

## **Meeting Notes: Community Advisory Group - Aerojet Superfund Issues, November 16, 2004**

### **1. Attendees**

Charles Berrey (USEPA, Aerojet RPM), Alex MacDonald (Regional Water Quality Control Board), Tricia Carter (Recorder, CH2M HILL), Don Hodge (EPA), George Waegell, Paul Schubert (Southern California Water Service), Janis Heple (CAG member), Jean Young (Sacramento County), Michael Girard (Aerojet), Tim Murphy (GenCorp), Ed Cargile (DTSC), Ed Winkler (Sacramento Groundwater Authority), John B. Hervey (Gold River resident), Monica Brown (California Cancer Registry, presenter)

### **2. Update on major milestones and deliverables produced since the September meeting for OU-3 and other environmental related efforts at Aerojet.**

Charles Berrey updated the CAG on recent regulatory actions. Since the last meeting, the agencies have approved the following submittals:

- Aerojet's request for further extension of the deadline for producing Short-term and Long-term Water Replacement Contingency Plans (with no objection from water agencies).
- Aerojet's OU3 General Monitoring Plan (with update by December 17, 2004).
- Aerojet's Draft Carmichael Area Groundwater Investigation Data Transmittal, which provides the results of the analysis of water samples from six monitoring wells north of the American River. Results were all non-detect for NDMA. One more well is planned to the west of the Carmichael lobe of the plume in Ansel Hoffman Park to ensure that NDMA is not migrating downgradient.
- Six of seven updates to Aerojet's Standard Operating Procedures for analyzing contaminants, while disapproving one SOP update for hexavalent chromium.
- Aerojet's Field Sampling Plan for Area 39 and Site C41 subject to comments on OU5 Remedial Investigation/Feasibility Study.
- Aerojet's Area 41 2004-5 Groundwater Monitoring Work Plan, with comments (see item 6).

The agencies disapproved Aerojet's Review and Technical Evaluation of a fate-and-transport model of groundwater flow and requested that Aerojet add fate-and-transport modeling to its current particle-tracking model.

Since the last meeting, the agencies have commented on the following:

- Aerojet's Groundwater Extraction and Treatment system H (OU3 Area 1) construction documents.
- Aerojet's Draft Addendum 2 to the Conceptual/Preliminary Remedial Design Report for OU3 Area 1.
- Aerojet's Draft Program Plan Modification Report, which defines remaining operable units and priority for addressing them.
- Aerojet's proposal to include Waste Management Unit 1-4 in OU5 and requirements for deleting it from the definition of the site on the National Priorities List

The agencies requested that Aerojet:

- Provide documents on remediation under the Western Groundwater ROD and on investigation

under the Partial Consent Decree to the Sacramento Groundwater Authority and the Water Forum.

- Conduct a “Tier-3 Site-Specific Pathway Assessment” in property previously removed from the NPL site definition, to determine the amount of TCE vapor that might intrude into surface buildings from underlying groundwater contamination

### **3. Overview of California Cancer Registry.**

Monica Brown presented on the California Cancer Registry’s (CCR) Cancer Surveillance Program (CSP) for Region 3. The CCR has collected information on cancer incidence and mortality for the state of California through a system of eight regional registries. Data collected by the registry are used to monitor annual incidence and mortality, for research into the causes, cures, and prevention of cancer, and to produce reports including the state and regional annual reports and the ACS’s cancer facts and figures. The CSP provides cancer statistics for the region and counties, information/education, data and data analyses, and contacts to the public.

Monica addressed the leading sites of cancer incidence and of cancer death in the region. The five leading sites of cancer incidence in men are prostate, lung and bronchus, colon/rectum, urinary bladder, and melanoma of the skin. The five leading sites of cancer death in men are lung and bronchus, prostate, colon/rectum, pancreas, and non-hodgkin lymphoma (NHL). The five leading sites of cancer incidence in women are breast, lung and bronchus, colon/rectum, corpus and uterus, and NHL. The five leading sites of cancer death in women are lung and bronchus, breast, colon/rectum, pancreas, and ovary. Generally, regional cancer incidence and mortality were similar to that among all Californians. The region was lower than the state for cancers of the cervix, colon and rectum (in situ), liver, NHL, and stomach. The region was higher than the state for cancers of the lung and bronchus, mesothelioma, oral cavity, and pharynx, and urinary bladder.

Monica reviewed several educational messages:

- Cancer is common.
- Cancer falls into two categories: 1) those that are preventable and 2) those where the cause or prevention is unknown.
- Cancer risk varies by age, gender, race/ethnicity, and lifestyle.
- Causes of cancer deaths in the US are due to lifestyle, environmental/occupational, and lifestyle and/or an interaction between these factors.
- There are behaviors that you can practice that may prevent or reduce your risk of cancer including diet, physical activity, weight control, and risk reduction (i.e. avoiding tobacco and sun exposure, and moderate alcohol intake).

Cancer concerns were also addressed by Monica. In summary, etiologic cancer clusters are very rare, but do exist (both in neighborhoods and in workplaces). Study of cancer clusters almost never leads to a discovery of a cancer cause; although, studies often lead to more studies to help understand the causes and mechanisms of cancer. Community and workplace cancer concerns sometimes appear to be driven by lack of information on the causes of cancer and the ability to control cancer risk and fear.

Monica concluded her presentation by summarizing several research studies that are being conducted by the CSP:

- Information needs and information seeking behavior for cancer patients.

- Bridging prostate screening gap for high risk men.
- Incidental and unrecognized cancers
- Sacramento region county health officers' attitudes on cancer control and prevention
- Latinas and in situ breast cancers
- Patterns of care: breast, prostate, and ovarian cancers

#### **4. Update on Well Installation Activities in OU-3 and Beyond.**

Alex MacDonald discussed the activities that have been conducted north of the American River. As summarized during the September meeting, Aerojet completed the construction of three additional monitoring wells north of the American River. These monitoring wells were sampled and resulted in non-detections for NDMA. Aerojet is preparing a modification to the OU-3 design to include this area north of the American River.

Alex summarized several other activities that have been conducted at the plume boundaries to ensure the areas are bounded:

- Two extraction wells have been installed in Area 1 with the treatment system adjacent to the Kaiser parking lot.
- The installation of three extraction wells and conveyance piping to a treatment plant have been completed in Area 2. Additional conveyance piping is still being installed to connect other extraction wells.
- In Area 2, one extraction well is operating and additional wells will be brought on-line as treatment capacity allows. It is anticipated that the treatment facility will be operating at 4000 gpm next summer. The plume to be controlled by the extraction wells consists primarily of TCE and NDMA.
- An agreement between Aerojet and the City of Folsom was reached that will allow Aerojet to install a monitoring well at Iron Point Road.
- The Water Board and DTSC are working with the developer in the Central Disposal Area to allow Boeing to install a pipeline to the completed extraction wells south of Douglas Road. The wells are to control a plume of groundwater pollution emanating from the Administration Area on the IRCTS property. The current pipeline construction is tied to the installation of the streets and infrastructure for the development. Delays in the development have led to the cessation of operations during the wet weather period.
- Mather Field activities, except for the installation of a couple of monitoring wells, are on hold. Awaiting County agreement to install pipeline in the ground. Two extraction wells will be drilled in the near future and operated to protect the family housing wells to the south.

#### **5. Update on the Aerojet-American States Settlement.**

Paul Schubert noted that the agreement was settled on 2 November 2004. Under the settlement, Aerojet and the American States Water Company will work in coordination with the County of Sacramento to treat and reclaim water for the benefit of the contaminated areas. Aerojet's agreement with the county of Sacramento Agency includes the transfer of all remediated groundwater from its Sacramento site to the County. The County will assume responsibility for providing contingency /replacement water to the American States Water Company.

Paul summarized the financial components of the settlement and components of the project:

- The North/South transmission main was co-funded by Aerojet and Elliott Homes and is currently in operation.
- The West Coloma Main was funded 100% by Aerojet and was completed several months ago.
- The Folsom Boulevard main extension may need to be installed.
- Cycle Phase II North/South treatment main is a contingency main that will be installed if Well 18 and 23 are impacted by the contamination.
- The South Bridge Street main extension was installed several years ago as a dedicated line into the treatment plant to be able to blend surface water to stay below the action level.
- All GET water was granted to the County as part of the settlement. The County is obligated to address all water needs. Have been granted water from the County (5,000 acre-feet) which is a baseline supply in addition to the existing 5,000 acre-feet.

#### **6. Update on the Negotiations for the Program Plan Modification Report (PPMR).**

Charles Berrey noted that as part of the 2002 modification to the Partial Consent Decree, it was decided that the project would be divided into Operable Units (OUs). Charles provided a letter from Aerojet stating their priorities for several OUs within Aerojet. The selection and ranking of the OUs is based on several factors such as potential threat to groundwater, characteristics of groundwater at or near the source areas, location of the source areas, risks associated with surface exposure, potential threat to offsite groundwater, total relative priority, and priority for investigation.

Charles provided a handout that compared Aerojet's ratings and EPA's ratings for the Eastern, Central, Island, Boundary, and Area 41 Soil and Groundwater Operable Units. Charles noted that EPA did not provide a rating for the location of the source areas because this characteristic is covered by risk and potential threat to groundwater. The shaded areas identify rankings where the EPA and Aerojet are in disagreement. EPA's priorities are as follows: Island, Central, Boundary, Eastern, and Area 41 Soil and Groundwater Operable Units. Aerojet's priorities are as follows: Boundary, Eastern, Area 41 Soil and Groundwater, Island, and Central Operable Units. Aerojet and the EPA have agreed to proceed with the Islands and Boundary OUs on parallel efforts (conducting the Remedial Investigation and Feasibility Study phases). The Agencies and Aerojet agreed that additional information was necessary to resolve the priority for the Central vs. the Eastern Operable Units. Aerojet and the Agencies will develop an evaluation approach to provide additional data to facilitate establishing the priority for the Central vs. Eastern OUs to be contained in the PPMR due December 25, 2004. The approach will then be implemented so the December 25, 2005 Annual PPMR update can better recommend the sequence for the remaining OUs to complete the Aerojet Superfund site remediation.

#### **7. Next Meeting.**

Next meeting (**Please note the date change**): Monday, January 17, 2005, Sheriff's substation, Community Room, 10361 Rockingham Way (just off Mather), Rancho Cordova, 7 p.m. to 9 p.m.