

## Supplemental Site Characterization Triad Meeting No. 3, September 20, 2013

Former Galena Forward Operating Location, Alaska  
AFCEC Contract FA8903-08-D-8769, Task Order 0357

ATTENDEES: Fred Vreeman/ADEC Win Westervelt/CH2M HILL  
Dennis Shepard/ADEC Andi Beausang/CH2M HILL  
Margaret Moody/ADOT Vivian Tokar/CH2M HILL  
Sam Myers/ADOT Tom Wallis/CH2M HILL  
Donna Kozak/BAH Ron McComb/CH2M HILL  
Bill Hughes/CN Lauren Mancuso/CH2M HILL  
Dan McMahan/SW

FROM: CH2M HILL

DATE: September 20, 2013

Members of ADEC, ADOT, Booz Allen Hamilton (BAH), CH2M HILL, Cherokee Nation (CN), and Shannon & Wilson (SW) participated in the Former Galena FOL Triad call held via Live Meeting on September 20, 2013, at 10 am AST.

### Agenda:

1. Safety moment.
2. Field work status update.
3. Discussion of new site data and evaluation of progress towards SSC Work Plan objectives.
  - Initial Round- CG001/CG002 - DRO, RRO, GRO, and VOC rush data available for 1 of 2 sample locations (CG001CG002\_GP030).
    - All results below soil extent screening levels (SLs).
  - Initial Round- ST009 - DRO, RRO, and VOC rush data available for sample location ST009\_GP029 near OAP.
    - All results below soil extent SLs.
    - GRO data is not available in the database due to surrogate issue; EMAX will probably be able to analyze the GRO samples.
  - Initial Round- SS014- DRO, RRO, GRO, and VOC rush data available for 5 of 8 locations.
    - Results are in for GP023, GP024, GP025, GP027, and GP030 around the Birchwood Hangar foundation. There are low level TCE and PCE hits in the 5-7 and 10-12 ft sample depths. No step outs are recommended.
    - Waiting on results for SS014\_GO026, GP028, and GP029.
  - Initial Round-SS017/SS021 - DRO, RRO, GRO, and VOC rush data available for 1 of 3 locations.

- Near surface hits for petroleum in the 0-2 and 3-4ft depths, then clean at 5-7 to the bottom of boring at SS017\_GP027. No step outs recommended.
  - Waiting on results for SS017\_GP028 and SS021\_GP011.
  - Initial Round- ST020 – DRO, RRO, GRO, and VOC rush data available.
    - Exceedances of SL at ST020\_GP010 for GRO (438 mg/kg) at 7-8ft bgs. The field crew collected a sample at this interval due chemical smell of the soil. No exceedances of extent SL in soil in the standard interval samples.
    - No step outs are recommended in this area.
  - Initial Round- ST005 – DRO, RRO, GRO, and VOC rush data available
    - Exceedances of soil extent SL at ST005\_GP013 for DRO (4840 mg/kg), GRO (7360 mg/kg), benzene (31 mg/kg) exceedances and other VOC. Highest concentrations are at the 21-22ft depth. Except for benzene, the detections are below soil extent SL at the bottom of the boring 39-41ft.
    - No step outs are recommended in this area (see figure).
4. Open discussion for other items
  5. Schedule update for upcoming activities

## Safety Moment

Vivian started the call with a brief reminder to drive safely in the afternoon as the daylight changes. She also reminded the team that wearing reflective safety belts or vests during dark morning exercise or walking through the parking lot greatly increases your visibility to drivers.

## Field Work Status Update

This agenda item was summarized at the end of the call. Stepout hand auger samples discussed during Triad Call No. 1 were completed on Saturday, September 14. All planned soil and groundwater sampling activities have been completed. Surveying of new monitoring wells and soil sampling locations is being conducted this week.

## New Site Data and Evaluating Progress toward Work Plan Objectives

Rush data for 6 sites were discussed.

### CG001/CG002

A result from one of the two sample locations, CG001CG002\_GP030, was available for review. All hydrocarbon results were below soil extent SL but benzene was above extent SL at multiple depths with a max detection of 0.15J mg/kg at 10ft bgs (note there was an error in the meeting agenda stating all results below extent SL). The detections of benzene were all fairly low level and vertically defined at boring GP030.

- Triad Decision: No step outs needed in this area of CG001/CG002 based on available data.

### ST009

Only one soil boring was proposed for site ST009 and rush DRO, RRO, and VOC data were available for the call. There were no exceedances of soil extent SLs in the available data. GRO results were not available for quick turnaround analysis because these samples were affected by the missing TFT surrogate spike when submitted to the ASL lab. EMAX will be able to run the GRO analyses for the Site ST009 samples on a 21-day standard turnaround time schedule.

- Triad Decision: No step outs needed at ST009 based on available data.

## SS014

Partial data were available for SS014. The data were from site inspection (SI)-type borings in the former Birchwood Hangar foundation floor drains. Four of the seven targeted floor drain sample location results were available and all have TCE and/or PCE detections above the soil extent SL in the 5-7 or 10-12ft bgs depths. The relatively low level concentrations did not indicate any hot spot source areas of chlorinated solvents at these floor drains. (*Note Fred Vreeman and Bill Hughes joined the call during the SS014 discussion*). The results are fairly uniform in all the borings and may indicate that at one time the TCE/PCE spread with groundwater through this area. Donna reminded the group that the hangar was standing during the 1940's flood. Vivian noted that there is not a good step out location at this site because once you are outside of the footprint of the hangar foundation, drilling in the apron is restricted by ADOT's restriction to drill only in existing 2-inch cracks in the pavement.

Fred asked if the earlier samples (pre-2013) will be used to vertically bound the TCE/PCE contamination and Win responded yes, there are previous samples from within the foundation of the hangar that go to 40ft and are clean at depth. Fred commented that it looks like we have a large distributed low level TCE/PCE plume and that is what he expects to see discussed in the report.

➤ Triad Decision: No step outs needed at SS014 based on available data.

## SS017

Results from one sample, SS017\_GP027, are available. This sample is at the northern boundary of SS017. The area directly north of SS017 is an open area used as a lay down yard and currently a crane and other heavy equipment is stored here. The field team collected an additional sample in the 3-4ft bgs depth interval due to field indications of contamination.

- Win mentioned that this appears to be a surface stain issue not connected to the delineation of SS017 boundary.
- Fred was concerned that this contamination may be related to SS017 since the confirmation samples indicated contamination remaining in the soil at the 5-6ft bgs depth in the northern wall of the excavation.
- Donna stated that the Air Force wants to step out to the north and west to delineate DRO.

Win informed the team that samples may need to be collected by hand auger due to the crane and other equipment stored in this area.

➤ Triad Decision: Two step outs, 15-20ft to the north and west of SS017\_GP027, will be collected to delineate the DRO. Samples will be collected at 0-2 and 5-7 ft deep (and other intervals if there is field evidence of contamination). If hand augers are used the deepest sample interval will be the 5-7ft interval. If a drill rig can be used, samples will also be collected to the 10-12ft depth interval. If evidence of contamination is seen in the 10-12ft interval, deeper samples will be collected, similar to the SI-type process as described in the work plan. Samples will be analyzed for GRO, DRO, RRO, VOCs and PAHs (10%).

- Triad Decision: The Triad team pre-approved two additional step outs another 15 ft from the first step outs if there is evidence of contamination in the first step outs.

## ST020

GRO exceeded the soil extent SL in the 7-8 ft bgs interval. The field team collected a sample at this depth because there was field evidence of soil contamination. The GRO result (438 mg/kg) is only slightly above the GRO migration to groundwater clean up level, indicating that when the extent boundary is redrawn this will almost be right on the line. The GRO results from a more contaminated part of the plume at ST020\_GP005 were much higher (over 8,000 mg/kg) indicating that this is the edge of the contamination. Fred acknowledged that an additional stepout sample would not likely change the ultimate cleanup plan for the site. Donna agreed that any cleanup plan would include removing additional soil on the north west border of the site if that was the remedy.

- Triad Decision: Step out is not needed at ST020.

## ST005

ST005\_GP102 results were reviewed. The DRO, RRO, and VOC results were below soil extent SLs; however, GRO results were not available.

Boring ST005\_GP103, located between the Airport and GAVTC buildings, was also reviewed. The results exceeded soil extent SLs for petroleum hydrocarbons and VOCs at multiple depths, with the highest concentrations in the 21 ft bgs depth interval. The purpose of this boring was to provide additional analytical information on the soil source area since this location is near the heart of the groundwater plume. As discussed during the Redding Data Gap meeting, step outs at this location were not required. There are no good step outs from this location due to buildings to the east and west and the apron to the south. Fred agreed that this boring accomplished its goal.

- Triad Decision: No additional step outs at ST005.

## Open Discussion for Other Items

Fred recommended the Air Force review the 2013 data at SS014/Birchwood Hangar to see if the data supports an RI at the site based on the new TCE and PCE detections. Donna responded that the goal of the SI borings at SS014 was to see if a new source area could be identified and it doesn't look like there is one here. Donna and Fred discussed the potential need for additional wells in this area as part of a final remedy.

## Schedule Update for Upcoming Activities

The field team will collect the step out samples at SS017. No additional Triad calls are scheduled for 2013 and the field team will finish demobilizing from Galena in the next few days.

Call concluded at 11am.