

Meeting Notes: Community Advisory Group - Aerojet Superfund Issues, January 19, 2011

1. Attendees

Janis Heple, Jackie Lane, Gary Riley and Kevin Mayer, (EPA), Travis Anderson (Golden State Water Co., Allen Tsao, Alex MacDonald (CVRWQCB), Larry Ladd, Jimmy Spearow, Stephen Green (Save the American River Assn.), Ed Cargile (DTSC), Claudette Altamirano (Recorder, Weston Solutions, Inc.).

2. The November minutes were approved.

3. Aerojet Community Updates: Tim Murphy, Aerojet

No additional comments to add to Alex Mac Donald's presentation.

4. White Rock Waste Dumps 1 and 2 Update on Draft RAP, CEQA and Public Comment- Ed Cargile, DTSC

Please see the attached DTSC Fact Sheet. The proposed remedy for the two landfills is to consolidate the smaller landfill WDR1 with WDR2 and contain the consolidated material with a four foot native soil cover. The WRDI portion of the IRTCS consists of approximately 50 acres of dredge tailings with the 6-acre burn dump at the center. A 500-foot buffer was established around WRD 1 to address potential concerns over noise, dust, and visual appearance. WRD2 is located on the Aerojet Site and has about 5 acres of tailings on the south central side of the Site.. The public comment period is open until February 15, 2011.

Deed restrictions will be recorded to ensure the landfill is not used for incompatible uses. Annual inspections by a civil professional engineer will be required to ensure that the remedy is functioning proper. Sacramento County will be responsible for completing these items.

Stephen Green expressed concerns and the lack of confidence regarding the County's ability to perform these functions.

Mr. Cargile noted that DTSC also has an obligation to perform an annual review and to look for any items such as permits etc. that may indicate activity within one quarter mile of the landfill.

Janis Heple expressed concern that previous experience with deed restrictions have shown them to be ineffective and does not keep tight control of restrictions with a change in use under the same ownership.

Ed Cargile responded that the deed restriction enforcement is getting better.

It was also noted that in the Sacramento County EIR this area is zoned as a park. Jimmy asks if these maximum numbers? Answer these are the upper confidence of the average.

Allen Tsao noted that the presence of elderberry bush an endangered species would require a consultation with the Fish and Wildlife Service.

DTSC clarified after the meeting that is included in the closure of the landfills.

The remedy will be about 16 feet tall when complete including the four foot soil cover. A "notice" fabric will be placed at the division of waste material and cover material.

The Remedial Action Plan (RAP) is a decision document. If the County doesn't meet the remedy requirements then the RAP can be reopened. There will be five year reviews to evaluate the effectiveness of the remedy.

It was asked if Aerojet will sell the property - the answer is maybe, however the area is already designated as a park and the surrounding development requires specific amounts of park space. (indicating that the function of the landfill was unlikely to change from park space).

In response to a concern regarding groundwater contamination from the landfills, Mr. Cargile responded that the contaminates in the landfill were not water soluble and WET test showed this to not be an issue. Alex MacDonald added that all the contamination was found in the first four to five inches of soil and groundwater was 40-50 feet below ground surface.

The operations and maintenance plan will have to have a soil maintenance plan.

5. Presentation on OU6 Documents - how to find what you are looking for, Gary Riley, EPA, Alex MacDonald RWQCB

Please see the attached slides from the presentation. Alex and Gary described where data can be located in the voluminous RI. Some of the items discussed that are in the RI include maps of soil types, dredged and undisturbed soil types, background soil studies. Ecorisk assessments are located in Volume II disk 2 appendices.

Allen – where do you get background numbers?

Ed – Aerojet made efforts twice for 12,000 acres. Methods revisited when new analytical methods available.

Allen – Is there a soil map for the RI?

Answer: yes. There are two basic soil types: Corning and Red Bluff. Also two types of background, disturbed and undisturbed.

Allen: So DTSC geologists looked at soil information?

Answer: Yes.

A number of questions were asked about hydrazines and NDMA in surface water. Hydrazines have not been found in water and not even found in the rocket test stands or sumps. Tests for NDMA were conducted at chem Plant 2 and not considered a contaminant of concern based on earlier testing.

Janis Heple noted that the sample data and figures do not necessarily tell the whole story and one must also look at the topography.

6. General Aerojet Cleanup Overview: Alex MacDonald. RWQCB

(Handout provided by Alex MacDonald)

- A **GET L-A. NO CHANGE** - Construction has been completed at the system is up and operating at approximately 900 gpm.
- B **GET KA: NO CHANGES.** Operating with all initially planned wells operating, including former **AC-7** (Georgetown). Flow is approximately 1700 gpm and could be increased up to 1900 gpm. **AC-12** has once again been turned off due to NDMA concentrations near 5 ppt. Aerojet is looking at having an “open house” for the public at **GET K-A** sometime in the future.
- C **AC-6** - treatment system to remove perchlorate has been completed. California Department of Public Health will require some testing of the system prior to use within the Golden State system. Discharge of water not into the distribution system is under Aerojet’s NPDES permit.
- D **AC-18** and **AC-23** (NO CHANGES) have been provided with perchlorate IX units with and startup of the treatment systems will commence when perchlorate concentrations become greater. AC-18 has undergone verification testing and the resin transferred to AC-23 for its demonstration to CDPH. Currently the wells contain around 1-3 ppb perchlorate.
- E **GET H-A: NO CHANGES.** Working on getting two new extraction wells (White Rock Park and Coloma Road area) on north side of US 50 back to GET H. The pipeline under US50 is completed and Aerojet is working with SMUD to provide

power to the two wells. The wells will likely be started up in two to three months. Delays are due to ability to supply the wells with power by SMUD.

- F **GET B** - NO CHANGES. **GET B** has been expanded to accept transfer of **GET A** facility to the **GET B** location and to accept water from new extraction wells located in southern Zone 3 near Teichert. Two extraction wells north and east of Teichert are now hooked up to GET B. Two other wells have also been hooked up, but are not being pumped at this time - south on **Teichert Facility** next to the Tracy property.
- G White Rock Road North Dump - The treatment systems is up and operating to treat two extraction wells and the AKT-1 well. Water is currently sent back to GET B for disposal. When needed by **Teichert** for their use the water will be provided to them.
- H New Monitor Wells: No new monitor wells.
- I **Chettenham Well**: NO CHANGES. The Chettenham well remains off and the concentrations of perchlorate have remained around 3-4 ppb. Aerojet has reached an agreement with Cal-American Water Company concerning the Chettenham Well. The treatment system has been removed.
- J NO CHANGES. Aerojet and Sacramento County are continuing negotiations on water replacement issues. Meetings are occurring one to two times per week. City of Folsom, The Boeing Company and Golden State Water Company also participate in some or all of the meetings.
- K Perimeter Operable Unit - NO CHANGES - Aerojet is looking at removal of soils at site **C41** within the PGOU. Soils are impacted by perchlorate to the groundwater (approximately 80 feet) and perchlorate is in the groundwater. The area is within the proposed development area. To facilitate development, Aerojet would like to have the issue addressed sooner rather than waiting for ROD and subsequent order/implementation. Soils would be removed in the upper 10 feet to levels that allow unrestricted use.
- L Boundary OU - EPA is in the final stages of completing the draft Record of Decision for the Perimeter Groundwater Operable Unit (OU-5). The Feasibility Study should come out next week.
- M Treatability Studies:
 - i) **Line 03**. Redox box delivered along with walnut shells and sulfut to look at perchlorate reduction. Recent column studies have shown reduction of perchlorate from ppm levels to less than 4 ppb in 2.5 minutes.
 - ii) **HOGOUT** - NO CHANGES - Treatability study on-going to look at in-situ treatment of soils and groundwater has been completed. Aerojet is now looking at constructing and evaluating its "box of rocks" system.

N Island OU -NO CHANGES. Remedial Investigation Field Work: Second round of field work is complete. Assessing data for the RI/FS. IOU groundwater modeling work plan being developed.

O Eastern Operable Unit - NO CHANGES - all initial and follow-up sampling completed last week. Aerojet and their consultants will now commence development of the report.

P Central Operable Unit - NO CHANGES. Draft sampling plan has arrived, agency review has been completed and comments have been sent to Aerojet.

Q IRCTS:

- i) **Sigma Complex In-situ Bioremediation of Groundwater.** NO CHANGES - System has been operational for two years. Boeing is adding an electron donor to remediate high concentrations on perchlorate in groundwater at the Sigma Complex. Boeing is recirculating groundwater and adding an electron donor (acetic acid) to stimulate biological growth and reduction of perchlorate. Initially the system will include one extraction and one recharge well, and several monitor wells. System is working very well. Boeing has requested amending permit to allow discharge of a small portion of the water (after treatment to remove perchlorate and VOCs) to the perchlorate source area to help flush the perchlorate to the biological treatment system. Amended requirements to allow this to occur will be considered by the Board in December.
- ii) Additional soil sampling to define extent of perchlorate at the **Former GET F Sprayfield** has been completed.
- iii) **White Rock Road Dumps 1 and 2.** NO CHANGES. These two old burn dumps will be combined at the Dump 2 location on the IRCTS. That area is slated to be a park in the Rio Del Oro development. Looking at doing the work the end of this summer or next spring.
- iv) (NO CHANGES) The first modular biotreatment cell at **GET F Sprayfield and PBA** to remove perchlorate from extracted groundwater has been constructed and filled with media. The liner was found to leak. Thus, the cell was emptied and the liner repaired. The cell will be tested and then commence operation where the treated water is sent back to the ground for recharge.

Looking at mercury issues along Alder Creek. Looking at background levels. There is a dam that Folsom owned by the City of Folsom on Alder Creek; sediment has built up. (Alder Creek Watershed Group) Sacramento County.

7. The next CAG meeting is Scheduled for March 16th 2011.