



CARSWELL/PLANT 4 RESTORATION ADVISORY BOARD

**Fact Sheet #10
November 2, 2000**

NAS FORT WORTH JOINT RESERVE BASE INSTALLATION RESTORATION PROGRAM

This is the tenth 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 19 areas of concern (AOC) for further study and clean up, if necessary.

CARSWELL ON-BASE

RCRA FACILITY INVESTIGATION OF SOLID WASTE MANAGEMENT UNITS 19, 20, 21, AND 53 AND AREA OF CONCERN 19

The first round of field sampling activities was completed in May for RCRA Facility Investigations (RFI) 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), former fire training area (AOC 19), and the storm water drainage system (SWMU 53). Based on the results of the data collected, further sampling is necessary as proposed to the regulators in meetings held earlier today. The field work will be conducted later this month. If no additional sampling is required after this next field effort, then the Draft RFI Report will be prepared.

RCRA FACILITY INVESTIGATION OF SOLID WASTE MANAGEMENT UNITS 49 and 50

SWMUs 49 and 50 are former aircraft washing areas 1 and 2, respectively. Because of the nature and location of these units, work on SWMU 49 is contingent on the findings of potential contamination at SWMU 50. Therefore, work plans were prepared for the sampling at SWMU 50 only. The Final Work Plan for SWMU 50 was submitted to AFCEE in September. The field work will begin later this month.

SITE INVESTIGATION OF AREAS OF CONCERN 17 AND 18

The first round of field sampling activities also was completed in May for the Site Investigations (SI) at a suspected former landfill (AOC 17) and suspected former fire training area (AOC 18). Based on the sampling results, it does not appear as though a release of hazardous constituents has occurred from either of these units. Therefore, an SI report recommending closure of these units will be submitted to the regulators later this month.

LIMITED RCRA FACILITY INVESTIGATION OF SOLID WASTE MANAGEMENT UNITS 45, 54, and 55

The Final Work Plans to conduct a limited RFI were completed in September for the following areas: Building 1027 Waste Oil Tank Vault (SWMU 45); Storm Water Interceptors (SWMU 54); and the East Gate Oil/Water Separator (SWMU 55). A geophysical survey will be conducted in the vicinity of the oil/water separator serving Building 1027 to determine the existence of SWMU 45. As-built drawings obtained for the oil/water separator indicate that a waste oil tank vault associated with the oil/water separator does not exist. Soil sampling will be conducted for SWMUs 54 and 55 to determine if these units have released hazardous constituents to the environment. The field work will be conducted later this month. If no additional sampling is required after this next field effort, then the Draft RFI Report will be prepared.

BASEWIDE GROUNDWATER MONITORING CONTINUES

The Air Force collects groundwater samples at basewide locations four times a year to monitor the status of the contaminant plumes and to provide information for establishing trends. The current program (called Basewide Quarterly Groundwater Sampling and Analysis Program, or GSAP) has been in place since April 1995. Quarterly events occur in January, April, July, and October of each year. The GSAP Plan was updated for the year 2000's sampling events. The most recent round of quarterly monitoring was completed last month. The results of this sampling event will be submitted to AFCEE in January 2001.

RCRA FACILITY INVESTIGATION OF LANDFILLS CONTINUES

RFIs continue at six former landfills, also referred to as SWMUs. These landfills include Landfill No. 7 (SWMU 17), Landfill No. 3 (SWMU 26), Landfill No. 1 (SWMU 28), Landfill No. 2 (SWMU 29), Landfill No. 9 (SWMU 30), and Landfill No. 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. Field work for the fourth phase will begin this month.

WASTE ACCUMULATION AREA RCRA FACILITY INVESTIGATION

An RFI of 16 Waste Accumulation Areas (WAA) was completed in June 1999. Based on the results of the initial investigation, an RFI report recommending regulatory closure was prepared for 7 of the 16 WAAs and submitted to the regulators in July 2000. Regulatory comments are pending. A Phase II soil and groundwater investigation was performed on the remaining 9 of the 16 WAAs in May 2000. Based on the results of the Phase II investigation, a Draft RFI Report recommending site closure will be submitted to AFCEE for four additional sites in late November 2000. Additional investigations and/or remedial actions will be required at the remaining five WAAs. Work plans for additional soil and groundwater sampling will be submitted to AFCEE in early December 2000.

UNDERGROUND STORAGE TANK PROGRAM

Soil samples collected at the location of the former Underground Storage Tank (UST) 1427-1 during the initial UST investigations indicated that a release to the environment had occurred from the UST. As a result, the site was determined to meet the Texas Natural Resource Conservation Commission (TNRCC) definition of a Leaking Petroleum Storage Tank (LPST) site. A Final Release Determination Report for UST 1427-1 was submitted to the TNRCC in July 2000 presenting this discovery and requesting a TNRCC LPST site identification number. A Plan A Site Assessment will be completed for the LPST at Building 1427. This information will be presented in a Draft Site Assessment Report and will be submitted for AFCEE review in December 2000.

Additional sampling of groundwater at AOC 1 Base Service Station and the delineation of contaminants further downgradient of AOC 1 was requested by the TNRCC in January 2000. The sampling consisted of the installation and sampling of three downgradient off-base wells and the continued groundwater monitoring of existing on-base wells. Three off-base wells were installed and sampled in May 2000, and the first semiannual groundwater sampling at seven existing on-base wells was performed in April 2000. The most recent semiannual sampling event occurred in October 2000.

AFCEE provided review comments on the Draft AOC 4 1999 Annual Groundwater Monitoring Report in May 2000. This report presents four quarters of groundwater sampling that were performed in 1999. The Final AOC 4 1999 Annual Groundwater Sampling Report was submitted to the TNRCC in July 2000, fulfilling the TNRCC reporting requirements for an LPST site undergoing a long-term monitoring program. For the year 2000, groundwater monitoring at this site was reduced to a semiannual sampling schedule. The first semiannual sampling event was performed in April 2000. Product removal activities from two wells at AOC 4 continue on a weekly to monthly basis. The most recent semiannual sampling event occurred in October 2000.

Product removal activities at four wells associated with SWMU 68 and AOC 7 have continued on a weekly to monthly basis. Semiannual groundwater sampling to monitor the stability of groundwater contaminants began in April 2000 with the most recent semiannual sampling having occurred in October 2000. The TNRCC has requested a historical review in the form of a Site Assessment Report for the sites. AFCEE provided review comments on the Draft Site Assessment Report for SWMU 68 and AOC 7 in September 2000. The comments were incorporated in the final version and were submitted to the TNRCC in October 2000.

CORRECTIVE MEASURES PROPOSED FOR AREA OF CONCERN 13

Field work for the removal and replacement of the oil/water separator (OWS) system associated with AOC 13 was performed in May 2000. The removal activities consisted of the over excavation of soils around the system, the removal and disposal of one OWS and one UST, and the excavation of soils beneath and around the system that appeared to be affected as the result of the system. Confirmation soil sampling was conducted at the limits of the excavation along the walls of the pit. A review of the analytical data from the soil sampling was performed, and it was determined that further investigation is necessary at this site. The next round of sampling will be conducted in December. A brief work plan for this next field effort was submitted to AFCEE for review last month.

RCRA FACILITY INVESTIGATION OF OIL/WATER SEPARATORS

A RCRA Facility Investigation 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. Five additional OWSs will be submitted for closure, also based on evidence of no release, later this month. Investigations will continue at the remaining 15 sites before closure can be submitted. Phase III Work Plans for 14 OWS sites will be submitted this month and the field work will begin soon thereafter. One OWS (AOC 13) has been removed and will be closed under a separate cover (see "Corrective Measures Proposed for Area of Concern 13").

ONLINE DOCUMENTS FOR CARSWELL

All documents published in the Carswell Administrative Record/Information Repository can be obtained from the web site hosted by AFCEE for the Carswell AFB Restoration Advisory Board. The address is <http://www.afcee.brooks.af.mil/er/carswell/nasfw/>.

CARSWELL OFF-BASE

RCRA FACILITY INVESTIGATION OF LANDFILLS

Field work was completed at four former landfills in September 2000. These landfills include Landfills (LF) No. 4, 5, and 8 and Waste Pile (WP) 07. Installation of earthen caps at LFs 4 and 5 were completed, and the Final Cover System Evaluation Reports were issued to TNRCC for approval in September 2000. The hot spot removal from LF 8 was completed. Drum and hot spot removal at WP07 were completed in September 2000. A post removal geophysical survey verified the removal of drums was complete. All data from the final verification sampling was provided for completion of the RFI Closure Report for these sites, which has been submitted to TNRCC for review and approval. Final disposal of the hazardous waste from WP07 was completed in October 2000. All work at these landfills is complete.

SANITARY SEWER SYSTEM RFI

Results from Phase II soil and groundwater sampling in March 2000 has verified that most sections of the Sanitary Sewer may be closed. However a Phase III RFI is required to finish confirmation and/or delineation of some contaminants. The Phase III RFI also will take samples from Sanitary Sewer areas with questionable structural integrity as identified in a camera survey. The Phase III investigation will commence in November 2000. The results of the RFI will be used to determine which TNRCC Risk Reduction Standard (RRS) is appropriate for closure of the unit. If the values are all below background, then a closure with no further action will be requested. If the sites have contaminants above background levels concentrations, then additional efforts will be accomplished that may include remediation of the sites.

OFFSITE WEAPON STORAGE AREA

All field work has been completed, and areas of previous excavation have been filled and regraded. The RFI site closure report was submitted to the regulators in July 2000, and U.S. EPA comments were received in August 2000. The Draft Final Closure Report was submitted to the regulators in September. Final closure of three underground storage tanks under the TNRCC Petroleum Storage Tank Division will be completed within the next quarter.

GROUNDNS MAINTENANCE YARD AND AEROSPACE MUSEUM SITE

- The metes and bounds survey of the Grounds Maintenance Yard was completed in September, and the closure report for the Grounds Maintenance Yard was submitted to the regulatory agencies in October 2000.
- Further sampling is planned for certain analytes at the Aerospace Museum Site. Sampling began in mid-October 2000.

PROPERTY TRANSFERS

- Property transfer for the Federal Bureau of Prisons was completed in August 2000.
- Property transfer for the Kings Branch Housing Area was completed in October 2000.

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.

Dense Non-Aqueous Phase Liquid (DNAPL) – a non-soluble liquid that is more dense than water. These liquids sink in water and include such materials as trichloroethene and dichloroethene.

Dichloroethene (DCE) – a chemical that can be either man-made or produced by the natural degradation of TCE.

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.

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.

Vinyl Chloride – a chemical compound produced both by manufacturing and by degradation of TCE in the environment.

Volatile Organic Compound (VOC) – a type of organic chemical or compound with a high propensity to vaporize.

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/> or contact the following individuals:

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