Final Meeting Notes: Community Advisory Group (CAG) –
Aerojet General Corporation Superfund Site Issues
Meeting Date: May 20, 2015

1. Introductions and Attendees

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

Attendees:

Alexander MacDonald (Regional Water Quality Control Board)
Alta Tura (Sacramento Area Creeks Council)
Brit Snipes (City of Rancho Cordova)
Bryon Rinde (Golden State Water Company)
Chris Fennessy (Aerojet Rocketdyne Holdings, Inc. [Aerojet])
Jackie Lane (U.S. Environmental Protection Agency [EPA])
Janis Heple (CAG Chair)
Jessica Cooper (Recorder, Sullivan International Group, Inc.)
Jimmy Spearow (CAG)
Jerald Drobesh (Community Member)
John Valdes (Sacramento Suburban Water District)
Julie Santiago (EPA)
Kevin Mayer (EPA)
Rick Bettis (Sierra Club and others)
Stephan Green (Save the American River Association)
Steve Nugent (Carmichael Water District [Carmichael])
Steven Ross (Department of Toxic Substances Control [DTSC])

The Draft Meeting Notes from the meeting on March 18, 2015 were finalized.

2. Aerojet Community Update – Chris Fennessy, Aerojet

Mr. Fennessy announced the company restructuring was completed and now known as "Aerojet Rocketdyne Holdings, Inc." effective on April 20, 2015.

Mr. Fennessy said Creek Week occurred in April 2015, which was organized by the Sacramento Area Creeks Council. Aerojet temporarily stopped discharge from Groundwater Extraction and Treatment (GET) K to allow cleanup to occur within the Cordova Drain that empties into the American River. Ms. Tura announced that this drainage channel has been re-designated as "Cordova Creek".

3. Aerojet Cleanup Updates –Julie Santiago-Ocasio and Kevin Mayer, EPA

Ms. Santiago said the final version of the Record of Decision (ROD) for Boundary Operable Unit (OU-6) is almost done – she said the final version will be submitted to the State regulatory agencies, and their concurrence will be needed.

Mr. Fennessy said Aerojet is working on addressing comments on the draft Remedial Investigation report for the Island Operable Unit (OU-7), and then it will be submitted back to the regulatory agencies for concurrence. He said there were changes in screening

levels and criteria since 2007, and they will need to fill in data gaps. He hopes it will be finalized near the tail-end of summer.

Ms. Santiago said she attended a meeting with the prospective buyer for Area 40. She said the EPA has not decided to split-off Area 40 as a separate Operable Unit (OU). Mr. MacDonald said the prospective buyer for Area 40 held individual meetings with the regulatory agencies, including the Regional Water Quality Control Board and DTSC. Mr. MacDonald explained the developer has seen the data, so they just wanted to go over any potential restrictions. Ms. Santiago said it was more of a "process meeting" including the timeframe. Mr. Fennessy said the potential buyer plans to purchase lands around and to the east of the Superfund site – the buyer wanted to know if there any future pitfalls or concerns. Ms. Heple asked if the regulatory agencies prepared notes from the meetings with the developer, and Mr. MacDonald said they did not have notes.

Question: Will the main portion of Aerojet be sold down the road? Mr. Fennessy said property can't be sold until the regulatory agencies make decisions on remedies, etc. Additionally, as a part of the partial consent decree, all the agencies need to be notified prior to any planning for development.

Question: What entity is purchasing the property? Mr. MacDonald explained that a developer will buy the property surrounding the proposed park, and the proposed park property will be deeded to the City of Folsom.

Question: Will the community be able to weigh in prior to the decision to extract Area 40 into its own OU? Ms. Santiago said the EPA will communicate any progress, such as if EPA will make the decision to split-out Area 40 as a separate OU. Mr. MacDonald reminded the group that the site still needs to go through the ROD phase; deciding on land uses, etc. Mr. Mayer indicated that the EPA has broken-up Superfund sites in the past, but this case is complicated because there are so many factors the EPA needs to consider. He said there is no formal process to involve the public in this sort of "administrative" procedure; however, the EPA will keep the CAG apprised of the situation. Ms. Heple discussed the CAGs concern about this causing less time/resources for other more high risk sites. Mr. Mayer explained that EPA identified protection of the drinking water wells as a more immediate priority than addressing the sources of the plumes right away. The groundwater cleanup decisions came first at Aerojet.

Question: How is land use decided? Mr. Fennessy said risk will be assessed for the different land use types, so based on that analysis, the agencies will determine what land use can be allowed.

Question: For the open space areas, how will you guarantee people will not utilize the space? Mr. Fennessy said aside from an aesthetically pleasing fence, there will be periodic monitoring. He said any structure or remediation system built will be a part of a Land Use Control and required to be kept maintained.

Question: Who will provide water in that area? Ms. Heple responded, the City of Folsom.

4. Island Operable Unit (OU-7); Line 4 – Chris Fennessy, Aerojet

Note: Maps were presented (see attachments with final meeting notes).

Mr. Fennessy discussed Line 4 within the Island Operable Unit (OU-7). He provided an overview of the history of Island Operable Unit (OU-7). He explained the location, physical features, and history of Line 4. He said there are many potential source areas such as wash areas that drained to ponds. He said Aerojet started in 2005 with a Sampling and Analysis Plan to investigate OU-7 – all historical data was used, and helped define where future sampling may be needed to address the entire area. He said aerial photographs from 1951 to 2006 were reviewed for any evidence of activities, such as ground scarring that could indicate a potential release of contaminants to the environment, outside of the pre-defined source areas (these areas that were identified through aerial photograph research and site visits were termed "Features of Interest" in the Sampling and Analysis Plan). He said during the time the first investigation was being performed in this area (1991), the first water supply well was impacted and all resources went into mitigating risk to groundwater – now Aerojet is focusing back on the source areas.

Mr. Fennessy said 10 source areas were identified in Line 4, such as mix stations or anywhere tools were cleaned with industrial solvents, such as trichloroethylene (TCE).

He mentioned the Aerojet maps and figures had to be split into different areas because there is so much data for the entire Line 4.

He explained that the purple boundaries on the maps signify areas with potential human health risk, such as where high concentrations were detected and designated as Risk Management Decision Boundaries (RMDB). He said sampling was not conducted again within the RMDB areas because concentrations were so high, these areas will automatically be included in the Feasibility Study. He said instead, samples were collected to evaluate the extent of RMDB areas.

He explained the green boundaries on the maps signify areas with potential ecological risk, such as where there is potential risk to burrowing animals. Additionally, he said the dashed lines signify areas with data gaps, which will be investigated.

Mr. Fennessy mentioned the perchlorate screening level is 60 µg/kg in soil for the protection of groundwater.

Question: Can the source areas be excavated out? Mr. Fennessy said yes; however, in some cases the contamination is too deep for excavation to be feasible.

Mr. Fennessy explained the idea of strategically placing wells intended to monitor water bearing zones deeper than the first water bearing zone so that they do not become conduits for contamination – so in some cases it's too dangerous to place wells near the

sources. Mr. Mayer explained that some of the wells near source areas may be converted to extraction wells to contain and cleanup up some of that source mass.

Question: Where does the water from the wells go? Mr. Fennessy said purged groundwater is contained and properly disposed.

Ms. Heple commented that this seems like a major hurdle to fully understand the site, and Mr. Fennessy concurred – he reiterated Mr. Mayer's comment from another meeting regarding the fact that each of these areas could be considered a Superfund site on its own. Ms. Heple commented that reviewing the large documents on a small computer screen can be difficult. Mr. MacDonald offered to have CAG members review hard copies at his RWQCB office – he can help, and mentioned there is a repository in the library at Sacramento State University.

Ms. Heple discussed the possibility of visiting a site, and Mr. Fennessy said Aerojet can set-up a location to visit. Mr. Mayer suggested a site visit to Area 49000 because it is outside of the Aerojet security, and there is a brand new soil vapor extraction system that would be great to tour.

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

Note: The presentation notes and activities map were distributed (see attachments with final meeting notes).

Mr. MacDonald described the new monitoring wells and extraction wells installed.

He mentioned the installation of six new monitoring wells is in progress near the factory outlets in the City of Folsom, particularly to investigate N-Nitrosodimethylamine (NDMA) and perchlorate.

He said in the Hogout Area, an extraction well was installed last year and only extracts ½-gallon per minute, so a replacement well is being evaluated for installation in the near future.

He said two new extraction wells were installed and connected to the GET AB facility.

He discussed the progress of the pipeline from GET J to connect three new Layer E extraction wells in Gold River. He said there is approximately 2,000-feet more to be constructed.

He updated the CAG on the Area 49000 soil vapor extraction system. He said it will be expanded to encompass as larger radius of extraction. He said the Air Quality Management District is evaluating the stack emissions because there are limitations for concentrations emitted.

He indicated there are a few documents under review by the regulatory agencies including the Area 40 Remedial Investigation. Additionally, he indicated there are three ongoing treatability studies, one regarding the use of encapsulated bacteria for NDMA destruction at GET EF.

He explained that Aerojet is in discussions with the County of Sacramento, Cal Recycle, and regulatory agencies regarding removal of the Aerojet Landfills.

Question: Are the development plans near the landfill moving quickly? Why can't the landfill be removed first? Mr. Fennessy said it is estimated to cost over $20 Million, so the company doesn't want to incur the cost of landfill removal until it is required for development.

Question: What category of homes are in the development plans where the landfills are located? Mr. Fennessy said only single family homes, no commercial or multi-use like at Easton Place.

6. Partial Deletions – Kevin Mayer, EPA

Mr. Mayer explained the partial deletions process, and indicated that this item will be further discussed at the next CAG meeting in July 2015. He said EPA may publish a notice of intent (NOI) for deletion, set a public comment period, and publish a final NOI. Although the process allows an option for fast track when comments are not expected, EPA would be sure to have a full comment period at this site.

7. 2014 Meeting Dates

The next CAG meeting is scheduled for Wednesday, July 15, 2015 in the American River South Room.

The subsequent meeting is tentatively scheduled for Wednesday, September 16, 2015 in the American River South Room.