

**Final Meeting Notes: Community Advisory Group (CAG) - Aerojet Superfund Issues, January 15, 2014**

Janis Heple, CAG Chair, began the meeting with Introductions at 7:00 p.m.

**1. Introductions and Attendees**

Attendees:

Alex MacDonald (Regional Water Quality Control Board [RWQCB])	Jimmy Spearow (CAG)
Blair Stone-Schneider (Skeo Solutions)	Julie Santiago (EPA)
Burt Hodges (Save the American River Association)	Kathy Lawson (Golden State Water Company)
Chris Fennessy (Aerojet Rocketdyne)	Kevin Mayer (EPA)
Gary Riley (U.S. Environmental Protection Agency [EPA])	Paul Schubert (Golden State Water Company)
Jackie Lane (EPA)	Rick Bettis (Sierra Club and others)
Janis Heple (CAG)	Rodney Frake (Aerojet Rocketdyne)
Jerald Drobesh (Resident of the City of Rancho Cordova)	Stephen Green (Save the American River Association)
Jessica Cooper (Recorder, Sullivan International Group, Inc.)	Steven Ross (Department of Toxic Substances Control [DTSC])
	Tim Murphy (Aerojet Rocketdyne)

Comments will be addressed on the September 18, 2013 Draft Meeting Notes and a final version will be submitted to the CAG.

**2. Aerojet Community Update – Tim Murphy, Aerojet Rocketdyne**

Tim Murphy: There are no updates and there is no update regarding the Aerojet Rocketdyne (“Aerojet”) employee who was injured on the job in November 2013.

**3. Aerojet Cleanup Updates – Gary Riley and Kevin Mayer, EPA**

Kevin Mayer: EPA staff changes were announced, including a new section chief and branch chief. Mr. Mayer introduced Ms. Julie Santiago, who will be replacing Mr. Gary Riley.

Gary Riley: An overview and update of Aerojet was discussed. The Aerojet Superfund Site was divided into smaller size areas called Operable Units (OU) to prioritize investigation and cleanup work, which has been ongoing for decades. The Perimeter Groundwater OU and Western Groundwater OU have Records of Decision (RODs) specifying the selected groundwater cleanup plans.

Mr. Riley said much of last year EPA has been discussing the Boundary OU (OU 6). The OU 6 Proposed Plan public comment period ended September 20, 2013, and the EPA is working on the Responsiveness Summary.

Mr. Riley presented an overview and update of the Island OU (OU 7), areas where there was the most intensive manufacturing. EPA is working on the draft Remedial Investigation (RI). This document summarizes soil, groundwater, and contaminant information and has been submitted to the agencies as a draft version. The agencies have reviewed the document and Aerojet has submitted a Response to Comments (RTC) document. The agencies are currently reviewing the RTCs, and then the document will be available for CAG review after any further comments are addressed by Aerojet. EPA will also implement recommendations based on the Technical Assistance Needs Assessment (TANA) results.

The Human Health Risk Assessment (HHRA) and Ecological Risk Assessment (“Eco RA”) will be done later in the year following the RI.

Janis Heple: Will this be ready in the next few months?

Mr. Mayer said it will not likely be ready for the next CAG meeting in March.

Janis Heple: Will there be any sort of spatial or visual products on the presentation?

Mr. Mayer said EPA will keep that in mind. He said EPA may not have any details, but will present any available information. Mr. Riley said the CAG may need to dedicate more time outside of the meeting to review the document in more depth.

There is not a straightforward cleanup in the Boundary OU due to the varying sources of contamination. In the Island OU, sources can be challenging problems that go to depth and required complicated evaluation. The contamination can be orders of magnitude higher in the Island OU compared to the Boundary OU; therefore, EPA would like to convey this complex information to the CAG as well. Mr. Mayer said OU 6 is mostly surface contamination and OU 7 has deeper contamination that needs to be brought under control. He said we can expect long-term cleanup in these areas, and appropriate future land use plans will continually be evaluated. Mr. Riley said there will be a lot of information presented to the CAG, and EPA will use the results from the TANA to communicate this complex information.

Jerald Drobesh: How many water supply wells are located at Aerojet?

Mr. Mayer responded there are hundreds of monitoring wells and extraction wells, but there are no drinking water supply wells on the Aerojet property. There is clean water in deeper aquifers at Aerojet, but there are no water supply wells.

Paul Schubert: Golden State Water Company has closed 12 municipal wells (4 were closed due to nitrosamines).

Alex MacDonald: The contamination spread west and the reach goes off in every direction except east. There are different zones of contamination as well. Contamination,

such as from perchlorate, can be biodegraded and biodegradation can be assisted through injecting compounds into the subsurface or “in-situ bioremediation”.

Jerald Drobesh: Have any other agencies dealt with a perchlorate problem?

Mr. MacDonald responded, yes. In addition, Aerojet was an example site for the Interstate Technology & Regulatory Council (ITRC) guidance on perchlorate remediation in soil and groundwater. The process on how to cleanup of perchlorate is now well known.

Jerald Drobesh: Does Aerojet pay for new wells?

Mr. MacDonald said Aerojet is required to replace supply wells that are found to exceed specified criteria and work with the water purveyor on a plan for replacement.

Jerald Drobesh: How is Boeing involved?

Mr. MacDonald said Boeing is a co-Responsible Party (RP) with Aerojet at the Inactive Rancho Cordova Test Site (IRCTS), both are involved with cleanup at this site. Ms. Heple said additionally, Area 40 involves the City of Folsom. Mr. Riley said there are parts of Area 40 that have been suggested as buffers and open space.

Burt Hodges: Will future use be evaluated?

Steve Ross: The agencies will not allow development to occur if the land is not suitable for a particular use.

Mr. MacDonald said the agencies can bring the CAG up to speed even without the Remedial Investigation (RI) ready to go for CAG review.

Mr. Riley said he will be involved with Aerojet to complete the OU 6 Record of Decision (ROD).

Ms. Heple said she hoped the agencies could do a better job of updating the CAG on document schedules.

#### **4. Draft Technical Assistance Needs Assessments (TANA) Findings – Blair Stone-Schneider, Skeo Solutions**

Ms. Stone-Schneider said Skeo Solutions is the prime contractor for the EPA for technical assistance and working with community groups. Skeo Solutions serves as a third-party entity to provide technical assistance to communities at no cost. This “needs assessment” is intended to provide recommendations so the agencies may get a better handle on what a community needs. It identifies if a community needs additional assistance to understand the information agencies present. The results are developed into a prioritized list of recommendations and provided to the EPA.

The first step of the TANA was to gather the information and then identify needs. The information-gathering process started in June 2013 and continued into the July, September, and November CAG meeting in 2013. Approximately 20 interviews were conducted in November. This information was reviewed and the following areas of particular interest were identified:

1. Understanding the Cleanup Process
2. Understanding Contamination as It Relates to Land Development
3. Enhancing Community Outreach and Education

The following recommendations were developed from the particular areas of interest identified. Ms. Stone-Schneider said, please note there is no legally binding process for the recommendations.

1. Provide the CAG and broader community with a better understanding of the overall remedial process and specific cleanup details for each OU at the site.
2. Provide the community with more information on groundwater contamination and its potential impact on development, such as additional map layers and visual aids.
3. Provide more information to the CAG and interested stakeholders on soil contamination and related issues of vapor intrusion in areas slated for development.
4. Provide technical support to assist in greater outreach and education to community members who surround the site.

Ms. Stone-Schneider said EPA and Skeo Solutions will work with the CAG to determine what tasks will be implemented.

Jerald Drobesh: When Mather started having problems, they sent letters to the community and assuring the community that they were testing and closing wells they deemed unsafe. Communication is important.

Rick Bettis: Can the community communicate with Skeo directly – what is the line of communication if we have technical questions?

Ms. Stone-Schneider said during the TANA, Ms. Heple was the person to communicate directly with.

Mr. Mayer said the community is always welcome to communicate directly with the regulatory agencies.

Mr. Hodges said the TANA presentation and recommendations were good. Furthermore, he noted that there were no County representatives in attendance. He said he would like to see more of that. He said he attended the Board of Supervisors meeting and the community seemed concerned about development.

Ms. Heple said she would also like to see representatives from the City of Folsom in attendance as well.

Mr. Murphy asked if the concern is when Aerojet discusses development?

Mr. Hodges said affordable housing is a concern for the homeless.

Mr. Murphy said the County is and has been involved in the entire process, and input from the regulatory agencies is provided to them.

Ms. Heple indicated that it appeared the County was not aware of environmental issues during the Proposed Plan. She said it would be great to see representatives from the City of Rancho Cordova, City of Folsom, Sacramento County, and other stakeholders, especially during the OU 7 work.

Mr. Murphy said Aerojet has been involved and communication is occurring; it is in Aerojet's best interest to continually communicate with stakeholders.

Ms. Heple said Skeo Solutions did a great job in gathering all their information. She said an important action item will be to figure out how to get a better sense of the general schedule of documents and to prioritize things moving forward, such as budget issues. She asked if Skeo Solutions will continue to assist the CAG.

Jackie Lane: EPA is not sure about that at this juncture. Continued support may be done virtually.

Mr. MacDonald said he is happy to talk to community members anytime.

Ms. Heple said she was also pleased water purveyors attend the CAG meetings.

Mr. Schubert said the Golden State Water Company meets with the City of Rancho Cordova twice a year and provides updates at City Council meetings.

Jerald Drobesh: If a well is contaminated, who decides to close it, the water purveyor?

Mr. MacDonald responded, the Responsible Party (RP) decides if to take the well out of service, but Aerojet is required to provide replacement when concentrations reach specified levels – prior to exceeding drinking water standards.

Mr. Drobesh said the community may not understand the highly technical language.

Ms. Lane said that is why the EPA will try to explain things in plain language.

Ms. Heple said some people focus on different issues as well, for example, water or something else.

Mr. Drobesh said he was happy to see efforts to communicate and reach out to the community.

## **5. Regional Board Aerojet Cleanup Overview – Alex MacDonald, RWQCB**

Presentation notes and activities map were handed out (see attachments with final meeting notes).

Alex MacDonald: The American River Groundwater Extraction Treatment (ARGET) facility expansion was completed and is operating at a capacity of 3,500 gallons per minute (gpm) with the addition for the treatment of perchlorate. GET D is closed and water from the GET D extraction wells now goes to ARGET. GET D was the first treatment facility, built in 1981 and now shut down.

Mr. Mayer said water previously flowing to GET D will be redirected to a more improved facility.

Mr. MacDonald said the GET AB facility is going to be running at a capacity of 3,500 gpm and a new ultraviolet (UV) light system will be installed to reduce the power used to operate the facility. The GET E/F facility modifications are underway by installing ion-exchange units for perchlorate removal. These modifications are nearly complete.

Mr. MacDonald then discussed new monitoring wells and new extraction wells installed, with the goal to continually define the plume boundaries and capture zones.

The development of an Engineering Evaluation and Cost Analysis (EE/CA) for soils is in draft version. A key component will be receiving approval from the community. The EE/CA has been proposed by Aerojet to expedite soil cleanups where the proposed remedy is excavation; for example, “scoop and hauls.” The primary contaminants are metals at these sites and the prescribed remedy is to excavate and properly dispose the material.

Area C4, burn dumps at Aerojet, is 99 percent complete. Aerojet scooped-up two more drums of material and had completed confirmation sampling. Area C41 is complete. The installation of a soil vapor extraction system is slated for Area 4900, near GET D, to remove volatiles from soil.

For Area 39 Open Space, Aerojet is pilot testing a small treatment system that removes perchlorate from a groundwater spring prior to entering a nearby creek.

The removal of soil from White Rock Dump 2 to White Rock Dump 1 has been completed, and Aerojet is in the process of installing the three-foot-deep cover.

Ms. Heple mentioned a topic applicable to issues discussed at the Water Forum: with drought conditions, and increased pumping by water purveyors, how will this affect the plumes?

Mr. MacDonald said groundwater modeling conducted took everyday use and “stress” periods into consideration. Groundwater elevation and concentration data will continue to be monitored to evaluate modeling accuracy. All three regulatory agencies and Aerojet continually discuss groundwater conditions. Aerojet is required to do an outer barrier evaluation on an annual basis that looks at plume capture.

Golden States has reduced their use of groundwater; it was 30% surface water and 70% groundwater. Their use is now 65% surface water and 35% groundwater. Groundwater (GET water) is discharged by Aerojet to the American River, and Aerojet is working with Carmichael Water District and Golden State Water Company to utilize Carmichael’s Rainey collector to take the water back out of the river. A pipeline will be constructed to bring the water back under the river to be used by Golden State to replace lost water supplies.

Aerojet plans to take GET AB water to use for industrial purposes on their site – 300 acre feet/year beginning in 2014.

Mr. Schubert said there is a project underway to evaluate water replacement that consists of Aerojet providing treated water to parks groups. The planning stage will occur in 2014 and hopefully operational in 2015.

## **8. Tentative 2013 Meeting Dates – Action Items**

The next Aerojet CAG meeting is scheduled for March 19, 2014. Tentative dates for 2014 are shown below:

Next meeting date: March 19, 2014

- Tentative meeting date: May 21, 2014