



**NAVAL AIR STATION  
FORT WORTH JRB  
CARSWELL FIELD  
TEXAS**

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**ADMINISTRATIVE RECORD  
COVER SHEET**

AR File Number 417

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

A regular meeting of the Carswell/Plant 4 Restoration Board was held on 12 February 1998 at the new Commander's Conference Room, Bldg 1510 at Naval Air Station Fort Worth, Joint Reserve Base. The RAB meeting began at 7:08 pm.

**Agenda**

1. Welcome and Introduction of Attendees
2. Carswell Off-Base FY98 Program Update/Property Transfer
3. Carswell On-Base Budget Update/AOC 2 Update
4. Air Force Plant 4 Update
  - a. Public Health Assessment Presentation
  - b. Phytoremediation Project Update
5. Open Discussion
6. Adjournment

**Welcome and Introduction of Attendees**

Community Chair Mike Gross welcomed everyone to the meeting and introductions were made.

**Minutes**

Comments and additions to draft minutes should be sent to:

Joe Dunkle  
HQ AFCEE/ERD  
3207 North Road  
Brooks AFB, TX 78235  
210.536.5290 Phone  
210.536.9026 Fax  
[jdunkle@afceeb1.brooks.af.mil](mailto:jdunkle@afceeb1.brooks.af.mil) E-mail

**Carswell Off-Base**

Mr. Joe Dunkle conducted the Carswell Off-Base briefing in the absence of Olen Long.

**Review of Program Status**

Mr. Dunkle presented a summary of each of the environmental projects being conducted on Carswell Off-Base property (attachment 1).

**Property Transfer Update**

Mr. Raphael Vazquez provided an update on the property transfer process for Off-Base parcels.

Four Findings of Suitability to Lease (FOSLs) were submitted EPA Region 6 for comments.

AFBCA and the Westworth Redevelopment Authority reached an agreement in principal for leasing the parcels. A plan for the process is expected to be in place by next month.

### **Carswell On-Base Update**

Mr. Dunkle provided an update of the restoration program for Carswell On-Base activities.

AFCEE obligated \$3.3 million for three projects including Underground Storage Tanks, Waste Accumulation Areas and an additional year of groundwater monitoring. Mr. Dunkle still has \$1.6 million to obligate, \$1.1 million on projects and \$500 thousand on management and civilian pay.

Fact sheets were made available to keep the community informed of the activities being conducted under the restoration program (attachment 2).

He discussed the activities conducted at AOC 2, including geophysical transects, Direct Push Technology (DPT) testing, monitoring well installation and report preparation.

The Administrative Record (AR) and Information Repository (IR) will be available on CD-ROM in February. Copies will be available at AFBCA and the White Settlement Public Library. The CDs will contain all of the information necessary to query and print documents of interest.

The question was asked - What are the remedial action plans for the former Base Gas Station? Mr. Dunkle responded by saying that a monitoring plan has been approved by the TNRCC and that groundwater monitoring is underway. Another gentleman asked whether the investigation included evaluating potential contamination from an underground fuel pipeline in the area. Mr. Dunkle responded by stating that a separate investigation was conducted to evaluate potential contamination associated with the referenced pipeline. The results of that investigation concluded that the pipeline did not cause contamination at levels that would pose a threat to human health or the environment.

### **Air Force Plant 4 Update**

Mr. John Doepker was not present due to illness. The Air Force Plant 4 (AFP 4) briefing was conducted by Mr. Dunkle.

### **Public Health Presentation**

Mr. John Villanacci presented the results of the Public Health Assessment (PHA) conducted for AFP 4 as required under CERCLA (attachment 3). The Texas Department of Public Health has worked with the Agency for Toxic Substance and Disease Control since 1980 to conduct PHAs at CERCLA sites in Texas.

The draft PHA document is not ready for publication, but should be completed within the next month.

Mr. Villanacci presented the PHA process explaining the various categories of risk that are assigned in a PHA.

The PHA concluded that there is No Apparent Public Health Threat posed by contaminants in the sediments, surface water and air. The PHA also concluded there was No Public Health Threat posed by contaminants in the soil and groundwater.

Mr. Gary Miller of the USEPA cautioned against making the No Apparent Public Health Threat for surface water in Farmers Branch Creek.

Mr. Villanacci discussed the issues raised in the past about potentially higher incidences of cancer for residents of White Settlement. The Texas Department of Health conducted additional investigations and found that this situation was not confirmed when a larger population was examined.

Ms. Barbara Baldrige asked whether there was evidence of higher incidences of cancer among women near AFP 4. Mr. Villanacci responded by stating that there was no evidence of a higher incidence of cancer in women near AFP 4.

Mr. Villanacci concluded by presenting a recommendation for an additional investigation that would include fish tissue sampling. Mr Dunkle stated that a contract was going to be in place to conduct the fish tissue sampling within the next few weeks.

The United States Geological Survey volunteered its personnel and laboratory for the fish tissue sampling. The Texas Department of Health volunteered its laboratory for the analysis of the samples.

#### Phytoremediation Project Update

Mr. Greg Harvey from USAF ASC/EMR discussed preliminary results of the Phytoremediation Demonstration Study being conducted at Carswell Off-Base property.

Mr. Harvey explained the process by which trees can be used to remediate groundwater contamination. He presented a summary of the types of trees that were planted for this project, and also the evaluation techniques being used to monitor the success of the project. The early results are encouraging.

Mr. Harvey also discussed the evaluation that is being conducted on mature trees other than the species that was selected for this study (male cottonwood trees). Samples have been collected near other mature trees in the area, and early indications are that these other species may also be cleaning up the groundwater.

Mr. Mark Weegar of TNRCC was curious about the more toxic degradation byproducts of trichloroethene. He was also concerned about what happens to the remediation process during the winter months. Mr. Harvey responded that degradation by products such as vinyl chloride have been found, but that they do not persist in the environment like trichloroethyle does. He also said that in the winter months trees will "treat" water in the root zone, but do not "pump" water into the trunk of the tee due to lack of leaves.

#### AFP 4 Program Update

Mr. Dunkle provided an update of the AFP 4 program. He stated that the remedial design process is continuing for the East Parking Lot/Building 181 and the Window Area. He summarized the planned pump and treat and SVE systems to be implemented. He is in the process of putting the remedial implementation effort under contract.

He also stated that the Long Term Monitoring (LTM) program will be put under contract in the near future. He stated that the LTM plan was submitted late last year. Comments on the plan were received recently. The final plan will be completed soon.

#### Open Discussion

Greg McGraw of IT Corporation discussed the possibility of the Restoration Advisory Board setting up a booth at the Bi-annual air show to be conducted at the base on May 30-31. He suggested this might be more appropriate than having a booth in the local mall during Earth Day. This was generally agreed to by those present. Additional information will be sent to the interested parties by Greg McGraw when it is available.

Mr. Olshefski asked whether the copies of the RAB training video were completed. Alan Flolo stated that he would check with Olen Long as to their status.

Mr. Olshefski asked if groundwater samples were continuing to be collected at the wells in his neighborhood. Ms. Eve Kuniansky of the USGS did not think this was continuing as his neighborhood is upgradient and the contamination would not likely migrate in his direction.

A gentleman at the rear of the room was interested in sampling being conducted on water in Lake Worth. He was concerned with runoff from recent commercial construction on the other side of the lake from AFP 4/Carswell. Mr. Jim Scanlan from the Fort Worth Water Department stated that priority pollutant analyses are conducted on water samples from the lake twice per year.

Raphael Vazquez stated that he would like to add a discussion of the reorganization of the regional AFBCA to the agenda for the next RAB.

#### Adjournment

The next RAB is scheduled for May 7, 1998. Restoration Advisory Board members will be notified by mail of the exact date, place, and time.

The meeting was adjourned at 8:45 pm.

**In Attendance:**

**Carwell DERA (On-Base)**

Joe Dunkle, HQ AFCEE/ERD  
Lorraine Jameson, CH2M Hill  
Michael Dodyk, AFMC/CEVR  
Rick Belan, Booz-Allen and Hamilton  
Jim Costello, HydroGeoLogic, Inc.

**Carwell AFBCA (Off-Base)**

Alan Flolo, AFBCA/OL-H  
Rafael Vazquez, AFBCA/DC  
Emond White, US Navy

**Air Force Plant 4**

Norman Robbins, Lockheed-Martin  
Gregory McGraw, IT Corporation  
Steven Stransbauch, USAF/HSC  
Greg Harvey, USAF ASC/EMR  
Alex Briskin, ASC/EM

**United States Environmental Protection Agency**

Gary W. Miller

**Texas Natural Resources Conservation Commission**

Mark Weegar

**Texas Department of Health**

Nancy Ingram  
John F. Villanacci

**United States Department of Health**

Jeff Kellam

**United States Geological Survey**

Eve Kuniansky

**Fort Worth Water Department**

Jim Scanlan

**Others, Off-Base**

Mike Gross, Community Chair  
Barbara Baldrige, community member  
D.W. Owen, River Oaks  
Anita Baker, Star-Telegram  
Ed Von Hahn, Westworth Village  
W.F. Olshefski, Lake Worth Civic Club  
Ralph Stangl, Lake Worth Civic Club  
Greg Hendrickson, River Oaks  
Vince Wilcox, community

## SUMMARY

Air Force Plant 4 (AFP4) is a 602-acre government-owned contractor-operated aircraft manufacturing facility seven miles northwest of the city of Fort Worth in Tarrant County, Texas. The site is bounded by Lake Worth to the north and northwest, the City of White Settlement to the south and west, and Meandering Road Creek to the west. Naval Air Station (NAS) Fort Worth (formerly Carswell Air Force Base) is adjacent to AFP4 to the east.

AFP4 has been in continuous operation producing aircraft since 1942. Throughout the plant's early history (prior to 1973), waste materials (waste oils, fuels, solvents, paint residues, and spent process chemicals) were disposed of at on-site landfills or burned during fire training exercises. Primarily as a result of groundwater contamination, the site was placed on the National Priorities List (NPL) in August 1990. In September 1995, the U.S. Environmental Protection Agency (EPA) and the Texas Natural Resource Conservation Commission (TNRCC) approved the Remedial Investigation/Feasibility Study (RI/FS). A final Record of Decision (ROD) describing the selected remedial actions to be taken at the site was issued in July 1996.

The Texas Department of Health (TDH) and the Agency for Toxic Substances and Disease Registry (ATSDR) evaluated the environmental information available for the site and identified several exposure situations for evaluation. These exposure situations include possible contact with site contaminants in the foodchain, sediment, surface water, air, soil, and groundwater. A brief review of the evaluation organized by hazard category is presented below. Based on available data we have concluded that overall, the AFP4 NPL site poses no apparent public health threat. Because of insufficient data we identified one exposure situation as an indeterminate public health hazard. In the future, the conclusion category for the overall site could change if additional data indicate that the indeterminate public health hazard situation poses a threat to public health.

### INDETERMINATE PUBLIC HEALTH HAZARD

ATSDR concluded that one exposure situation is a potential or indeterminate public health hazard. Additional information is required to adequately assess the magnitude of the health threat associated with this situation.

1. Exposure to contaminants through the foodchain is considered an indeterminate public health hazard. Although contaminants were detected at low concentrations in mosquito fish (a non-edible fish) from Meandering Creek, data on edible fish tissue were not available. The ecological risk assessment, prepared for AFP4, identified several contaminants that could pose a risk to largemouth bass, an edible species. Although, we could not determine with any degree of certainty if AFP4 was the sole source for these contaminants, arochlor 1254, one of the contaminants identified in the ecological risk assessment as a potential threat to aquatic life, accumulates in fatty tissue. It would be reasonable to assume that other high fat content edible species (carp, drum [gaspergou],

catfish, and buffalo fish) could accumulate this and other contaminants. Long-term exposure to these contaminants potentially could pose a threat to public health; however, based on available information, exposure to contaminants through the ingestion of fish is an indeterminate public health hazard. We have recommended additional fish tissue sampling to assess whether eating fish from this area poses a public health hazard.

## NO APPARENT HEALTH HAZARD

We concluded that the following exposure situations pose no apparent public health hazard. In these situations, people may have come into contact with site contaminants; however, certain conditions exist that make it unlikely that exposure to contaminants would be of health concern.

1. **Sediment contamination in Meandering Road Creek & Lake Worth** presents no apparent public health hazard. A review of the environmental data and consideration of possible exposure situations indicate that if exposure to sediment at these locations were to occur, they would be short-term and infrequent. In Meandering Road Creek, the highest concentrations (those of potential public health concern) were found in sediment from an area that is fenced and therefore not accessible to the general public. In Lake Worth, the concentrations of contaminants in the sediment were below levels of health concern. In either location, it is unlikely that people would be exposed to contaminants at levels that would be of health concern.
2. **Surface water contamination in Lake Worth, Meandering Road Creek, and Farmers Branch Creek** presents no apparent public health hazard. At Lake Worth concentrations of contaminants were low and with the exception of silver, below health based screening levels. Actual exposure through dermal contact or incidental ingestion would be limited. At Meandering Road Creek, elevated concentrations of some contaminants were found infrequently, and only in water obtained adjacent to Landfill No. 3 (an area that is not accessible to the general public). At Farmers Branch Creek, the area where contaminants were found is not accessible to the general public.
3. **Potential air contamination at this site** poses no apparent public health hazard. Although, in the past, site contaminants were detected in on-site ambient air, the contaminant concentrations were well below those that would pose a public health hazard.

## NO PUBLIC HEALTH HAZARD

ATSDR concluded that the following exposure situations pose no public health hazard either because people were not likely to come into contact with site contaminants or because institutional controls are sufficient to protect human health.

1. **Soil contamination** on the site poses no public health hazard because the areas where contamination has been found are fenced, have restricted access, or are under buildings.
2. **Contaminated groundwater** beneath AFP4 poses no public health hazard because the water is not used for potable or other purposes. It is possible that, in the future, contaminants could migrate toward water supply wells; however, proposed groundwater remedial activities will reduce or prevent this migration. Scheduled water testing will reduce or eliminate the likelihood of long-term exposure should contaminants migrate toward water supply wells.

In addition to the environmental data, ATSDR evaluated available health outcome data pertaining to concerns raised by members of the community. In the past, community members raised concerns about cancer and asthma. Because of the lack of a plausible exposure pathway, ATSDR was not able to associate any of the health outcome data with site-related contaminants.



# NAS Fort Worth Joint Reserve Base Installation Restoration Program

Fact Sheet #1 - February 12, 1998

## NAS FORT WORTH JRB INSTALLATION RESTORATION PROGRAM (IRP)

This is the first in a series of fact sheets focusing on the Installation Restoration Program (IRP) at NAS Fort Worth Joint Reserve Base (JRB). The NAS JRB, formerly Carswell Air Force Base, is in the process of planning and conducting activities for the identification, remediation, and closure of contaminated sites at the base.

The IRP is DoD's primary mechanism for environmental response actions on U.S. Air Force installations. IRP activities are governed by provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA) and other applicable federal and state regulations. These activities are being conducted through the combined effort of the Air Force Center for Environmental Excellence (AFCEE) and the Air Force Base Conversion Agency (AFBCA). Under provisions of the Resource Conservation and Recovery Act (RCRA), the Air Force identified 68 solid waste management units (SWMUs) for further study and cleanup if needed.

### For More Information

*If you would like more information about the Installation Restoration Program at NAS Fort Worth JRB, contact Joseph Dunkle, HQ AFCEE, at 210/536-5290.*

## AOC 2 FIELD WORK PROGRESSES

Field work for the RCRA Facility Investigation (RFI) for Area of Concern 2 (AOC 2) is nearly 70 percent complete. AOC 2 includes all areas on the east side of the runway where trichloroethene (TCE) has been detected in shallow groundwater (see the illustration on page 2). TCE contamination at NAS Fort Worth JRB is generally confined to three areas, called lobes, in the southern, central, and northern portions of AOC 2. Characterization of the AOC 2 TCE in the central and southern lobes has been ongoing through other investigations. The AOC 2 RFI is focused on completing characterization and source definition of the northern lobe of contamination.

RFI tasks completed to-date include:

- Conducting geophysical surveys along six transects located in the flightline area.
- Installing 15 new groundwater monitoring wells in the northern lobe to expand the amount of information available about AOC 2 groundwater.
- Collecting subsurface soil samples during drilling activities.
- Collecting the first round of groundwater samples from new and existing wells in the AOC 2 study area.
- Testing new and existing wells to gather information about the rate of groundwater flow.
- Surveying of new sample and monitor well locations.

The following RFI activities remain to be completed:

- Conducting the 2<sup>nd</sup> and 3<sup>rd</sup> rounds of groundwater sampling in new and existing wells.
- Managing and validating analytical data from the soil and groundwater sampling efforts.
- Evaluating the nature and extent of contamination affecting AOC 2.

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- Performing a risk assessment to evaluate the potential for contaminants from AOC 2 to pose a threat to human health or the environment.
- Completing the AOC 2 RFI Report.

Submission of the final RFI Report to the Texas Natural Resource Conservation Commission (TNRCC) is planned for November 1998.

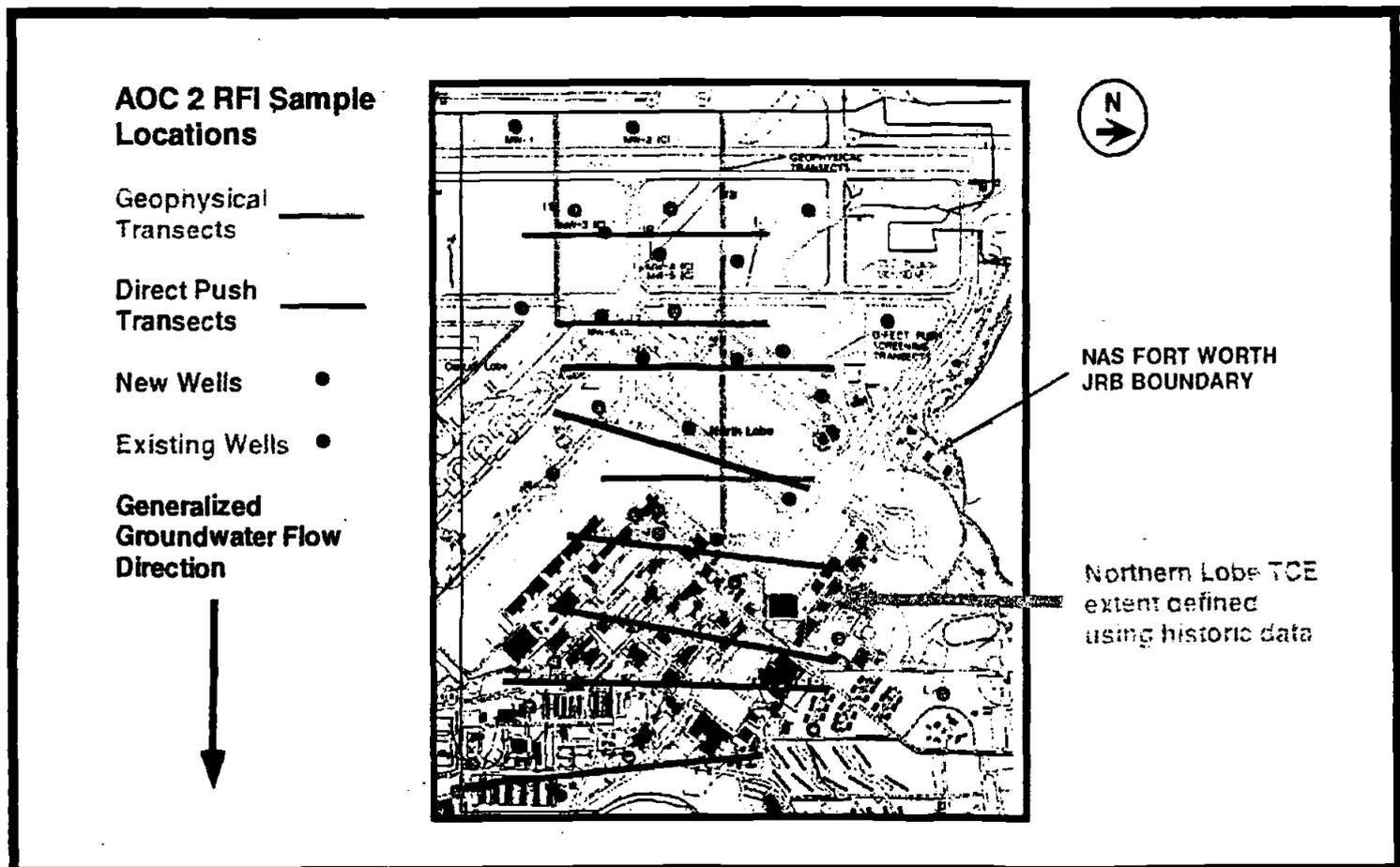
### QUARTERLY BASE-WIDE MONITORING CONTINUES

The Air Force samples groundwater at locations base-wide four times a year to monitor the status of the contaminant plumes, and to provide information for establishing trends. The current program (called Base-wide Quarterly Groundwater Sampling and Analysis Program, or GSAP) has been in place since January 1997. Quarterly events occur in January, April, July, and October each year. The most recent round of quarterly monitoring was completed in January 1998. An annual report is being prepared that summarizes 1997 groundwater monitoring results.

### AOC 4 SITE INVESTIGATION SCHEDULED FOR EARLY MARCH

AOC 4 includes the area of the former fuel hydrant system at the Base. The fuel hydrant system was used to transfer aviation fuel from the bulk storage facility to fuel hydrants located along the flightline. These hydrants were then used to fuel the aircraft. The hydrant system was removed from service in 1994. Contamination from the chemicals that comprise the aviation fuel was detected during the removal of the system. The Site Investigation (SI) for Area of Concern 4 (AOC 4) is scheduled to begin in March 1998. The first phase of the SI will consist of field work that includes:

- ◆ Installing an additional six monitoring wells to evaluate characteristics of groundwater beneath the site.
- ◆ Collecting nine direct-push soil samples and six auger soil borings to determine if the soil currently contains elevated concentrations of benzene, toluene, ethylbenzene, and xylene, commonly called BTEX; total petroleum hydrocarbons (TPH); and semi-volatile organic compounds (SVOC).



- ◆ Analyzing samples from four existing monitoring wells and the six new wells for BTEX, TPH and SVOCs. The results will be used to evaluate if past leaks from the tanks and/or piping pose a current public health or environmental risk.

In addition to the data collected during March 1998 field activities, selected data gathered by CH2M HILL during the AOC 2 RFI field effort and by HydroGeoLogic during the January 1998 Quarterly Base-wide GSAP event from sampling locations in the AOC 4 study area will be incorporated into the results obtained from the activities described above.

"The Air Force will receive all the AOC 4 analytical data about one month after the Field Investigation is complete," explains Joe Dunkle, NAS Ft. Worth JRB IRP Manager. "We will use the results of the field investigation to prepare a Site Investigation Report. We expect the draft report to be done by the end of July 1998."

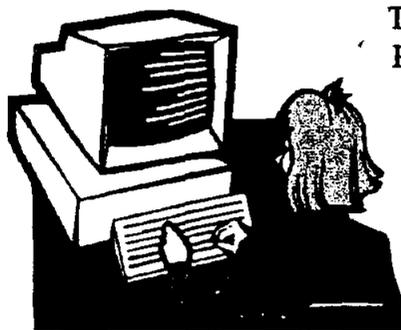
The Site Investigation Report will summarize the information gathered at AOC 4 and will recommend further remedial actions, if necessary, or support submission of a No Further Remedial Action petition to the TNRCC.

## RCRA FACILITY INVESTIGATION OF LANDFILLS BEGINS

A RCRA Facility Investigation (RFI) began the first week of February 1998 at five former landfills. These landfills include SWMU 17 (Landfill No. 7), SWMU 27 (Landfill No. 10), SWMU 29 (Landfill No. 2), SWMU 30 (Landfill No. 9), and SWMU 62 (Landfill No. 6). The results of the RFI will determine if a source of potential contamination exists, and, if so, if the source has impacted the soil, groundwater, surface water or sediments at or near the site.

The results of the RFI also will be used to determine which TNRCC Risk Reduction Standard (RRS) is appropriate for closure of the units. If the values are all below background

## THE ADMINISTRATIVE RECORD GOES DIGITAL



The Administrative Record and other documents for the NAS Fort Worth JRB Installation Restoration Program (IRP) soon will be available on CD-ROM at the local

Information Repositories.

Community members will be able to view more than 356 documents, such as work plans, sampling and analysis data, and the Community Relations Plan on CD-ROM. *In Magic*, a library management database, will allow readers to use keywords to search for documents of interest.

"The Air Force will provide the information repositories with a CD-ROM, which includes the documents and all software required to view them," says Mr. Dunkle. "It is so much more convenient for both the library staff and the reader to have documents

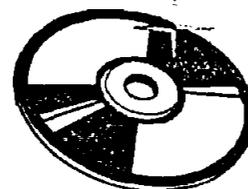
available on-line. Documents are easier to find and keep organized."

As work progresses at the base and new documents become available, the Air Force will provide the library with additional CD-ROMs on a yearly basis.

Information Repositories have been established at the following locations:

**White Settlement Public Library**  
8215 White Settlement Road  
White Settlement, Texas 76108  
(817) 367-0166

**Central Fort Worth Public Library**  
300 Taylor Street  
Fort Worth, Texas 76102  
(817) 871-7701



values, the units will be closed under RRS No. 1. If the values exceed background but are below the "look-up" tables included as RRS No. 2, the site will be closed under RRS No. 2. If the concentrations detected exceed RRS No. 2, a baseline risk assessment will be conducted and potential options will be considered, including closure under RRS No. 3.

"The RFI is a multi-step process. Conducting field activities is one of the first steps in the process," says Mr. Dunkle. "A work plan for the landfill RFI was completed in February 1998. The work plan paved the way for the field activities phase of the landfills investigation."

Field activities for the landfill RFI include:

- Geophysical investigations at each landfill to define former landfill boundaries. These surveys will assist in finding optimal locations for soil borings and monitoring wells.
- Soil borings to evaluate the physical characteristics of the soil and waste. Some of the soil borings also will be used to collect soil samples for chemical analysis.
- Temporary piezometers will be installed at each landfill to evaluate groundwater flow patterns. The results will be used to finalize selection of permanent monitoring well locations.
- Monitoring wells will be installed to evaluate the nature of the groundwater beneath the landfills. These wells will be installed both upgradient and downgradient of the landfills. This will allow the Air Force to establish whether the landfills have had an effect on groundwater quality.
- Monitoring wells will be sampled three times while field activities are underway. Conducting three rounds of sampling will confirm the validity of the sampling results.

According to Mr. Dunkle, the results of the field activities for the landfills will be combined with information obtained from previous investigations to prepare the RFI report. The report is scheduled to be submitted in Fall 1998.

## WELCOME NEW AFCEE STAFFER

Welcome Mike Dodyk to the AFCEE staff here at NAS Fort Worth JRB. As an AFCEE Field Engineer located on-base, Mike will coordinate base-level activities and support Joe Dunkle in San Antonio. Mike will serve as AFCEE's liaison with the 301<sup>st</sup> Air National Guard Unit and the U.S. Navy on-base. Mike also will be involved in awarding and managing AFCEE delivery orders, technical document review, and attending and supporting Restoration Advisory Board meetings.

Mike, who will assume his new duties in March 1998, previously worked with Air Force Materiel Command HQ at Wright Patterson Air Force Base in Dayton, Ohio.

## OTHER NEWS & NOTES

### *Website Under Construction for Carswell/Air Force Plant 4 RAB*



The Carswell/ Plant 4 Restoration Advisory Board is joining the thousands of organizations that offer information via computer screen and modem. In March the Air Force will issue a delivery order en-

abling a contractor to help RAB members develop a website for the group. Plans are to have the website up and running by May 1998.

"In the near future, you will be able to find out the date, time and location of the next RAB meeting, review the RAB's charter, or find recent documents not yet available in the information repository," says Mr. Dunkle. "We believe the website will stimulate interest in the RAB and environmental issues among community members."

The RAB website's address will be publicized in local newspapers when the site is on-line.

### *Compliance Plan*

The Air Force is currently awaiting a draft Compliance Plan from the Texas Natural Resource Conservation Commission (TNRCC). The Compliance Plan is a follow-on document to the RCRA permit, which regulates the cleanup of contaminated sites on-base. The Air Force provided the TNRCC with a permit application on September 26, 1997. The TNRCC is now in the process of creating the Compliance Plan. Once the draft is released, there will be a public comment period. "This will be the chance for the public to have direct input on how the program will be run in the future," says Mr. Dunkle. "We encourage the public to be involved in the Compliance Plan process."

The TNRCC estimates that the Compliance Plan will become final sometime in the summer of 1998.

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