Meeting Notes: Community Advisory Group - Aerojet Superfund Issues, November 19, 2008

1. Attendees

Janis Heple, Cindy Caulk (Aerojet), Kevin Mayer (EPA), Travis Anderson (GSWC), David Lancaster (CDPH), Larry Ladd, Claudette Altamirano (Recorder, Weston Solutions, Inc.).

2. Approval of Meeting Minutes

The September meeting minutes will be reviewed at the next meeting in January.

3. Aerojet Community Updates: Cindy Caulk, Aerojet

Cindy Caulk summarized the following:

> Fair Oaks – A second public meeting will be held regarding the installation of a monitor and extraction well in Fair Oaks on December 9, 2008. This meeting will address comments received in the first meeting including the results of a search for an alternate site and ways to minimize impacts of the project.

4. Preliminary Briefing on the Remedial Investigation of the Perimeter Groundwater Operable Unit. Kevin Mayer, EPA

The agencies are currently reviewing the remedial investigation for the Perimeter Groundwater Operable Unit. The document should be available for public review by early 2009 and a proposed plan is anticipated to be published in the spring of 2009.

Mr. Mayer reviewed the areas included in the Perimeter Groundwater Operable Unit which includes the groundwater contamination that rings the site including groundwater in all areas but OU3. The Perimeter OU also include seventeen small land areas previously used as UST sites, sumps, and/or ditches that received industrial discharges. All 17 sites are located on land above the groundwater OU boundary. The 17 ground sites potentially posed a risk to ground water or human health and will require soil removal and/or deed restrictions.

The understanding of the groundwater profile acquired as new data was gathered over the last 20 years advanced the overall understanding of the contamination problem. In 2002 a modification was made to the cleanup order where Aerojet agreed to take obvious steps to capture the groundwater plume prior to the issuing of a record of decision. This agreement between Aerojet and the Agencies led to the installation of the extraction wells that are now in place on the site.

EPA had serious concerns regarding vapor intrusion given that commercial and residential development would occur over shallow contaminated groundwater. The initial model assumptions were not reassuring to the risk assessors that the true risk was captured. About 100 more vapor monitoring wells were added to gain more information. The information from the monitoring wells along with a few minor “tweaks” to the model is leading to the conclusion that vapor intrusion is not a significant pathway.

The ground water sections of the draft report are being reviewed and EPA anticipates that only minor corrections will be required to the document and these will not change the final conclusions.

The land evaluation is more straightforward. Some of the 17 areas posed an unacceptable risk and will need to be removed. The presumptive remedy is a standard remedy based on past experience and for small areas of contaminated soil the presumptive remedy is to remove the soil.

A concern was voiced regarding the source areas on other OUs that are sources for groundwater contamination. Cindy Caulk from Aerojet said that potential source areas where the highest chemical concentrations are within the Aerojet site footprint will be kept under Aerojet control and that there are no current plans to develop these areas.

5. Update on Perchlorate Regulatory Issues (New EPA standards and State Standard effects for Aerojet): Kevin Mayer, EPA.

Mr. Mayer provided an overview of the proposal by EPA to not regulate perchlorate in drinking water that was published in the Federal Register on October 10, 2008. The EPA justified it decision based on its finding that there were too few people affected to provide a meaningful reduction in risk. There are three parts to the argument to regulate a contaminant in drinking water, 1) the material is toxic. 2) It occurs in public water supply systems and 3) has the possibility of a meaningful reduction in risk.

There are numerous ways to calculate the reference dose and numerous ways to choose the most at risk population and uncertainty numbers. The EPA's choices resulted in a level of 15 ppb Perchlorate as being protective of the most sensitive target (mother /fetus). There is controversy regarding the assumptions in their calculations including using the mother/fetus rather than an infant as the most sensitive target. Then the EPA found that only 2 water systems out of 7000 had Perchlorate levels over 20ppb. (Addendum by Kevin Mayer: Mr. Mayer explained that fewer public water systems have detections of perchlorate at higher concentrations. The EPA documents says: "Only 31 out of 3,865 systems (0.8 percent) detected perchlorate in drinking water above the HRL of 15 micrograms/L. EPA's best estimate is that 0.9 million people (with an upper bound estimate of 2 million people) may be consuming water containing perchlorate at levels that could exceed the HRL for perchlorate and the Agency estimates that fewer than 30,000 of them are pregnant women at any given time.")
If the same assumptions are used but the calculations are performed for an infant then the protective level could be lower, perhaps 3 ppb. Newer human studies were not completed in time for the National Academy of Sciences to review the data and therefore these studies were not included in EPA's evaluation. There is no impact from the current EPA proposal on Aerojet. California regulates perchlorate at 6 ppb as an MCL and this is in the record of decision as an ARAR.

Larry Ladd added that the Environmental Working Group will sue if EPA follows through with finalizing the rule. Given that major changes may occur in EPA with the new administration the view on the current proposal may change.

6. Next meeting date January 28th, 2009.