



**Restoration Advisory Board (RAB) Meeting Minutes  
Sierra Army Depot (SIAD)  
28 May 2015, 6:00 p.m.  
Skedaddle Inn - Herlong, California**

<b>Attendee</b>	<b>Organization</b>
Cortney Carrier	SIAD, RAB Co-Chair
Paul Herman	SIAD, RAB Co-Chair
Rich Mendoza	Army Environmental Command (AEC)
John Steude	Lahontan RWQCB
Scott Armstrong	US Army Corp of Engineers (USACE) - Sacramento
Matt May	Associate Planner Lassen County
Michael Blizzard	Sterling Global Operations/Team
Hoa Voscott	ARCADIS/Team
Emily Sheu	ARCADIS

**1.0 Roll Call – Cortney Carrier, SIAD, RAB Co-Chair**

Ms. Carrier opened the meeting by welcoming the RAB members and attendees. Ms. Carrier welcomed Mr. Matt May Associate Planner for Lassen County. Mr May was in attendance representing Lassen County Planning Department as his office was interested in the status of groundwater remediation efforts on SIAD. Ms. Carrier asked for approval of the last RAB meeting minutes from the May 6, 2014 meeting. Mr. Herman stated his approval.

**2.0 Groundwater Remedial Sites as part of the Installation Restoration Program (IRP) – Hoa Voscott, ARCADIS/Team**

Mr. Hoa Voscott introduced himself as the as the project manager at ARCADIS. Mr. Voscott presented the progress of remedy in place (RIP) for the four groundwater sites: Building 210 Area, ALF-SSA, DRMO and TNT, and the UST site – Building 640.

**Bldg 210 Area: Presentation.**

Mr. Voscott presented the status of the remedy in place (RIP) - enhanced reductive dechlorination (ERD) with soil vapor extraction (SVE) for the Building 210 Area. The groundwater remedy system consists of six transects at Building 210 Area. Injections of two percent molasses completed at Transect 1 (50,000-gallons per well [50 ft. well spacing]), Transect 2 -6 (32,000-gallons per well [40-ft. well spacing]). Recent injections used a 2% molasses solution due to concerns with water use restrictions.

Started with quarterly ERD performance monitoring and transitioning into semi-annual performance monitoring per 2012 Annual Groundwater Monitoring Report.

Mr. Voscott presented the ERD results for the performance wells located downgradient of the transects. Monitoring of pH levels, total organ carbon (TOC) levels, and methane production levels show that the conditions are favorable for the remediation of Trichloroethylene (TCE) at all transects. A review of the current data was presented and it was noted that the removal of TCE are mainly on track or ahead of track as supported by the continued reductions observed in performance wells downgradient of the six ERD transects. When there were rebounds observed, reductions were observed after several months.

Injections completed at all Transects from August 2014 to March 2015. Semi-annual sampling is scheduled for June 2015. Will prepare annual groundwater report.

Mr. Herman inquired about the treatment of groundwater in a specific location. Mr. Voscott addressed his question.

**ALF/SSA:** Presentation.

Mr. Voscott presented the status of the ERD performance of ALF/SSA RIP. The Team continues to operate the ERD remedy injections and to conduct ERD performance monitoring. Injections completed from August to October 2014. Injection volumes were between 3,000-10,000 gallons per well.

Monitoring indicated favorable conditions for TCE remediation and steadily decreasing trends in TCE concentrations. Injections were completed in May 2015. Semi-annual sampling is scheduled for June 2015. Will prepare annual groundwater report.

**DRMO:** Presentation.

Mr. Voscott discussed the implementation of the ERD/SVE Treatability Test which consisted of installing six injection wells in November 2010 to remediate the highest groundwater TCE concentrations. Injection volumes were between 3,000-7,000-gallons per well for each of the semi-annual events.

Injections were completed in April/May 2015. Semi-annual sampling is scheduled for June 2015. Will prepare annual groundwater report. Continue to see reduction in TCE concentrations and conditions for ERD remain favorable.

**TNT:** Presentation.

Mr. Voscott discussed the progress of the ERD Demonstration Program and annual monitoring of the plume stability. There are 4 injection wells that are injected at a rate of 1,000-gallons per well on semi-annual basis. Continue to see reduction in TCE concentrations which supports the effectiveness of the remedy.

Injections were completed in May 2015. Annual sampling is scheduled for June 2015. Will prepare annual groundwater report.

## **Building 640 UST: Presentation.**

Mr. Voscott presented the site background and discussed the remedial investigation that was completed from November 2010 through September 2011 as part of the MMRP Contract. Free product removal initiated following RWQCB approval in April 2013. Completed fieldwork to close identified data gaps and collected soil vapor samples in July 2014. Received regulatory approval to complete well destruction on January 29, 2015. Completed well destruction activities in April 2015 and submitted well destruction letter in May 2015.

Will receive a No Further Action Letter from the RWQCB.

### **3.0 DRMO Yard RI/FS –Michael Blizzard, Sterling Global Operations**

Mr. Blizzard presented a summary of efforts completed at the DRMO Yard since the last RAB meeting. RI was completed in 2014. No MEC items were identified during surface, subsurface, and soil pile investigations completed during the RI. Explosive compounds were not detected in soil samples collected during the RI. Perchlorate was detected in 4 soil samples. All detected concentrations of perchlorate were below EPA residential Regional Screening Levels. The MEC hazard analysis completed as part of the RI indicated risks associated with MEC at the DRMO Yard were low enough to allow continued industrial use without further munitions responses efforts.

The RI concluded that no further action is recommended at the DRMO Yard due to the presence of MEC or MC. The Draft-Final Report submitted to DTSC and Water Board April 2015 and comments are pending. Pending DTSC comments and the Final RI report will be issued.

### **4.0 Military Munitions Response Program (MMRP) –Michael Blizzard, Sterling Global Operations**

Mr. Blizzard presented the work completed since the last RAB meeting for the seven sites that are part of the MMRP. The MMRP ROD was approved and signed on December 21, 2012. Annual review of MRSPP scores were completed in February 2015. The MRSPP score for the DRMO Yard was update based on the results of the 2014 RI and MEC hazard analysis.

Sterling completed the second annual fence and sign inspections (along with minor repairs) at Upper Burning Ground and BLM-Administered Land from and the remaining five sites in September 2014. Required repairs consisted of replacing faded signs, replacing a broken lock on a gate, re-attaching barb wires to fence posts, and replacement of fence posts. Sterling submitted the Year 2 Engineering Controls Inspection Results in December 2014.

## **5.0 PA/SI Nine Sites – Michael Blizzard, Sterling Global Operations**

Mr. Blizzard presented a summary of completed work and future work planned for the completion of the PA/SI at Nine Sites. PA/SI efforts are planned for nine sites located within the Main Depot area of SIAD.

- Deactivation Furnace Area
- JP-4 Facility
- Building 403 filter system
- Construction Debris Landfill
- Refueling System Sump
- Building 506 Battery Shop Site
- Wash Racks
- Building 577 Acid Shed
- Ore Piles

The Draft PA/SI work plan was submitted August 2014 and DTSC comments were received October 2014. Based on discussions completed with DTSC the PA and SI efforts were separated and a Final PA work plan issued in May 2015. PA field work is scheduled for July 2015.

The Draft PA findings issued with 90-days of completion of field effort. For sites determined to require additional investigation (SI efforts), the PA findings will be presented in SI work plan. The SI work plan will be completed and submitted for DTSC review.

## **6.0 Honey Lake BRAC Status Update – Scott Armstrong, USACE - Sacramento**

Mr. Armstrong provided a summary of the status of efforts at the Honey Lake BRAC area. Currently no funding is available to support the planned work at Honey Lake and BRAC is seeking additional funding.

## **7.0 Open Discussion**

None.

## **8.0 Schedule next meeting**

The next RAB meeting will likely be in the spring 2016. The meeting was adjourned at approximately 6:30 PM.