



CARSWELL/PLANT 4 RESTORATION ADVISORY BOARD

Fact Sheet #17
August 8, 2002

NAS FORT WORTH JOINT RESERVE BASE INSTALLATION RESTORATION PROGRAM

This is the 17th in a series of fact sheets focusing on the Installation Restoration Program (IRP) at the Naval Air Station Fort Worth Joint Reserve Base (NAS Fort Worth JRB). The NAS Fort Worth JRB, formerly Carswell Air Force Base (AFB), is in the process of planning and conducting activities for the identification, remediation, and closure of contaminated sites at the base.

The IRP is the Department of Defense's (DoD) 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 efforts of the Air Force Center for Environmental Excellence (AFCEE) and the Air Force Base Conversion Agency (AFBCA). Under provisions of RCRA, the Air Force identified 68 solid waste management units (SWMU) and 20 areas of concern (AOC) at NAS Fort Worth JRB for further study and clean up, if necessary.

CARSWELL ON-BASE

RCRA FACILITY INVESTIGATION OF SOLID WASTE MANAGEMENT UNITS 49 AND 50

SWMUs 49 and 50 are former aircraft washing areas 1 and 2, respectively. The Final Work Plan for SWMU 50 was submitted to AFCEE in September 2000, and the first round of field work was conducted at this location in December 2000. Initial results from the December 2000 sampling event were validated, and it was determined that further soil sampling was necessary at SWMU 50. This soil sampling was conducted in June 2001. In addition, a groundwater investigation was conducted in July 2001 to determine to what extent, if any, groundwater has been impacted. Monitoring wells were installed, and the first round of groundwater sampling was conducted in July 2001. The second round of groundwater sampling was conducted in September 2001, and the third round was conducted in November 2001. The results of the soil and groundwater investigation indicated that additional sampling is not necessary. Therefore, SWMU 50 will be submitted for closure in September 2002.

The first round of soil and groundwater sampling activities at SWMU 49 was conducted in January 2002. Soil samples were collected from four locations surrounding the former aircraft washing area. One monitoring well was installed in the downgradient direction, and two rounds of groundwater sampling have been conducted. Based on the results of this sampling effort, SWMU 49 required additional sampling that was conducted last month. Three additional monitoring wells were installed and sampled. This sampling data will be evaluated to determine if this site requires additional sampling or can be submitted for closure.

LIMITED RCRA FACILITY INVESTIGATION OF SOLID WASTE MANAGEMENT UNITS 54 AND 55

The Final Work Plans to conduct a limited RCRA Facility Investigation (RFI) were completed in September 2000 for the Storm Water Interceptors (SWMU 54) and the East Gate Oil/Water Separator (SWMU 55).

Soil sampling was conducted for SWMUs 54 and 55 to determine if these units have released hazardous constituents to the environment. The first round of sampling was conducted in December 2000. The second round of sampling was completed in June 2001, and the third round was completed in December 2001. Contaminated soil and sediment will be removed before SWMUs 54 and 55 are submitted for closure. This removal action will be completed later this year.

RCRA FACILITY INVESTIGATION OF LANDFILLS CONTINUES

RFIs continue at five former landfills, also referred to as SWMUs. These landfills include Landfill 7 (SWMU 17), Landfill 1 (SWMU 28), Landfill 2 (SWMU 29), Landfill 9 (SWMU 30), and Landfill 6 (SWMU 62). The results of the RFIs will determine if a source of potential contamination exists, and if the source has impacted the soil, groundwater, surface water, or sediments at or near each landfill. Work plans were prepared for the fourth phase of investigations at Landfills 1, 2, 6, 7, and 9, and field work was completed in February 2001. Additional sampling was conducted in June 2001. Based on evaluation of the data, interim remedial actions, also referred to as "hot spot removals," were necessary prior to the completion of the RFI for Landfills 2, 6, 7, and 9. These hot spot removals began in October 2001 and concluded in January 2002. A Draft RFI Report for Landfills 2, 6, 7, and 9 was submitted last month to AFCEE for review. Landfill 1 will require additional sampling and hot spot removals to be conducted later this fall.

WASTE ACCUMULATION AREA RCRA FACILITY INVESTIGATION

A RFI of 16 Waste Accumulation Areas (WAA) was completed in June 1999. Based on the results of the initial investigation, a RFI report recommending regulatory closure was prepared for 7 of the 16 WAAs and submitted to the regulators in July 2000. Closure of these seven WAAs was approved by the Texas Natural Resource Conservation Commission (TNRCC) in November 2000. A Phase II soil and groundwater investigation was performed on the remaining nine WAAs in May 2000. Based on the results of the Phase II investigation, a Final RFI Report recommending site closure was submitted to TNRCC for four additional sites in March 2001. The TNRCC granted closure of these four sites in June 2001. Additional investigations and/or remedial actions were required at the remaining five WAAs. Work plans for additional soil and groundwater sampling were submitted to AFCEE in January 2001, and the additional sampling was conducted at the remaining five sites in June 2001. Based on the results of the June 2001 sampling event, hot spot removals were necessary at three WAAs and began in October 2001. The hot spot removals were completed in January 2002, and a RFI report was prepared and submitted for approval in June.

RCRA FACILITY INVESTIGATION OF SOLID WASTE MANAGEMENT UNITS 19, 20, AND 21 AND AREA OF CONCERN 19

The first round of field sampling activities was completed in May 2000 for RFIs of the following areas: former Fire Training Area No. 2 (SWMU 19), former aboveground waste fuel storage tank (SWMU 20), former underground storage tank (SWMU 21), and suspected former fire training area (AOC 19).

A geophysical survey was completed at SWMUs 19, 20, and 21 and AOC 19 in February 2001. Based on the results of this survey, several areas of buried metal were excavated, and additional soil sampling was conducted in August 2001. The anomalies were caused by buried scrap metal such as steel pipes, metal plates, wire, and road construction debris. Monitoring wells were installed at these sites in February 2001, and groundwater sampling was conducted in February, April, and June 2001. Additional rounds of groundwater sampling at SWMUs 19, 20, and 21 were conducted in October and December 2001. The Final Site Investigation (SI) Report for AOC 19 requesting closure was submitted to TNRCC in April 2002. A RFI Report currently is being prepared and will be submitted to AFCEE for review later this fall.

UNDERGROUND STORAGE TANK PROGRAM

Additional sampling of groundwater at AOC 1, the Base Service/Gas Station, and the delineation of contaminants further downgradient of AOC 1 were requested by the TNRCC in January 2000. Groundwater sampling performed in monitoring wells installed off-base in May 2000 and July 2001 revealed the presence of fuel hydrocarbons in several of the off-base wells. The most recent sampling of the off-base wells occurred in April 2002. Surface water samples collected from the West Fork Trinity River during previous sampling events detected no hydrocarbons downgradient of AOC 1. Based on the groundwater results from samples collected from the off-base wells, the decision was made to install an interim remediation system downgradient of AOC 1. The purpose of the remediation system is to prevent any additional migration of fuel hydrocarbons beyond the base boundary and to remediate the fuel hydrocarbons already present in the groundwater. The remediation system design was completed in coordination with the Navy. The Corrective Action Plan including the final remedial system design was reviewed and approved by AFCEE in May 2002 and submitted to the TNRCC for review and approval in June 2002.

The TNRCC requested additional information for underground storage tanks (UST) at Buildings 1040, 4115, and 4136 and a Ground Control Approach (GCA) site in order to complete the site review process. Additional groundwater monitoring wells were installed and groundwater samples collected to provide the additional information requested by the TNRCC. The sample results are pending and should be received in the next few weeks. The TNRCC also issued a Leaking Petroleum Storage Tank number for the USTs at Building 1411 in February 2002. A risk-based assessment was completed for the site on April 15, 2002. The TNRCC requested additional groundwater information for this location based on the risk assessment. Groundwater samples were collected in July 2002. The results of the sampling are pending. The risk assessment will be resubmitted to the TNRCC after receipt of the groundwater sampling results. Per the TNRCC, groundwater samples were also collected in July 2002 for a Plan A risk assessment accomplished for former USTs located at Building 4210. A new monitoring well was installed and sampled to provide additional groundwater data requested by the TNRCC. The Plan A risk assessment will be submitted to the TNRCC after receipt of the groundwater sampling results.

RCRA FACILITY INVESTIGATION OF OIL/WATER SEPARATORS

A RFI is being conducted on 21 oil/water separator (OWS) sites at NAS Fort Worth JRB. Based on the results of the initial investigation, one OWS (SWMU 7) received closure in July 2000 based on evidence that a release of hazardous constituents to the environment has not occurred from this unit. In December 2000, a RFI Report for five additional OWS sites at Buildings 1101, 1320, 1423, 1656, and 4160 was submitted to the regulators for closure, also based on evidence of no release. The TNRCC granted No Further Action status for these five sites in a letter dated March 23, 2001.

Investigations will continue at the remaining 15 sites before closure can be requested. Phase III Work Plans for 14 OWS sites were submitted in November 2000, and the field work was completed soon thereafter. A Final RFI report requesting closure for 13 of these sites at Buildings 1015, 1027, 1060, 1064, 1190, 1191, 1194, 1414, 1602, 1643, 3358, 4146, and 4210 was submitted to the TNRCC for review in May 2001. An addendum report was prepared for 10 of these sites based on comments received from TNRCC and was submitted to TNRCC in April 2002. One OWS site (Building 1655) required additional investigation that was conducted in June 2001. The Final RFI Report for the Building 1655 OWS was submitted to TNRCC for review in April 2002. The OWS at Building 1145 (AOC 13) has been removed and was approved for closure by TNRCC in October 2001.

SOLID WASTE MANAGEMENT UNIT 64 STATUS UPDATE

SWMU 64, the French Underdrain System, was removed by excavation in October 2001. A closure report documenting the removal of the system will be submitted to the TNRCC next month. All contamination has been investigated and remediated to Risk Reduction Standard (RRS) 2 levels.

CARSWELL OFF-BASE

SANITARY SEWER SYSTEM RFI

Results from Phase II soil and groundwater sampling in March 2000 verified that most sections of the Sanitary Sewer may be recommended for closure. However, a Phase III RFI was required to complete confirmation and/or delineation of some contaminants at specific locations along the NAS sanitary sewer lines only. The Phase III RFI began on February 14, 2001, and the sampling and analysis results indicate certain specific locations will require hot spot removals. Programming action is under way to approve the removal of the hot spots. The hot spots removals are scheduled to commence this fall.

OFF-SITE WEAPON STORAGE AREA

All field work has been completed, and areas of previous excavation have been filled and regraded. The Draft Final Closure Report for Removal of Hazardous/Non-Hazardous Wastes was submitted to the regulators in September 2000 and approval for closure under Risk Reduction Standard (RRS) 2 was received on February 5, 2001. The Deed Certification also has been completed for the entire Weapon Storage Area (WSA) site. Final closure of three underground storage tanks, which were removed under the TNRCC Petroleum Storage

Tank Division regulations, was approved by TNRCC early this summer. The Finding of Suitability for Transfer (FOST) for the WSA is under review by the regulatory agencies and the U.S. Air Force.

PROPERTY TRANSFERS

- Property transfer for the Kings Branch Housing Area was completed in October 2000.
- Property transfer for the Federal Bureau of Prisons was completed on December 15, 2000.
- Property transfer for the Stables was completed August 1, 2001.
- The FOST for the WSA is currently under review.
- The Finding of Suitability to Lease (FOSL) for Expansion of the Golf Course to include Landfill 6 was signed by AFBCA on October 5, 2001.

RCRA PERMIT RENEWAL UPDATE

The RCRA permit for Carswell AFB, Texas, was signed by the TNRCC on May 2, 1990, and became effective February 7, 1991. The permit is required to be updated and renewed every 10 years. The permit renewal application was submitted to the regulatory agency on February 1, 2001, and the final permit approval is projected to be approved by November 2002. The permit renewal with amendment is an institutional control to ensure Corrective Actions continue until all of the U.S. Air Force sites located both on NAS Fort Worth JRB and on the former Carswell AFB property off-base are closed. Currently, only sites located on NAS Fort Worth JRB remain open. The Draft Final Permit was signed by TNRCC on June 24, 2002, and is available for the public to review at the White Settlement Public Library. Written comments and requests for a public meeting regarding the permit should be submitted to:

Office of the Chief Clerk
TNRCC, MC105
P.O. Box 13087
Austin, TX 78711-3087

GLOSSARY OF TERMS

Area of Concern (AOC) – an area identified as a potential environmental concern.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – Also known as “Superfund,” this law was enacted in 1980 and requires the identification, investigation, and clean up of contaminated sites.

Oil/Water Separator (OWS) – an oil water separator is used to separate the oil from waste water. Oil water separators are used commonly with service stations, maintenance shops, and surface water drainage systems where surface water run off may collect oil drippings or small spills.

PCE (Tetrachloroethene) - an industrial solvent used to dissolve or disperse another substance such as oil; often used in degreasing metal parts.

Resource Conservation and Recovery Act (RCRA) – a law enacted to identify active hazardous waste generating facilities, investigate past site contamination, and initiate cleanup and pollution prevention measures.

RCRA Facility Investigation (RFI) – an investigation of soil and groundwater contamination resulting from a release of contaminants from a storage unit regulated under RCRA.

Risk Reduction Standard (RRS) – a risk-based cleanup standard for soil and groundwater defined by the Texas Natural Resource Conservation Commission.

Site Investigation (SI) – a preliminary environmental study of a site possibly contaminated by an underground storage tank used for storing petroleum products such as gasoline or aviation fuels.

Solid Waste Management Unit (SWMU) – a defined area used for storage or disposal of hazardous wastes as defined by RCRA.

Trichloroethene (TCE) – an industrial solvent used to dissolve or disperse another substance such as oil; often used in degreasing metal parts.

Underground Storage Tank (UST) – a tank installed beneath the ground surface used for storing liquids such as gasoline, aviation fuels, and waste oils.

Waste Accumulation Area (WAA) – a specified area used for temporary storage of hazardous wastes.

FOR MORE INFORMATION

If you would like more information, please see our web site at <http://www.afcee.brooks.af.mil/er/carswell/nasfw/rab/rab.htm> or contact the following individuals:

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