

**Carswell/Plant 4  
Restoration Advisory Board Meeting**

**DRAFT**  
**Summary Minutes of November 4, 1999**  
**Regular Quarterly Meeting**

A regular meeting of the Carswell/Plant 4 Restoration Advisory Board (RAB) was held November 4, 1999, at the Carswell Lanes Bowling Center Meeting Room, Building 1815, on the corner of Military Parkway and Hulk Road at Naval Air Station (NAS) Fort Worth Joint Reserve Base (JRB). The RAB meeting began at 6:00 p.m.

**Agenda**

- Welcome/Introductions/Minutes
- Westworth Redevelopment Authority
  - Program Update
- Carswell Off-Base (Rafael Vazquez)
  - Program Update
  - Property Transfer Update
- Carswell On-Base (Mike Dodyk)
  - RCRA Facilities Landfill Investigation Update
  - Underground Storage Tanks Report
- Air Force Plant 4 (George Walters)
  - Program Update
  - Parking Lot DNAPL Plume Report
- Next Meeting
- Open Discussion/Questions

**Welcome and Introduction of Attendees**

Community Co-Chair J'Nell Pate called the meeting to order and introductions were made. A discussion regarding changing the start time of the RAB meetings from 7:00 p.m. to 6:00 p.m. ensued. A vote was taken and it was decided that the meeting start time would be changed to 6:00 p.m. Ms. Pate then asked that any corrections and additions be presented regarding the August RAB meeting minutes. Hearing none, the minutes from the previous meeting were approved.

Comments to the draft meeting minutes for this meeting (November 4, 1999) should be sent to:

Ms. Valerie Eisenstein  
HydroGeoLogic, Inc.  
1155 Herndon Parkway, Suite 900  
Herndon, Virginia 20170

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#### Westworth Redevelopment Authority

Mr. Leland Clemons was unable to attend the meeting because of a conflicting meeting commitment, and, therefore, there was no briefing from the Westworth Redevelopment Authority.

#### Carswell Off-Base

Ms. Pate introduced Rafael Vazquez who conducted the Carswell Off-Base briefing. Handouts were provided outlining the Carswell Off-Base program status (Attachment 1).

#### Program Update

Mr. Vazquez began his presentation by providing a program status update. Closure reports currently are being generated for four off-base locations at the former Carswell Air Force Base (AFB). The Golf Course Maintenance Yard closure report obtained from the Texas Natural Resource Conservation Commission (TNRCC) was approved for No Further Action. The closure report for the Unnamed Stream locations was submitted to the TNRCC on September 29, and the Air Force Base Conversion Agency (AFBCA) is awaiting comment from the regulators. Additional sampling has been required at the Aerospace Museum and the Grounds Maintenance Yard. Closure reports for these sites should be completed by January of 2000.

The field investigations conducted at the Weapons Storage Area were completed in September. Additional soil excavation work will be conducted next month. A closure report will be written for the site by January of 2000. Mr. Vasquez noted that the Weapons Storage Area probably would be sold when the clean up is complete.

The Sanitary Sewer Investigation continues. The FY00 funding has been approved to further investigate the hits detected at the site. Funds should be made

available by the close of this calendar year to perform the necessary sanitary sewer investigations in the spring of 2000.

Community member Mike Gross asked questions regarding whether borings were performed within the storage area buildings, given that the weapons were stored inside the buildings. Mr. Vazquez indicated that borings were conducted on the drains outside of the buildings. Some metals and lead contamination were found in relation to the exterior drains, and the contaminated soils have been removed. Within the buildings, swipe samples were taken, and no contamination was detected. A range located next to the bunkers already has been cleared.

Landfill investigations continue at four off-base locations. Additional field investigations to complete the Resource Conservation and Recovery Act (RCRA) Facility Investigation are being conducted in the area and should be completed this month (November). Following their completion, a corrective measures study will be performed to evaluate cleanup alternatives early in 2000. Cleanup alternatives will be evaluated for the landfills, and remediation plans will be designed for implementation in the fall of 2000. Mr. Vazquez indicated that, given the nature of the materials found at the sites (i.e., municipal/medical wastes), a clay or earthen cap may be utilized for containment. More complex remediation methods are not warranted. He stated that following these remediation activities, the cleanup construction phase of the project will be completed by August of 2000, ending the major portion of work for Base Realignment and Closure (BRAC) on the base. Monitoring activities at these sites will continue for years to come.

#### Property Transfer Update

Mr. Vazquez went on to give a property transfer update. The transfer of the Federal Bureau of Prison Hospital land has been delayed because two documents are still needed from the regulators regarding the closure of the underground storage tanks (UST) on the site. Once these have been received, the property transfer will proceed.

The Finding of Suitability to Transfer (FOST) documents involving the commercial area along U.S. Route 183 were submitted to the regulators for review, and their comments have been received. The property transfer is scheduled for the end of this month (November).

A community member inquired whether zoning restrictions were placed on the properties being transferred. Mr. Vazquez indicated that the Air Force is not involved in developing zoning restrictions (this is left up to the local community zoning commissions), but restrictions are placed on how the transferred lands can be utilized. These restrictions are a function of the Economic Development Conveyance Agreement that was put into effect by the Westworth Redevelopment Authority and the government to create commercial/retail/industrial properties.

Several attendees then inquired as to whether building codes involving noise and height restrictions would be put into effect in the area. Mr. Vazquez again indicated that these were not issues for the Air Force, but rather for the local community zoning laws.

### Carswell On-Base

Ms. Pate introduced Michael Dodyk to provide an update on the work being conducted on-base at the former Carswell AFB. Mr. Dodyk reminded the attendees that information regarding the work on-base at Carswell AFB [in addition to information regarding work being conducted off-base at Carswell AFB and at Air Force Plant 4 (AFP 4)] was included in RAB Fact Sheet #6, which was made available at the meeting (Attachment 2).

Mr. Vazquez then brought up an issue that he had not mentioned in his briefing. Approval for closure of the treatment storage and disposal facility on-base has been received.

Mr. Dodyk began his briefing by providing an update on the work being conducted at the solid waste management units (SWMU) and areas of concern (AOC) on-base. He explained that the contractor is formulating work plans for these areas that will be submitted late this year. He then provided a brief description of each site, which was elaborated on in a corresponding handout outlining Installation Restoration Program activities at NAS Fort Worth JRB (Attachment 3).

Mr. Dodyk gave an overview of the work currently being conducted for the Groundwater Sampling and Analysis Program. The April 1999 Quarterly Report was submitted to the TNRCC in October. The July 1999 Quarterly Report was submitted to the Air Force Center for Environmental Excellence (AFCEE) in September 1999, and during the month of October, the quarterly sampling was conducted. The 1999 Annual Report is being prepared for submittal to AFCEE in January of 2000. The report will present plume characteristics and trends since the beginning of the program. Preliminary maps and animation indicate that the plume has stabilized.

### RCRA Facilities Landfill Investigation Update

Mr. Dodyk continued by providing an update on the RCRA Landfill Investigation. A meeting was held at TNRCC on September 28 to discuss the status of the landfills. Additional field activities currently are being proposed at five landfills (Landfills 1, 2, 6, 7, and 9). Mr. Dodyk gave a description of the work being conducted in association with each landfill (see Attachment 3). A Technical Memorandum currently is being prepared for submittal to AFCEE in November. The associated field activities are proposed for late 1999. The RCRA Facility Investigation (RFI) Report is scheduled for submittal to AFCEE in the spring of 2000, pending the successful completion of the delineation activities.

Next, Mr. Dodyk discussed the ongoing work at the Waste Accumulation Areas. Field investigations were conducted at 16 Waste Accumulation Areas in June of this year. Approximately 50 soil borings were installed and sampled. A Technical Memorandum currently is being prepared for submittal to AFCEE to present the investigation results and propose plans for additional soil delineation and groundwater sampling.

#### Underground Storage Tanks Report

Mr. Dodyk continued with an update covering the UST investigation. The Waste Accumulation Area and UST work was conducted concurrently. The initial field investigation was completed in June of this year, and the results are being prepared. Approximately 50 soil borings were installed and sampled. The results of the current investigation are being prepared for submittal to AFCEE. The initial findings indicate that 6 of the 12 USTs may meet closure requirements. The remaining 6 USTs may require additional delineation and/or groundwater investigation.

Mr. Dodyk then provided an update of the corrective measures activities being conducted at AOC 13, which is the oil water separator (OWS) located at the auto hobby shop. Mr. Dodyk explained that the original separator and tank leaked. A design document exists to remove and replace the existing OWS and UST. Repairs should take about 2 weeks, and during this time, the auto hobby shop will be closed. The date the work will be conducted is not yet known, but announcements will be made prior to the closing.

Next, the activities involving AOC 4 (the Fuel Hydrant System) were discussed. Executive Summary #13 provides information regarding work at this site (Attachment 4). Field investigation activities for the site were completed in January of this year. The draft Site Investigation Report and Assessment Report Form was submitted to the TNRCC in August of 1999. The recommendations included weekly product removal and quarterly groundwater monitoring for 1 year. After 1 year, AOC 4 will be re-evaluated for closure.

Mr. Dodyk provided information regarding monitoring well abandonment and repair. Site inspection of the base monitoring wells was conducted in June of this year. Minor repairs were performed to the monitoring wells at that time. A work plan involving well abandonment and more extensive repairs was submitted to AFCEE in October. Currently, 11 monitoring wells are proposed for abandonment, 3 wells will need extensive repairs, and 2 wells that are located on a floodway will need to be converted to a flush mount so that they will not be damaged when the grass is cut.

Mr. Dodyk concluded his briefing by elaborating on activities involving SWMUs 7 and 8, which are also described in Fact Sheet #6 (Attachment 2). The Draft Technical Memorandum was submitted to the TNRCC in October requesting No

Further Action at SWMU 7 (Building 1628 OWS) and SWMU 8 (associated waste oil UST). The request for No Further Action is based on the conclusion that there has been no release of hazardous constituents from either the oil water separator or the tank.

#### Air Force Plant 4

Ms. Pate introduced George Walters to provide an update on the ongoing activities that are occurring at AFP 4.

#### Program Update

Mr. Walters provided an overview of ongoing remediation work occurring as part of the Record of Decision (ROD). Three sites were discussed. At fuel saturation area #1, where the first extraction system was installed, the system has been in place for several years. It has pumped 18 million gallons of water, removing 240 pounds of solvents. The Soil Vapor Extraction (SVE) System that was recently upgraded at Building 181 has removed 13,000 pounds of trichloroethylene (TCE) in the past 3 months and constitutes the final action in place at that site for the ROD. In addition, Jacobs Engineering is continuing its work on the east parking lot remediation system upgrade. A small system has been in place for the last 6 years, treating 55 million gallons of water and removing 2,850 pounds of TCE. This system is being upgraded to protect against contamination of the Paluxy Aquifer. The system will be shut down for 6 months as the upgrade takes place. To avoid damage to Lockheed aircraft at the site, more costly horizontal wells will be installed.

Mr. Walters then discussed the work occurring concerning the groundwater plume containment sites. This included work on the SVE system at Landfill #3. No Further Action was mandated at the site, but to prevent any off-site migration, the SVE will continue to run.

Mr. Walters provided a description of various pilot studies. The first involved a tree farm experiment that plans to use solar radiation to grow trees over the groundwater plume area. The hypothesis is that the tree roots will extract contaminants from the plume and treat the underlying groundwater. The other pilot study discussed involves using thermal heating to enhance the removal of TCE. Given that the TCE vaporizes at 72°C, either radio frequency or six-phase heating will be used to generate heat to degrade the TCE. This method is expensive. A 3-month pilot study involving a 50 by 50 foot test plot is planned. An AFP 4 Fact Sheet discussing the Thermal Enhancement Pilot Study by Radian International and Current Environmental Solutions was made available at the meeting (Attachment 5).

Mr. Walters then noted that the fish tissue sampling results are not yet available. The samples were submitted in April of 1999, but because of difficulties between

the United States Geological Survey (USGS) and the laboratory examining the samples, the results will not be available until the end of the year. When they are released, the results must first be sent to the Texas Department of Health for examination. They then will be released to AFP 4.

#### Parking Lot DNAPL Plume Report

Originally, the west parking lot near Bomber Road was mandated as a No Further Action site because it was thought that the underlying Walnut bedrock was solid, creating an aquitard. Monitoring wells in the area discovered the presence of fractures in the bedrock. The top and bottom 5 feet of the bedrock are solid rock, but about 15 feet into the rock, a fractured band exists that is approximately 20 to 25 feet thick. The fractures have been shown to contain TCE contamination.

Don Ficklen from AFCEE asked about how the fractures were formed. Victor Dozzi of IT Corporation explained that they formed as part of the natural rock formation. The area was once a seabed where various materials would have been deposited (i.e., shells), and, therefore, a tight rock formation was never formed. Another attendee questioned how far the fractures extend. Mr. Dozzi indicated that the bounds of the formation in parking lot area to the north and south have been determined, but those to the east and west have not. Additional wells will be included to test the aquifer and determine how well the materials can be removed from this fractured zone.

Mr. Weegar of TNRCC questioned whether monitoring wells exist to sample groundwater in the Paluxy Aquifer in the No Further Action area under question. Mr. Dozzi indicated that wells have existed in this area for a number of years. Some TCE contamination has been measured at action levels, and recovery/cleanup wells have been installed in the area. The TCE contamination that is found in the Paluxy Aquifer that is being remediated by the cleanup wells does not correspond to the TCE found in the fractured limestone samples from the west parking lot area. He further indicated that the majority of the TCE contamination in the Paluxy Aquifer is found in the uppermost layer at about 2,000 to 3,000 feet. Cleanup wells installed in this portion of the aquifer have very low pumping rates. Most people get their drinking water from the lower levels of the aquifer where pumping rates are higher, but where the water is relatively clean. Mr. Weegar confirmed that this site was previously demonstrated to be a No Further Action site and questioned whether additional No Further Action sites would be reevaluated in light of the dense non-aqueous phase liquid (DNAPL) contamination found under the west parking lot. Mr. Dozzi indicated that other sites would be evaluated, but reminded everyone that the previous No Further Action recommendation referred only to the upper level of the aquifer. Remediation work has been occurring on the underlying drinking water portion of the aquifer.

Mr. Walters then indicated that he was open to any suggestions for topics of discussion involving AFP 4 at future RAB meetings.

Mr. Walters continued his briefing with a golf course plume update. He provided a handout regarding this project (Attachment 6). A treatment system was installed a number of years ago near Waste Burial Area 7. This system was reinstated because the plume continued to migrate. Five potential recovery wells have been installed at the site to delineate the plume boundaries. The eastern border of the TCE plume, near the intersection of White Settlement Road and U.S. Route 183, has been better defined. The highest TCE detection in the new monitoring/recovery wells was 42 µg/L. All other results yielded TCE concentrations below 5 µg/L. These results indicate that the plume has been bounded with the existing monitoring wells.

Mr. Walters assured the RAB that although HydroGeoLogic, Inc.'s, contract to operate the system ends this year, he has budgeted FY00 funding to hire another contractor to keep the system running.

### Adjournment

The next RAB meeting was scheduled for February 10, 2000, at 6:00 p.m.

Dan Johnson announced that the RAB would have a booth at the NAS Air Show to be held in May 2000. It was noted that this would be a good opportunity to promote RAB membership.

Mr. Weegar then asked questions regarding when the sampling results from both the golf course monitoring wells and the fish tissue sampling would become available. Miquette Rochford of HydroGeoLogic, Inc., stated that the last round of sampling at the golf course was completed this month and results will be available early next year. Mr. Walters stated that USGS had indicated that the fish tissue lab results would take 6 to 8 months for completion.

Ms. Pate indicated that a news release involving the results of the fish tissue sampling would be of interest to the community. She also suggested that Dr. J. Bruce Moring from the USGS, who provided the original briefing describing the fish tissue sampling project at Lake Worth at the May RAB meeting, return to provide a report on the sampling results.

Mr. Walters noted that in response to Mr. Olshefski's concern at the last meeting regarding sampling results at several off-base AFP 4 wells, he had contacted the USGS to resample his well. The testing was conducted and the sample results came back clean. However, it was later realized that the water is being carbon filtered.

The meeting was adjourned at 7:00 p.m.

**In Attendance****Carswell DERA (On-Base)**

Mike Dodyk, HQ AFCEE/ERD  
Joe Dunkle, HQ AFCEE/ERD  
Gary DuPriest, HQ AFCEE/ERD  
Don Ficklen, HQ AFCEE/ERD  
Amy Hardberger, UNITEC  
Jim Costello, HydroGeoLogic, Inc.  
Valerie Eisenstein, HydroGeoLogic, Inc.  
Todd Harrah, HydroGeoLogic, Inc.  
Miquette Rochford, HydroGeoLogic, Inc.

**Carswell AFBCA (Off-Base)**

Rafael Vazquez, AFBCA

**Air Force Plant 4**

Daniel Johnson, USAF/ASC  
George Walters, ASC/ENVR  
Lynn Schuetter, Jacobs Engineering  
Luke Gilpin, Lockheed Martin  
Victor Dozzi, IT Corporation

**United States Navy**

Capt. Craig McDonald, NAS JRB  
C.R. Love  
Robert Myer, NAS JRB Environmental

**Texas Natural Resource Conservation Commission**

Ray Risner  
Tim Sewell, Region 4  
Ludmila Voskov  
Mark Weeger

**United States Environmental Protection Agency**

Gary Miller, Region 6

**Others, Off-Base**

Roy Gibson, Community Member  
Mike Gross, Community Member  
J'Nell Pate, Community Member  
Trang Trinh, Community Member  
Vince Wilcox, Community Member  
Robert Taylor, City of Fort Worth Water Department  
Greg Hendrickson, River Oaks  
Ed von Kohn, Westworth Redevelopment Authority

