

**MEETING SUMMARY
 FORMER WALKER AIR FORCE BASE (WAFB)
 ROSWELL INDUSTRIAL AIR CENTER (RIAC)
 RESTORATION ADVISORY BOARD (RAB)
 25 APRIL 2000**

<p>RAB Members Present: Kathleen Aisling David Gregory Richard Cervantes Kay Havenor Ken Hirst Julie Jacobs Leroy Lang Anita Logan Ethel Logan Dick Smith Ron Courts</p> <p>RAB Members Absent: Tom Day Eva Gomez Steve Harris Tim Hutcheson Eloy Ortega Mary Kay Samples</p> <p>Facilitator: Sandra Chaloux</p> <p>Guests Present: Don Adams Ted Allen Gay Hirst Linda Livingston Raymond Prescott T.C. Shepard Ian Osgerby</p>	<p>Affiliation: USEPA USACE ENMU - Roswell Local Geologist National Guard NMED New Mexico Farm Bureau Citizen, Y-O Acres Citizen, Y-O Acres Citizen City of Roswell</p> <p>Nova Bus Citizen, Y-O Acres Chaves County LePrino Foods Chaves County Commissioner Citizen, Latimer Subdivision</p> <p>CEC, Inc – RAB support Contractor</p> <p>Affiliation: Community Farmer Unity Center East Grand Plains Berrendo Co-Op Water Users For Bob Beck USTB USACE</p>
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Meeting Summary Review

- There were corrections from the 13 January 2000 meeting minutes. On page 2, second paragraph, the units are listed as 120 milligrams per liter, and should be 120 micrograms per liter.

USACE Update

- Since January, another round of sampling has been completed. David Gregory showed four graphs indicating changes that have been recorded since January. The hydrograph shows consistent seasonal change, ending in a significant drop-off in the water table in September, and upward in March. There has been a correlation between the concentrations and how the shallow alluvial aquifer fluctuated based on the probable smear zone of the contaminants. The level at one of the Y-O Acres wells shows concentrations that decreased, which is good news.
- David re-addressed the idea of chemical oxidation from the last meeting. He explained that the Corps has been evaluating technologies for treating the contaminated groundwater in place. These technologies that have been presented to him by numerous consultants do not seem suitable for achieving the goal of meeting safe drinking water standards at Walker. This is because the zone of influence of the oxidation chemicals is not great, and the affected area around Walker is large. There would need to be a very tight spacing of the injections areas of about 15 feet centers, with a groundwater depth of 125 feet. The cost would be too high to be considered feasible.
- Ian Osgerby, Research and Development for the Corps in Concorde, Massachusetts, described the process of how to increase the population of microbial bacteria in the groundwater system to see if it could speed up the process of breaking down the TCE contaminants. Ian explained the process of the microbial injection as a cleanup alternative. He explained that some special analysis was needed to see if the proper conditions exist for the bacteria to work. If the conditions look good, we can inject food for the bacteria such as Molasses, sugar solutions, or lactate. These chemicals are cheap and won't hurt anyone. The bacteria will use the food, and in the process they will convert the toxic TCE compounds to a non-toxic substance, and we will end up with Hydrochloric Acid and then become a kind of salt. David explained that the Corps is in the fact-finding stage to examine the possibility of this approach at Walker. David said that it looks like the most promising technology right now other than pumping.
- A second pump test will be performed on the east side of the base near the east boundary just outside the ready alert area. A contract has not been awarded for the pump test, but David said it would occur very soon. This test will determine if the sustained pumping rate can be increased from 40 to 400 gallons per minute. This would not prohibit the use of microbes.
- David explained that all chemicals do not move at the same rate. TCE moves very quickly and is very soluble in the water. Bacteria can move very quickly, at a rate of 35 meters per day in bedrock when looking for food. TCE is still tied up in clays and soils in the aquifer. There is an opportunity for the bacteria to get the residual TCE tied to the soils in the aquifer.
- David has been in favor of a more aggressive pumping rate, greater than 40 gallons. This would involve installing a large well that would pump up to 500 gallons per minute. However, before any money is spent he would like to find out if the aquifer would support

the more aggressive pumping rate. David is ready to test it on the east side of the base, closer to the community. David said that pumping has been very effective. Every time they pumped water, they have removed contaminants without the fear of it changing into a more harmful compound.

- A member raised concern about the aggressive pumping during the upcoming drought season. David assured her that one well producing 500 gallons per minute is not significant; 500 wells producing 500 gallons per minute *is* significant, and that there would never be this many wells pumping during a season. The concern regarding the basins being rechargeable was raised, and it was not disputed that the shallow water wells in the community cannot be recharged like the Artesian wells can be.

New Business

- Two individuals sent in applications expressing interest in joining the RAB:
 - Raymond Prescott – Lives ¼ mile east of the base
 - Kerry Hunter – Doesn't live close to the base, but is leasing a building at RIAC from the city.
- Mr. Prescott explained his interest in the RAB, by stating that Bob Beck is his father and that he is taking over the trailer park at 120 West Crossroads in Y-O Acres. Mr. Hunter was not present.
- A member expressed concern over the approval of the pumping plan. David said he had a scope of work written, and before he gets it finalized he would like to get as much mileage out of it as possible. The member questioned if the testing would occur on an existing well or require additional drilling, and David noted that they would not want to use existing wells for the test and would probably install a new one. The test well will be 6 inches in diameter and the observational wells will be 2 inches in diameter.
- Two wells have been tested on the fringe areas of the base where residents were asked not to use their wells by the government. The object was to see how well these wells produce now that they have been idle for some time, to get new pumps, and to let the citizens use their wells again. They are concerned now of disrupting the very slow movement of the contaminant away from the base.

Next Meeting

- The next RAB Meeting was set for 20 July 2000, at 7:00 p.m., at the National Guard Building #524. Agenda items identified for the next RAB meeting include:
 - Conditions of soil or aquifer area
 - Pump test results
 - What the Corps will do with the pumped water
 - Setting parameters for pumping.