel pipelines running under the east side of runway (Sites CPL006 and ST010), and for a small pipeline used to fuel fires at the Former Fire Protection Training Area (Site FT001). The pipelines had been cut and did not contain fuel product but were not plugged. Parsons plugged the exposed ends of the pipelines and sampled potentially contaminated soil (results pending data validation).

The Galena Landfarm was operated over the summer of 2018 and expanded in September by pushing out the berms around the soil treatment area to the south and east. This increased the amount of soil that can be treated by the windrow turner from 4,100 to 5,250 cubic yards. A detention basin was also installed to capture excess storm water, which will be used for moisture control during dry periods.

Bruce then went over the field schedule for the remainder of the PBR from 2019 to 2020. The remaining remedies to be accomplished in 2019 include excavations at Site DP023 (Disposal Site West of Dike) and Site SS018 (Former Waste Accumulation Area). The SVE system at Site SS006 (TCE Area Building 1845) will also be completed and the system started up. In addition, Proposed Plan meetings for Site DP023 and Site CS001 (Contaminated Sediments [DDT Soils]) will be held in the spring of 2019, and Records of Decision (RODs) for the two sites finalized in 2019. Operation and maintenance of all the remedies (including operation at the landfarm) will be conducted through the summer of 2020.

Luis Echenique asked what is the final target of cleanup activities at Galena, and did it include cleanup of all 32 sites? Christiana Hewitt (AFCEC) indicated that cleanup of all 32 sites is the goal of cleanup activities at Galena and that the Air Force would be responsible for the final cleanup even if it takes many years.

Sam Myers asked when is the next Galena PBR newsletter coming out? Christiana thought that maybe next year would be a good time once all the PBR remedies are in place.

Luis Echenique asked if the Galena PBR contractors provide community service. He indicated that the City of Galena and the Louden Tribal Council have limited budgets and any help is appreciated. Bruce and Win replied that they try to limit the impact of cleanup activities on the community and try to help when they can. Mr. Echenique also expressed frustration about the condition of the roads in Galena following the summer runway improvement project by ADOT/QAP. He said that he had reached out for assistance to several agencies working in Galena regarding the road situation and other concerns, and he indicated that the responses he received were not what he was hoping for. Sam Myers also spoke up and said that Luis needed to contact his legislator(s) to see if they could get more funding coming into the community.

## Closing Remarks

Sam Myers of ADOT described how 2018 was a challenging year due to the ADOT runway construction project and the amount of remediation work being performed. He said ADOT is pleased with the remedial actions that are being achieved.

Jamie McKellar ADEC spoke to the RAB and community, letting them know she has replaced Dennis Shepard as the ADEC project manager for Galena. She also stated that the Former

Campion Air Station is also one of her projects. She encouraged the RAB and community members to contact her if they had questions regarding the cleanup of these locations.

John Stam asked what is happening at the Former Campion Air Station. Jamie McKellar stated that Campion is regulated by ADEC and was recently assigned to her. She is starting to review the status of the former facility and encouraged John to contact her if he would like more information. The site is also in the ADEC Contaminated Sites Program database and information can be obtained online. Christiana Hewitt said that the former facility is administered by a different Air Force entity (the 611th at JBER) and it has been awhile since they have presented at the RAB meetings.

Christiana Hewitt closed the meeting by thanking the Galena community for attending and contributing to the meeting. Christiana mentioned the next RAB meeting will be in March or April 2019 and gave AFCEC contact information for anyone interested in more information about the Former Galena FOL cleanup efforts.

**Attachments:**

1. RAB Meeting Agenda
2. Presentation: Performance Based Remediation at Former Galena FOL, Alaska

**Attachment 1**
**RAB Meeting Agenda**

# Galena Restoration Advisory Board (RAB)

Final RAB Meeting Agenda
October 24, 2018
7:00 p.m. – 8:00 p.m.
Larsen Charlie Community Hall
Galena, Alaska

**Welcome** **Christiana Hewitt, AFCEC**

- Introductions

**Overview of Environmental Restoration**

- Performance-Based Remediation (PBR) Contract **Bruce Henry, Parsons**
  - Summary of Sites Achieving Cleanup Complete **Win Westervelt, CH2M/Jacobs**
  - Activities Completed in 2018 Field Season
  - Activities Planned for 2019 Field Season
- Follow-on PBR Contract **Christiana Hewitt, AFCEC**

**Questions from the Public** **Bruce Henry/Win Westervelt (Facilitators)**

**Remarks from ADEC** **Jamie McKellar, ADEC**

**Remarks from ADOT** **Sam Myers, ADOT**

**Schedule for Next RAB Meeting and Closing Remarks** **Christiana Hewitt**

For more information about the Galena Environmental Cleanup program, please contact the AFCEC Public Affairs hotline at 1-866-725-7617 or via email at AFIMSC.PA.Workflow@us.af.mil

# Attachment 2

# Performance-Based Remediation (PBR) at the Former Galena Forward Operating Location (FOL), Alaska

*This page left intentionally blank*

# Air Force Civil Engineer Center

## Performance-Based Remediation (PBR) at the Former Galena Forward Operating Location (FOL), Alaska

Restoration Advisory Board (RAB) Meeting
24 October 2018

***Battle Ready…Built Right!***

## Former Galena FOL Performance Based Contract

- **Parsons - Prime Contractor**
- **Partnering Team – CH2M/Jacobs and Ahtna Engineering Services**
- **Remediation of 32 sites contaminated primarily with fuels and solvents**
- **To date, six sites have achieved Cleanup Complete**
- **Installation of remediation systems from 2015 to 2019**
- **Operations and monitoring through Summer 2020**

Installation of Bioventing Cover at Former Fire Training Protection Area (Site FT001)

2

# Sites Achieving Cleanup Complete

1. Site CST009 Building 1400 Former Ammunition Storage UST (UST1400) – 9/29/15
2. Site CST013 Former Incinerator USTs (UST1770) – 12/6/16
3. Site CSS005 Refueling Pads (PADS) – 6/23/17
4. Site CSS001 Electric Power Station AST (AST1569) – 6/30/17
5. Site SS021 Building 1549 Old Fire Station - 9/29/17
6. Site SS013 Control Tower Drum Storage Area South – 8/13/18

Excavation at Site CSS001

Excavation at Site CST013

3

# 2018 Field Activities

## Subsurface Aeration (Vertical Well) Air Sparging

– Completed small air sparge system at northern portion of Million Gallon Hill (Site CG001) to supplement treatment from horizontal well system.

## Soil Vapor Extraction (SVE)

– Completed system at Former South Apron Maintenance Area (Site SS015)
– Installed small system at POL Yard (Site ST005 Area C)
– Installed system at Building 1845 TCE Area/Building 1700 Refueler Maintenance Shop (Sites SS006/SS019) (*Startup in 2019*)

## Bioventing

– Installed system at Former Fire Protection Training Area (Site FT001)

## Enhanced Anaerobic Bioremediation/Enhanced Biogeochemical Transformation (EAB/EBT) Injections

– Former South Apron Maintenance Area (Site SS015)
– Building 1845 TCE Area (Site SS006)

4

# 2018 Field Work (continued)

**Excavations**

- Completed small excavation at Former Birchwood Hangar (Site SS014) (*started in 2017*)
- Small excavation at POL Yard (Site ST005 Area D)
- Surface soil excavation at Building 1845 TCE Area (Site SS006)

**In Situ Chemical Oxidation (ISCO) Injection**

- Old Abandoned Pipeline (CPL006 Area 2 – along ski strip)
- Combat Alert Cell USTs (Site CST011 Area 1)

**Other Field Work**

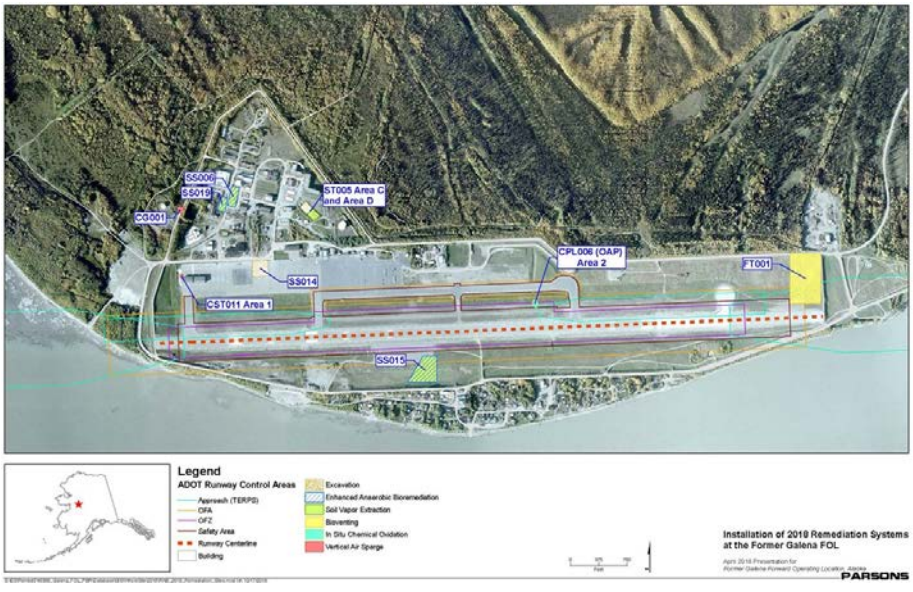
- SS019 Drywell removal
- OAP pipeline inspection (CPL006 Area 3 and FT001)
- TCE soil pile remediation
- System modifications (e.g., expand or replace vent wells)
- Annual groundwater monitoring

**Galena Landfarm**

- Landfarm reconstruction and operation

5

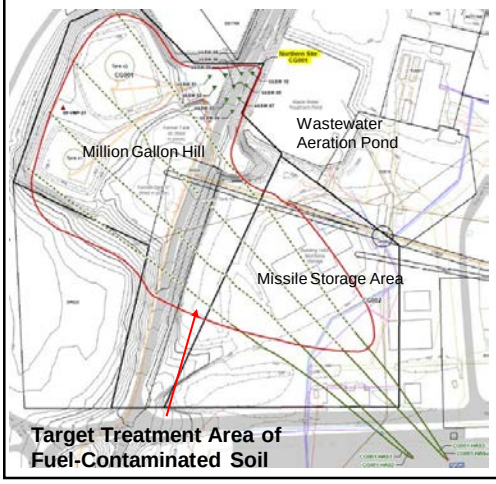
# 2018 Field Work Locations




6

# Vertical Air Sparge System at Million Gallon Hill (Site CG001)

- **Ten air sparging wells were added to the northern portion of the Million Gallon Hill remediation system to supplement aeration treatment from the 4 horizontal wells.**




**Target Treatment Area of Fuel-Contaminated Soil**

Blower enclosure building for air sparge system.

7

# Soil Vapor Extraction (SVE) at POL Yard (Site ST005 Area C)

- **Seven SVE wells were installed around the former aboveground storage tanks to treat fuel-contaminated soils.**
- **Will be operated from November – April when groundwater levels are low.**

Tank farm ASTs at Site ST005 Area C

Installation of SVE piping

8

## Petroleum Soil Excavation at POL Yard (Site ST005 Area D)

- **75 CY of fuel-contaminated soil were excavated from this former AVGAS truck fill stand.**

Excavation area around former fill stand

9

## In Situ Chemical Oxidation at Combat Alert Cell (Site CST011 Area 1)

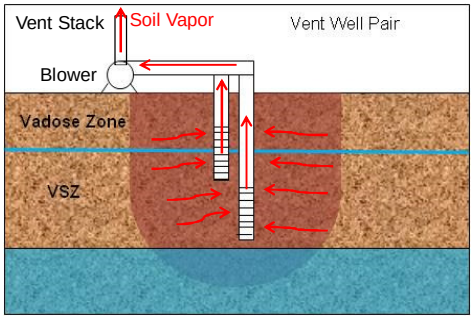
- **Sodium persulfate was injected into a small area at 5 feet deep to oxidize remaining gasoline-contaminated soil from former fuel underground storage tanks (USTs).**
- **Will resample next summer to determine if site meets cleanup objectives.**

Northwest corner of CAC Building where USTs were formerly located.

10

# Soil Vapor Extraction for TCE Sites SS015 and SS006

- **SVE removes volatile TCE in unsaturated soil and vents it to the atmosphere**
- **Air quality is monitored to ensure ADEC exposure levels are not exceeded**




Note: VSZ = variably saturated zone

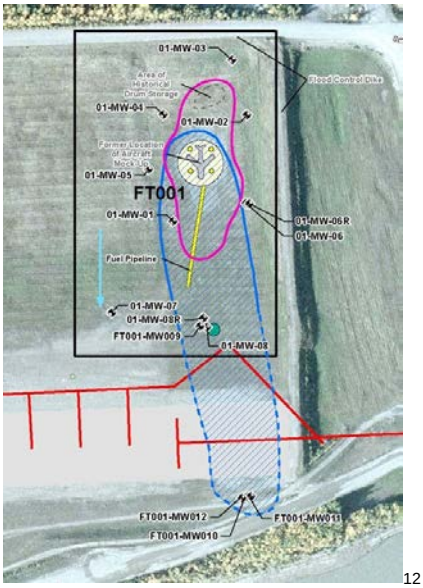
SVE vent pipe installation at Site SS015

- **SVE System at Site SS015 completed in 2018**
- **SVE System at Site SS006 installed with startup in 2019**

11

# Bioventing System at Former Fire Protection Training Area (Site FT001)

- **Soil and groundwater contaminated with petroleum hydrocarbons from fire training exercises**
- **Per- and polyfluoroalkyl substances (PFAS) are also present in soil and groundwater but will be addressed separately**
- **Bioventing selected to treat petroleum hydrocarbons in unsaturated soil as an interim remedy**




Magenta outline is extent of soil contamination above cleanup levels
Blue hatch is extent of benzene in groundwater

12

## Bioventing System Installation at Site FT001

- 12 shallow and 2 deep vent wells installed under an impermeable cover
- Cover will limit infiltration and enhance influence of bioventing
- Benzene and diesel-range organics in groundwater will attenuate as soil bioventing removes petroleum hydrocarbons from soil

Installing bioventing cover at Site FT001

13

## Enhanced Anaerobic Bioremediation/ Enhanced Biogeochemical Transformation (EAB/EBT)

- TCE degrades in groundwater:
  - Biologically by anaerobic microorganisms (EAB)
  - Abiotically by reactions with reduced iron sulfide minerals (EBT)
- End product of biodegradation (ethene) is unstable in groundwater and further degrades to carbon dioxide and water
- Injected chemicals/cultures:
  - Emulsified vegetable oil to stimulate anaerobic conditions for biological degradation of TCE
  - Bioaugmentation culture that is capable of complete anaerobic degradation of TCE to ethene
  - Sulfate which is reduced to sulfide that precipitates with iron to form reactive iron sulfide minerals

14

# Direct-Push Injection for EAB/EBT

**Amendments are mixed with water at the surface and injected directly into groundwater through direct-push rods and tools**

**Bioaugmentation culture injected after amendments**

Emulsified vegetable oil product staged at Site SS015

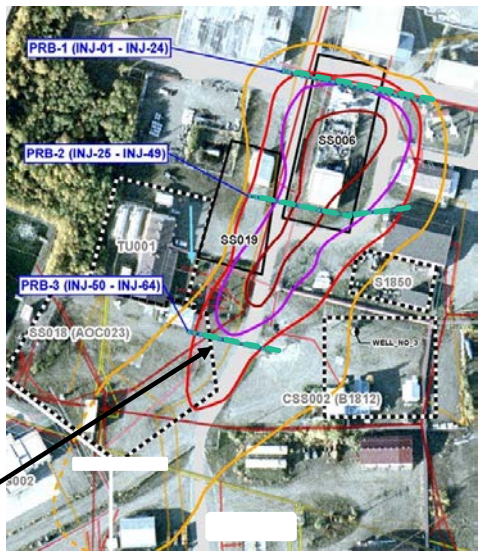
Injecting Bioaugmentation Culture

15

# EAB/EBT at Site SS006

- **Emulsified vegetable oil, sulfate amendment, and bioaugmentation culture injected into three rows of injection points to form permeable reactive barriers (PRBs) oriented perpendicular to groundwater flow**
- **Total of 7,300 gallons of emulsified vegetable oil injected into 3 PRBs at Site SS006, and a total of 6,500 gallons of emulsified vegetable oil injected into 3 PRBs at Site SS015**

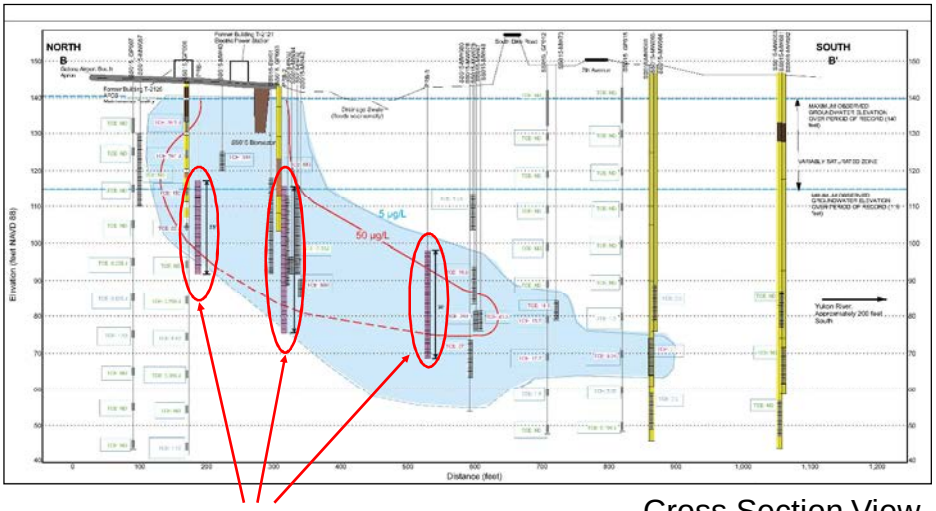
PRBs intercept TCE in groundwater above 50 micrograms per liter




Plan View SS006 PRBs

16

# Injection into Permeable Reactive Barriers at Site SS015




PRBs intercept TCE in groundwater

Cross Section View

17

# Soil Excavation at Site SS006 and Site SS014

- **Building 1845 TCE Area Excavation (Site SS006)**
  - **Removed approximately 30 cubic yards of soil contaminated with pentachlorophenol and polycyclic aromatic hydrocarbons at the Utility Pole Storage Area**
  - **Soil staged at RAPCON Yard for disposal outside of Galena in 2019**
- **Former Birchwood Hangar (Site SS014)**
  - **Removed soil with petroleum hydrocarbons remaining from the 2017 excavation of a former floor drain**
  - **Soil transported to landfarm for treatment**

Utility Pole Storage Area at Site SS006

Excavation at Site SS014

18

# Drywell Removal at Site SS019

- **Former underground drywell drained an oil/water separator in Building 1700**
- **Drywell and soil being characterized for disposal**

Drywell constructed of perforated 55-gallon drum

Drywell excavation

19

# Treatment of TCE Soil Pile

- **Soil excavated from Site CSS002 (Building 1812) and soil cuttings lightly contaminated (below human health but above migration to groundwater standards) with TCE was staged at Million Gallon Hill**
- **Soil was tilled at the Missile Storage Yard to remove TCE by volatilization**
- **Breathing zone air monitored to ensure no exposure occurred**
- **After treatment soil was transported to the Galena Landfarm to treat residual petroleum hydrocarbons**

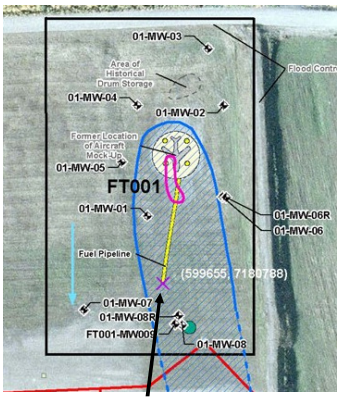
Tilling soil at Missile Storage Yard

Soil covered pending test results

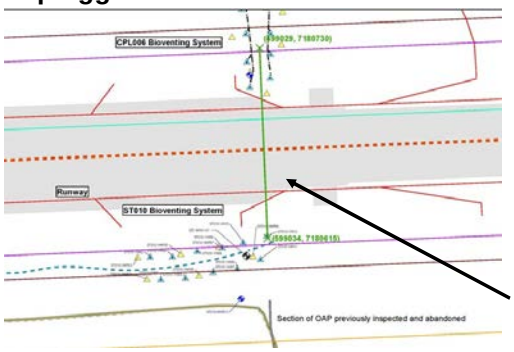
20

# OAP and FT001 Pipeline Inspection

- **Inspected former fuel pipelines under east side of runway (Sites CPL006 and ST010) and at the Former Fire Protection Training Area**
- **Pipelines were cut and did not contain fuel product but were not plugged**




Pipeline Location at Site FT001




Pipeline Location at Sites CPL006 and ST010

21

# OAP and FT001 Pipeline Inspection

- **Exposed pipeline ends were plugged contaminated soil was sampled**

Plugged Pipe at OAP under runway

Exposed pipeline at FT001

22

## Galena Landfarm Expansion

- Expanded landfarm tilling area by pushing berms out to the south and east
- Amount of soil that can be treated by the windrow turner increases from 4,100 to 5,250 cubic yards
- Installed a detention basin to capture excess storm water – water used for moisture control during dry periods

Construction of fenced detention basin

23

## Galena PBR 2019-2020 Schedule

- 2019 Proposed Plan Meeting and RODs for Sites DP023 (Disposal Site West of Dike) and CS001 (Contaminated Sediments – DDT Soils)
- 2019 – Implement remaining remedies
  - Site DP023 complete excavation
  - Former Waste Accumulation Area South of Building 1499 (Site SS018) excavation
- Operate remedies and prepare close out reports, as appropriate (through 2020)
- Operate Landfarm
- Five-year Reviews for all open sites
- Current PBR Contract ends September 2020

24

# Communications

- **Public Review of Proposed Plan for remaining CERCLA sites**
  - **Site DP023 and Site CS001 in March/April of 2019**
- **Notices will be published when RODs are finalized for public review**
- **Semi-annual RAB Meetings (April/October) to continue**
- **Air Force maintains Administrative Record for Final Documents at:**

  **http://afcec.publicadmin-record.us.af.mil/**

25

# 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**

26


AIR FORCE CIVIL ENGINEER CENTER