



# The Former Galena FOL Environmental Update

Published to keep the Galena, Alaska, community informed of the Air Force's cleanup progress | Jan 2016

## Field Activities Planned For Summer of 2016

### Installation of bioventing systems at sites:

- SS016 (Bldg. 2541)
- CPL006 (Old Abandoned Pipeline or OAP)
- ST010 (Southeast Runway)
- SS014/SS017 (Birchwood Hangar/Truck Fill Stands)

### Installation of soil vapor extraction, or SVE, systems at sites:

- ST009 (West Unit JP-4 Fuel Stands)
- SS015 (South Apron Maintenance Area)

### Enhanced bioremediation treatment at:

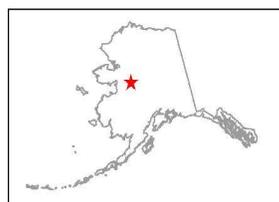
- CSS002 (Bldg. 1812)

### Installation of vertical air sparge and SVE systems at sites:

- CST011 (Combat Alert Cell Bldg.)
- CST014 (Dining Facility)
- SS005 (Wilderness Hall)
- ST020 (Bldg. 1837)
- TU001 (Power Plant Tank 49)

### MARK YOUR CALENDARS!

For more information about planned activities for 2016, the next Galena Restoration Advisory Board, or RAB, meeting is scheduled for April 13, 2016 at 7 pm at the Larsen Charlie Hall.



### Legend

- Bioventing System Installation
- SVE System Installation
- Vertical Air Sparge/SVE System Installation
- Sulfate Enhanced Bioremediation Injection

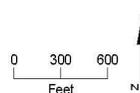


Figure 1

Installation of 2016 Remediation Systems at the Former Galena FOL

Former Galena Forward Operating Location, Alaska

**PARSONS**

# Installation of New Clean-Up Technology to Begin in 2016

Historically, energy and power needs at the Former Galena FOL, including facility heating and aircraft refueling, were met using petroleum-based fuels. The fuels were routed via barge to storage tanks, both above ground and underground storage tanks, or USTs. The main fuels used at Former Galena FOL were arctic diesel fuel, aviation fuel, jet-propulsion fuel, and lesser quantities of motor gasoline. Release of these fuels occurred during transportation, storage and use of these petroleum products which resulted in hydrocarbon contamination of soils and groundwater.

A cleanup plan using treatment systems comprised of air sparge, or AS, and soil vapor extraction, or SVE, has never been used at Galena FOL and has been selected for the following five sites: Site CST014 (Dining Facility), Site CST011 Area 2 (Combat Alert Cell), Site TU001 (Power Plant Tank 49), Site SS005 (Wilderness Hall, Former Bldg. 1872), and Site ST020 (Bldg. 1837). Installation of these systems is to commence June through September of 2016.

## WHAT IS AIR SPARGING?

Air Sparging is the process of injecting air directly into

groundwater using vertical or horizontal wells, also known as subsurface aeration remediation. It is often used in conjunction with SVE and monitored natural attenuation, or the monitoring of the natural breakdown of contaminants.

## HOW DOES IT WORK?

Air sparging is like blowing bubbles into water with a straw. The contaminants in the groundwater convert to a vapor phase which rise and are carried into the soil.

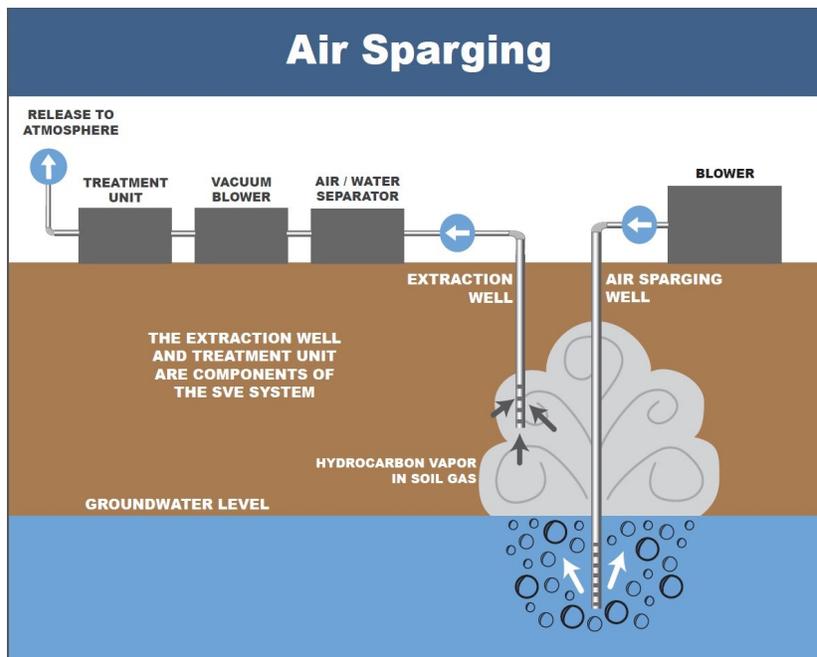


Illustration of an Air Sparging System with vertical wells used in conjunction with a SVE system. Illustration Courtesy: AFCEC

As the contaminants move into the soil, the SVE system is used to remove the contaminated vapors through extraction wells. Depending on the amount of contamination, the extracted air may not require treatment before releasing to the atmosphere. The five systems being installed in 2016 will use vertical air sparge wells and are not expected to require a treatment unit for extracted vapors. The Air Force monitors all SVE systems to ensure releases meet regulatory

requirements. The target contaminants for air sparging are Volatile Organic Compounds, or VOCs, and fuels, or petroleum hydrocarbons, in groundwater.

## Help Improve RAB Meeting Attendance, Become a RAB Member

The Air Force is looking for community input on how to better schedule and improve attendance at the Restoration Advisory Board, or RAB, meetings. These meetings are held for the benefit of informing interested community members of the Air Force cleanup progress and provide a forum for the community to ask questions to the Air Force and its contractors.

The Air Force will hold the next RAB meeting at **7 p.m. on Wednesday, April 13, 2016**, at the Larsen Charlie Hall.

**RAB presentations are available online.** If you missed the October 2015 RAB Meeting and would like to review the information presented, please visit, [www.afcec.af.mil/brac/galena/rabdocuments/index.asp](http://www.afcec.af.mil/brac/galena/rabdocuments/index.asp) to access all past Galena RAB presentations.

If you are interested in supporting your community by becoming a RAB member, please contact AL Weilbacher at AFCEC, contact information can be found on the last page of this newsletter.

# 2015 Property Transfer Update

At the close of 2015, 142 acres, or 93% of the land reserved or leased by the Air Force at the former Galena FOL has been transferred back to the state of Alaska or other recipients, and only 10 acres remain to achieve whole base transfer, or WBT. Although the remaining acreage is small, it is comprised of 15 parcels which vary in size from less than one-quarter acre to one and one-half acre, and are currently undergoing clean-up efforts.

While the Air Force and its contractors focus on cleaning up the contaminated land, the Air Force property transfer team is working closely with Aviation Leasing and Right-of-Way staff from the Alaska Department of Transporta-

tion and Public Facilities, known as ADOT&PF, and the Alaska Department of Environmental Conservation, known as ADEC. This is to ensure the property transfer documents contain the necessary language to properly document the contamination, as well as the Air Force's obligation to continue cleaning up the property after it has been transferred to the state.

While the process to transfer contaminated property is lengthier, the collaborative relationship of ADOT&PF, ADEC and the Air Force will ensure the protectiveness of human health and the environment for years to come.

## 2015 Accomplishments

- Time Critical Removal Action, or TCRA, was conducted at Disposal Site West of Dike, or DP023 where majority of debris and petroleum-contaminated soil was removed and areas not excavated were covered with clean soil to prevent exposure, until next summer when it will be completed.
- Excavation at former Bldg. 1812, or CSS002, was conducted and approximately 2,800 cubic yards of petroleum-contaminated soil was removed up to a depth of 15 feet.
- Excavation at former Bldg. 1770 incinerator underground storage tanks, or CST013, was completed and approximately 500 cubic yards of petroleum-contaminated soil was removed. Preliminary data indicates this excavation will achieve complete clean-up.
- Investigation of underground storage tanks, or USTs, abandonment at the Combat Alert Cell Bldg. determined two tanks were previously excavated and the third was found abandoned in place and filled with sand in accordance with regulatory requirements.
- Installation of four SVE pilot test systems at sites SS019 (Bldg. 1700 Refueler Maintenance Shop), SS025 (West Perimeter Rd TCE spill site), SS022 (Bldg. 400 Former Weather Station) and OW024 (Oil-Water Separator 1833) was completed and will determine how to best design remediation systems for trichloroethylene, or TCE, and volatile fuel hydrocarbons in soil.

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**Next RAB Meeting:** Wednesday, April 13, 2016, 7 pm

**Location:** Larsen Charlie Hall

The Air Force will hold the next RAB meeting at 7 pm on Wednesday April 13, 2016 at the Larsen Charlie Hall.

## Galena FOL Restoration Contacts

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## Feedback, comments, and more information

I would like more information about the environmental cleanup of the former Galena FOL.

I would like more information about the Restoration Advisory Board for the former Galena FOL.

Please let us know how we are doing. Your comments and opinions are welcomed and assist the Air Force in providing the most accurate and up-to-date information regarding the cleanup for the former Galena FOL. Fill out this form and send it to the address listed below.

Name (Mr./Mrs./Ms.) \_\_\_\_\_

Organization \_\_\_\_\_

Street Address \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_

Additional Comments \_\_\_\_\_

\_\_\_\_\_

Detach and mail this section in a stamped envelope to: AFCEC/Public Affairs, 2261 Hughes Ave., Suite 155, JBSA Lackland, TX 78236-9853