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DRAFT MEETING MINUTES FROM RESTORATION ADVISORY BOARD MEETING AGENDA
FROM 23 SEPTEMBER 2004 WITH ATTACHMENTS NAS FORT WORTH TX
9/23/2004
RESTORATION ADVISORY BOARD



CARSWELL AFB TEXAS

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 782



Meeting Notice

Carswell/Plant 4 Restoration Advisory Board

September 23, 2004

6:00–8:00 pm

Holiday Inn Express

2730 Cherry Lane



**MEETING
LOCATION!**

Notice: *A tour of the Environmental Cleanup Sites will begin at approximately 6:30 pm as part of the RAB Meeting. Transportation will be provided. Please note, due to the sensitivity of Lockheed programs, cameras, tape recorders, laptop computers, or other recording devices are not permitted on the tour.*

Agenda

Welcome/Introductions/Minutes

Westworth Redevelopment Authority Update

Action Items

Air Force Plant 4/George Walters
Program Update

Carswell On-Base/Mike Dodyk
Program Update

Environmental Cleanup Site Tour

Open Discussion/Questions

Enclosures:

Draft May 2004 meeting minutes

For more information, please contact:

Mike Dodyk 817-782-6482

Estella Holmes 1-800-982-7248, ext. 53395

Carswell/Plant 4 RAB seeks to expand its membership within the community. Please encourage others to join us at the September meeting.

CARSWELL/PLANT 4 RESTORATION ADVISORY BOARD MEETING

DRAFT Summary Minutes of September 23, 2004 Regular Quarterly Meeting

A regular meeting of the Carswell/Plant 4 Restoration Advisory Board (RAB) was held September 23, 2004 at the Holiday Inn Express, 2730 Cherry Lane, Fort Worth, TX. The RAB meeting began at 6:00 p.m.

AGENDA

- Welcome/Introductions/Minutes
- Westworth Redevelopment Authority Update
- Action Items
- Air Force Plant 4 (George Walters)
 - Program Update
- Carswell On-Base (Mike Dodyk)
 - Program Update
- Environmental Cleanup Site Tour
- Next Meeting Agenda
- Open Discussion/Questions

WELCOME AND INTRODUCTION OF ATTENDEES

Ms. Chris Baack, Community Co-Chairman, called the meeting to order. The minutes from the May 2004 RAB meeting were approved. No action items remain from the May 2004 meeting. Ms. Baack turned the meeting over to Mr. George Walters.

Mr. Walters explained that due to the large turnout of people for the AFP 4 tour, the RAB meeting would be suspended for the evening. Mr. Walters introduced the RAB members, Air Force cleanup personnel, and regulatory personnel in attendance. He briefly explained the cleanup at Carswell and AFP 4 and described the function of the RAB.

Mr. Walters discussed the objective of the tour and the sites that would be visited. At that point, he asked that everyone board the busses to begin the tour.

NEXT MEETING

The next RAB meeting was scheduled for November 18, 2004. This meeting was later cancelled and rescheduled for February 10, 2005.

IN ATTENDANCE

Carswell DERA (On-Base)

Mike Dodyk, AFCEE, Resident Engineer

Mike Hawkins, Public Affairs, AFCEE

Carswell AFRPA (Off-Base)

Charles Pringle, HQAFCEE/BCW

Larisa Dawkins, AFRPA

Air Force Plant 4

George Walters, AFP 4 Project Manager, ASC, Wright Patterson Air Force Base

Estella Holmes, Public Affairs, Wright Patterson Air Force Base

Texas Commission on Environmental Quality

Ray Risner

Tim Sewell

Luda Voskov

U.S. Environmental Protection Agency

Robert Sullivan

Noel Bennett

Lockheed Martin

Sarah Young

Norman Robbins

Community

Greg Hendrickson, RAB, Community Member, River Oaks

Judy Hendrickson, Community Member, River Oaks

Chris Baack, RAB, Community Member

Vince Wilcox, RAB, Community Member

Paul Bounds, City of Fort Worth

Richard S. Talley, City of Fort Worth

Mary Gugliuzza, City of Fort Worth Water Department

Robert Chambers, Freese & Nichols

Kelly Harrall, Tarrant County College (TCC)

Kyle Thomason, TCC

Cristin Thorne, TCC

Malina Dallmann, TCC

Sheldon Cooksey, TCC

Amanze Asogu, TCC

Marcus Cliauvin, TCC

Krystal Kinslow, TCC

Angee Kinslow, TCC

Ife Komolafe, TCC

Matt Rios, TCC
Whitney Green, TCC
Humera Chaudhry, TCC
Regina Huse, TCC
Darcy Farrell, TCC
Kyle Freeman, TCC
Amy Prawer, TCC
Wei-Chiang Hsiao, TCC
Jennifer Dunn, TCC
Amber Jenkins, TCC
Joyce Nakawesi, TCC
Zach Orr, TCC
Glen Royall, TCC
Fernando Lopez, TCC
Ryan Feagley, TCC
Amy Powell, TCC
Onyinye Avanti, TCC
Daisy Figueroa, TCC
Lacye Hosfelt, TCC
Sara Klontz, TCC
Chappell Hope, TCC
Sarah Hope, TCC
Landon Amis, TCC

Air Force Contractors

Rick Wice, Shaw Group
Gregg McGraw, Shaw Group
Robyn Thompson, Smith/Associates

Comments/corrections regarding these meeting minutes should be sent to:

Ms. Miquette Rochford
HydroGeoLogic, Inc.
Phone: (970) 243-3893
Fax: (866) 545-8377
e-mail: mer@hgl.com



Restoration Advisory Board (RAB) East Parking Lot and Building 181— Remediation System Briefing/Tour Air Force Plant No. 4



Richard B. Wice, PG, CHMM

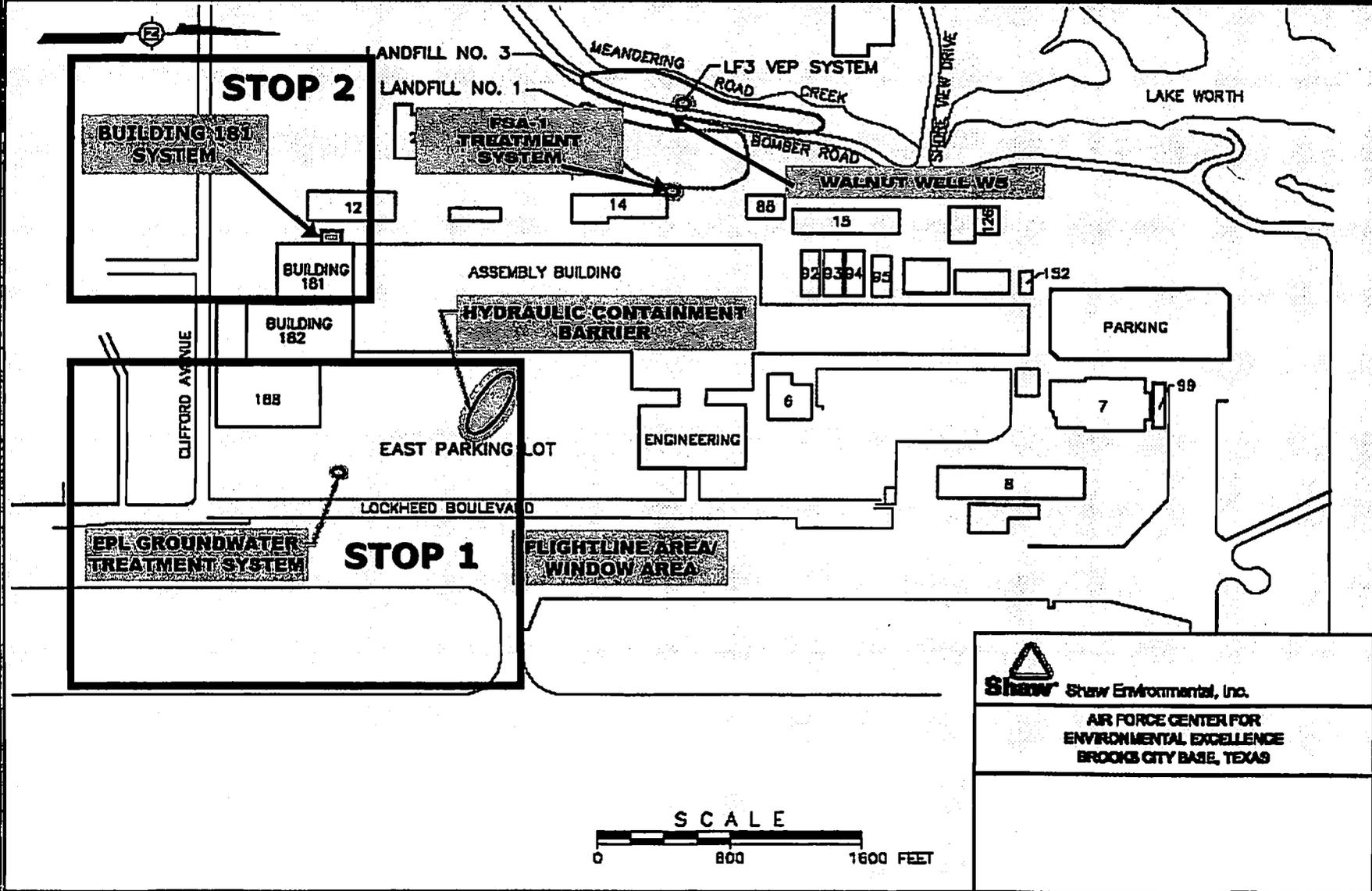
Shaw Environmental, Inc.

September 23, 2004

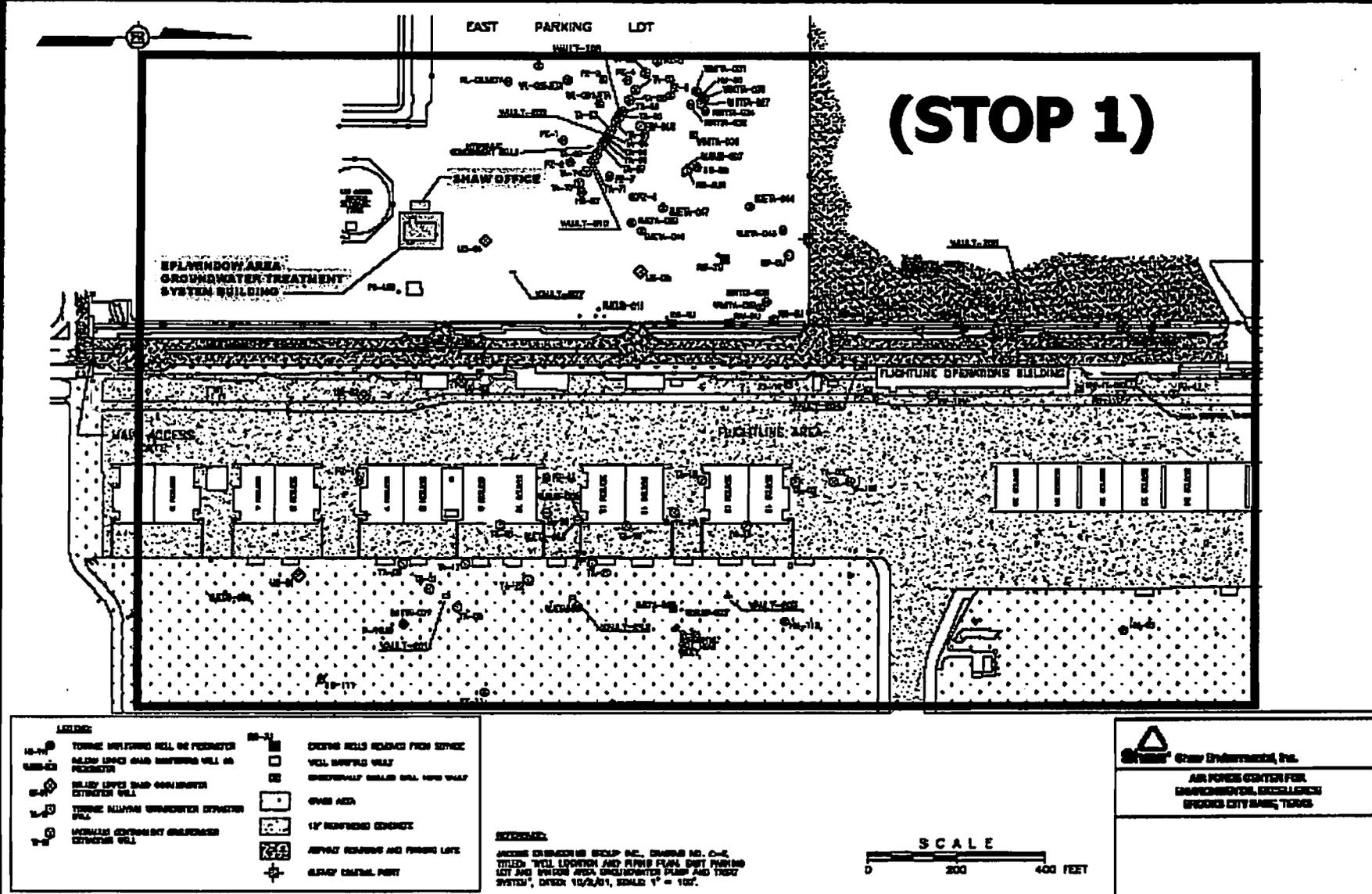
Richard.Wice@shawgrp.com

(412) 858-3309

Air Force Plant No. 4 Area—Installation Restoration Program Remediation System Locations



Location of East Parking Lot (EPL) - Groundwater Recovery and Treatment System



EPL Groundwater Recovery and Treatment System – Operational Milestones

- **Interim EPL System designed and constructed by IT Corporation during 1993 - 1994, and began operations in 1995.**
- **EPL System expanded by Jacobs Engineering Group to meet more recent AFP4 Record of Decision (1996) requirements during 1999 – 2001.**
- **Shaw took over operation of the expanded EPL System in November 2001, and continues to operate the EPL System today (2004).**
- **Treatment system currently operates at flow rates between 80 – 100 gallons per minute (gpm).**

EPL Groundwater Recovery and Treatment System – Operational Milestones (continued)

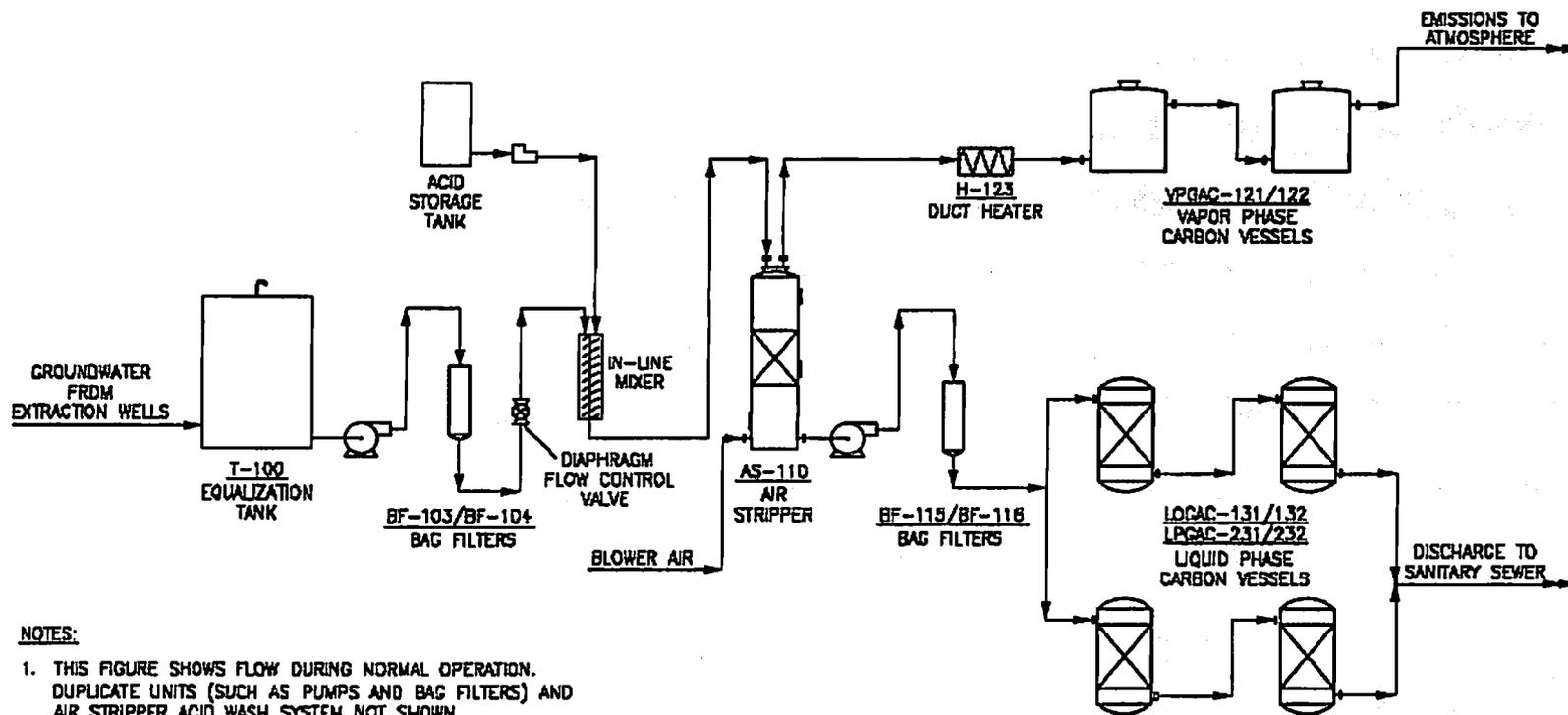
- **Approximately 68.5 Million gallons of ground-water have been recovered and treated by the EPL System (from November 2001 - June 2004).**
- **TCE influent concentrations have ranged from 1,300 micrograms per liter ($\mu\text{g/L}$) to 4,200 $\mu\text{g/L}$ since November 2001. Samples collected during 2004 ranged from 1,500 $\mu\text{g/L}$ to 1,900 $\mu\text{g/L}$.**
- **The EPL system has recovered an estimated 1,245 pounds of TCE (and over 1,350 pounds of total VOCs) from groundwater during the period of November 2001 through June 2004.**
- **Groundwater levels are lowered—indicates that EPL System has a good groundwater capture zone.**



EPL Groundwater Recovery and Treatment System – Basic Equipment/System Elements

- Extraction wells/well vaults/pumps/piping
- Equalization Tank
- Bag Filter Unit
- Acidification (pH adjustment) Unit
- Air Stripper Unit
- Vapor-Phase Carbon Polish Units
- Treated Air Emissions Discharge to Atmosphere
- Post-Air Stripper Bag Filter Unit
- Vapor-Phase Carbon Polish Units
- Treated Liquid Phase Discharges to Ft. Worth POTW

EPL Pump and Treatment System — Process Flow Diagram



NOTES:

1. THIS FIGURE SHOWS FLOW DURING NORMAL OPERATION. DUPLICATE UNITS (SUCH AS PUMPS AND BAG FILTERS) AND AIR STRIPPER ACID WASH SYSTEM NOT SHOWN.
2. FIGURE SHOWS NEW ACID STORAGE TANK AND IN-LINE ACID MIXER.

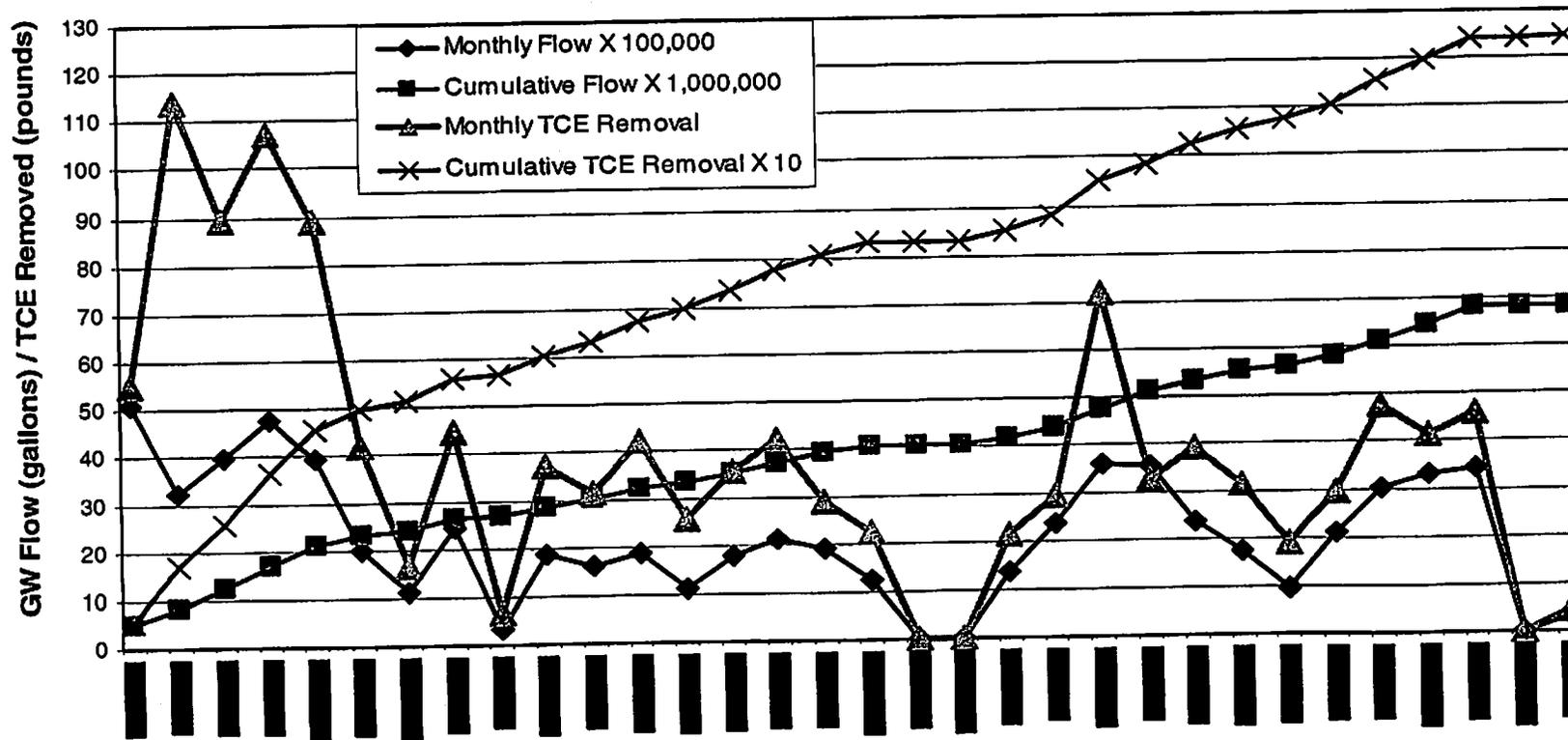
REFERENCE:

THIS DRAWING REVISED FROM JACOBS ENGINEERING DRAWING NO. 70300-83A, TITLED: "FLOW SCHEMATIC, EAST PARKING LOT AND WINDOW AREA GROUNDWATER PUMP AND TREAT SYSTEM", DATED: 10/27/88.

 Shaw Shaw Environmental, Inc.
AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE BROOKS CITY BASE, TEXAS

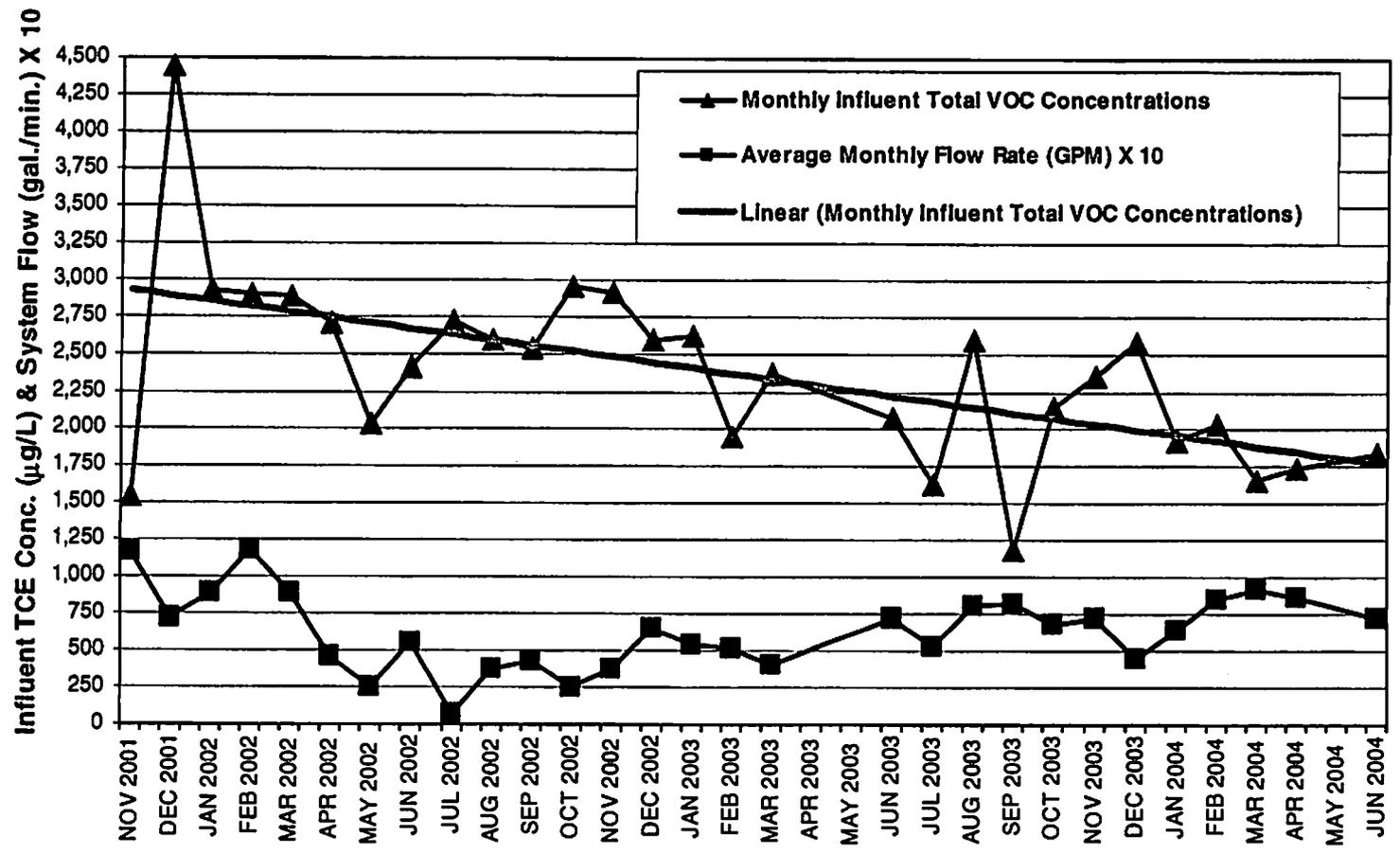
EPL Treatment System Production Rates (November 2001 – June 2004)

**TCE Recovery and Production Rates
East Parking Lot (EPL) Groundwater Recovery and
Treatment System
Air Force Plant 4 - Fort Worth, Texas**



Influent VOC Concentrations and Process Flow Rates (November 2001 – June 2004)

Influent VOC Concentrations and Process Flow Rates East Parking Lot (EPL) Groundwater Recovery and Treatment Air Force Plant 4 - Fort Worth, Texas



EPL Area Wells – Preliminary Comparison of TCE Data – 2000 and 2004 Well Field Sampling Data

ERPIMS Well Identification	Well Field Identification	Previous Sampling - TCE Result (µg/L)	Previous TCE Sampling Date	Recent Sampling - TCE Result (µg/L)	Recent TCE Sampling Date
Piezometers					
HM-89	HM-89	1,000	9/13/2000	310	3/31/2004
WL-112PJETA	PZ-12	38	9/14/2000	53	3/30/2004
WL-114PJETA	PZ-14	0.52J	9/13/2000	9.5	3/30/2004
W-149	W-149	10,000	9/12/2000	3,400	4/1/2004
W-156	W-156	7,800	9/14/2000	1,700	3/30/2004
WINTTA022	WINTTA022	6,000	9/13/2000	1,500	3/31/2004
WJETA043	WJETA043	1,500	9/12/2000	470	3/31/2004
WJETA087	WJETA087	8,600	9/14/2000	3,000	3/30/2004
WJETA088	WJETA088	6,200	9/14/2000	5,300	3/30/2004
WJEUS008	WJEUS008	4,700	9/13/2000	2,300	3/31/2004
WL-091JETA	WL-091JETA	4,100	9/12/2000	980	3/31/2004
Extraction Wells					
WL-153JETA	TA-53	1,400	12/12/2000	1,600	3/30/2004
WL-160JETA	TA-60	4,200	12/20/2000	880	3/30/2004
WL-165JETA	TA-65	640	12/12/2000	720	3/30/2004
WL-171JETA	TA-71	200	12/12/2000	230	3/30/2004
WL-101JETA	TA-01	1,400	12/12/2000	310	4/1/2004
WL-104JETA	TA-04	5,000	12/13/2000	4,500	3/30/2004
WL-106JETA	TA-06	2,000	12/13/2000	1,000	3/30/2004
WL-107JETA	TA-07	8,400	12/13/2000	2,600	3/30/2004

EPL Area Wells – Preliminary Comparison of TCE Data – 2000 and 2004 Well Field Sampling Data

ERPIMS Well Identification	Well Field Identification	Previous Sampling - TCE Result (µg/L)	Previous TCE Sampling Date	Recent Sampling - TCE Result (µg/L)	Recent TCE Sampling Date
WL-111JETA	TA-11	13,000	12/12/2000	3,100	3/30/2004
WL-112JETA	TA-12	4.2	12/20/2000	720	3/30/2004
WL-113JETA	TA-13	500	12/12/2000	1,700	3/30/2004
WL-115JETA	TA-15	8,200	1/22/2001	2,700	3/30/2004
WL-116JETA	TA-16	1,600	12/13/2000	2,800	3/30/2004
WL-117JETA	TA-17	710	12/13/2000	1,400	3/30/2004
WL-119JETA	TA-19	4,500	12/16/2000	920	3/30/2004
WL-120JETA	TA-20	5,300	12/20/2000	2,100	3/30/2004
WL-122JETA	TA-22	5,900	12/13/2000	2,000	3/30/2004
WL-127JETA	TA-27	1,100	12/12/2000	1,800	3/30/2004
RW-1U	RW-1U	4,600	12/14/2000	480	3/30/2004
RW-2U	RW-2U	6,000	12/14/2000	2,600	3/30/2004
RW-6U	RW-6U	3,300	12/14/2000	1,800	3/30/2004
RW-8UR	RW-8UR	4,400	12/14/2000	850	3/30/2004
RW-10U	RW-10U	5,800	1/22/2001	1,900	3/30/2004
RW-11U	RW-11U	1,500	1/22/2001	190	3/30/2004
WJETA083	WJETA083	3,200	12/20/2000	1,700	3/30/2004

Notes:

The 2004 data meet EPA criteria, but not AFCEE criteria due to lab control spike error.

NA - Not Applicable

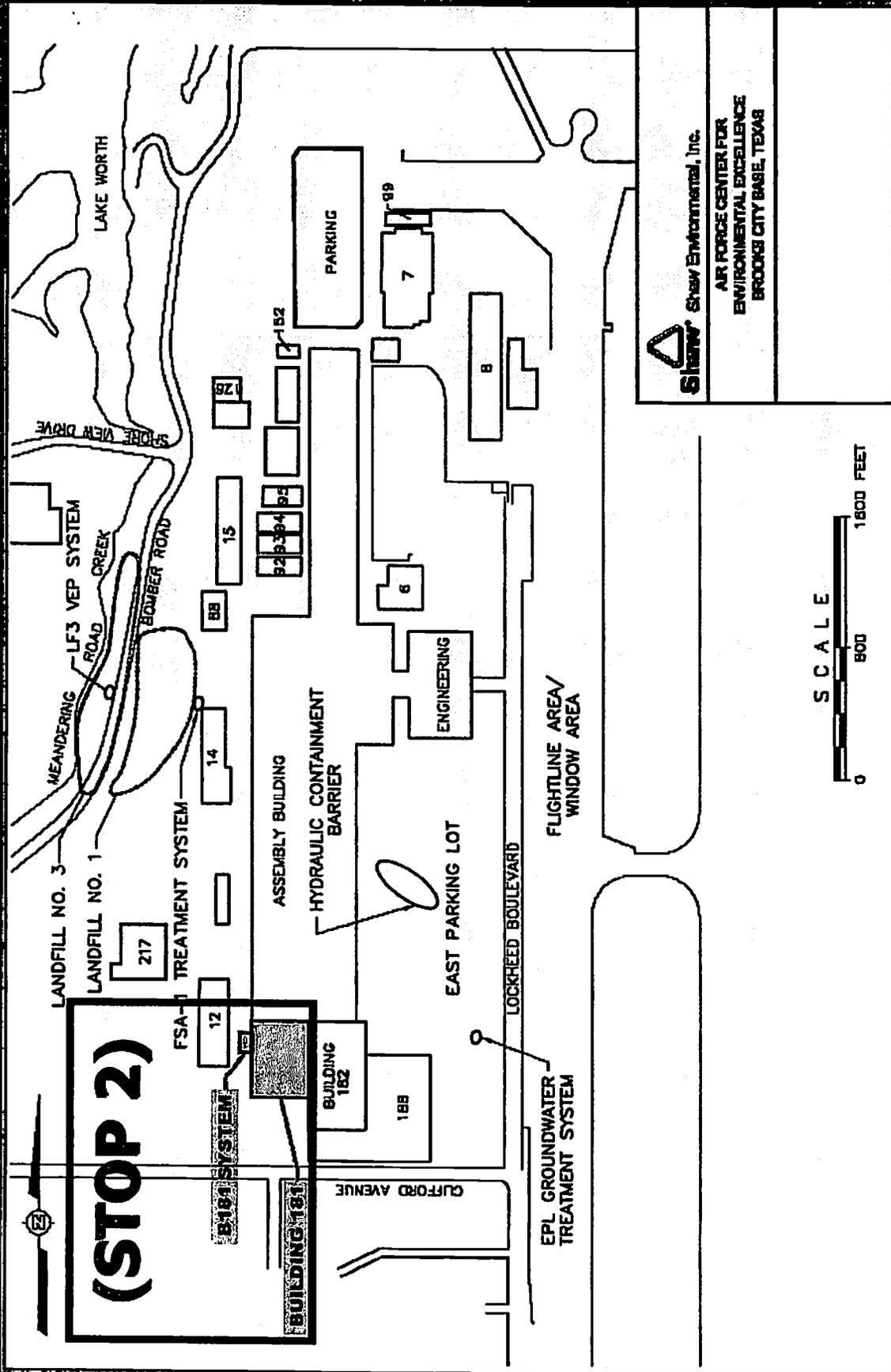
J - Analyte was positively identified, however, the quantitation level is estimated.

JEG Sampling - Highest TCE Level - Data from Final Remediation Report for EPL Groundwater Treatment System, Jacobs Engineering Group, March 2002.

Shaw Sampling - Performed during March 30 - April, 1, 2004



Building 181--SVE Treatment System -



Shaw Environmental, Inc.
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 BROOKS CITY BASE, TEXAS

Building 181—SVE Treatment System — Location of Wells/Treatment Equipment

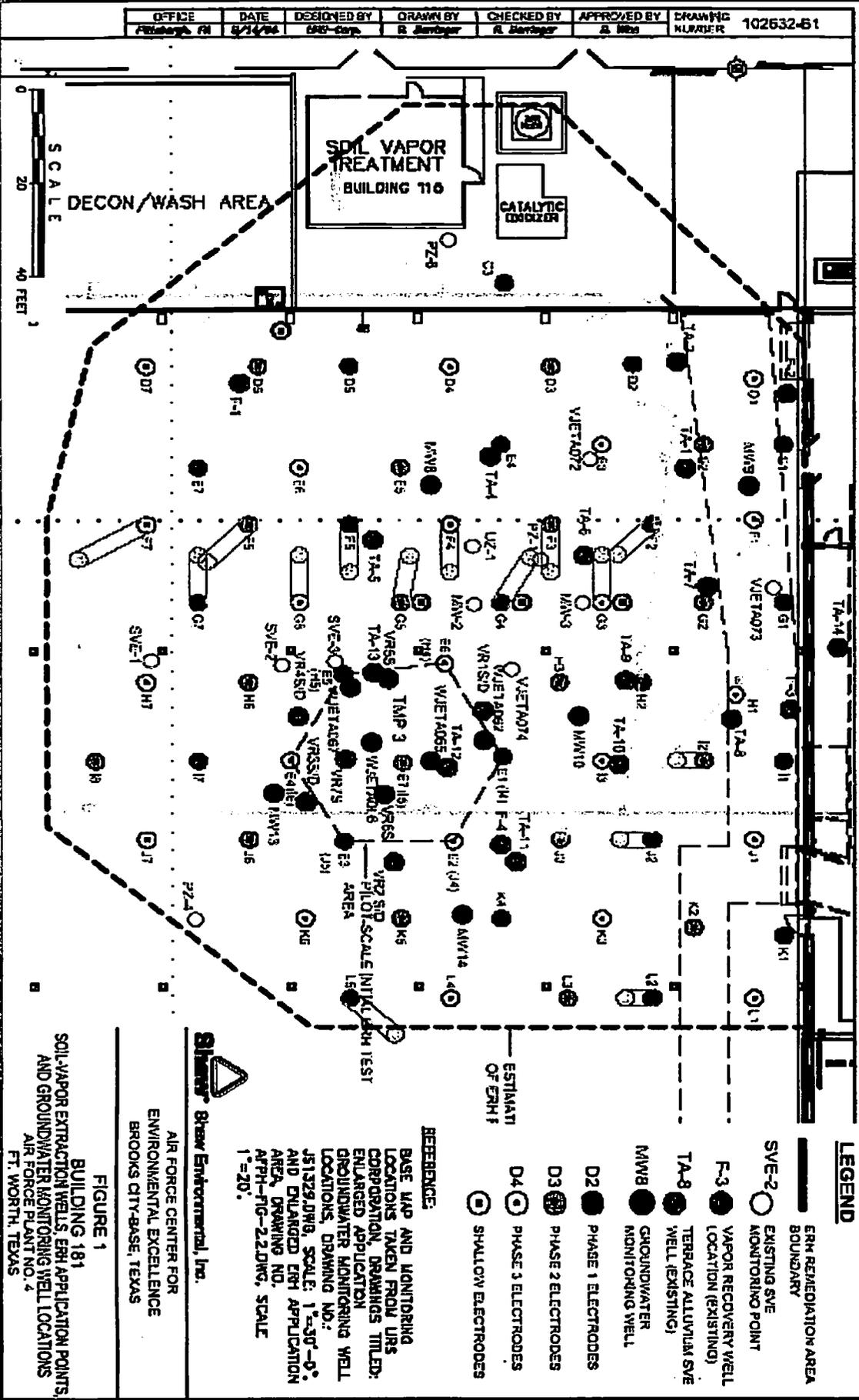


FIGURE 1
BUILDING 181
SOIL-VAPOR EXTRACTION WELLS, ERH APPLICATION POINTS,
AND GROUNDWATER MONITORING WELL LOCATIONS
FT. WORTH, TEXAS



Stewart Environmental, Inc.
 AIR FORCE CENTER FOR
 ENVIRONMENTAL EXCELLENCE
 BROOKS CITY-BASE, TEXAS

LEGEND

- ERH REMEDIATION AREA BOUNDARY
- SVE-2 EXISTING SVE MONITORING POINT
- F-3 VAPOR RECOVERY WELL LOCATION (EXISTING)
- TA-8 TERRACE ALLUVIAL SVE WELL (EXISTING)
- MWB GROUNDWATER MONITORING WELL
- D2 PHASE 1 ELECTRODES
- D3 PHASE 2 ELECTRODES
- D4 PHASE 3 ELECTRODES
- D4 SHALLOW ELECTRODES

REFERENCE:
 BASE MAP AND MONITORING LOCATIONS TAKEN FROM URS CORPORATION, DRAWINGS TITLED: ENLARGED APPLICATION GROUNDWATER MONITORING WELL LOCATIONS, DRAWING NO. J51329.DWG, SCALE: 1"=30'-0" AND ENLARGED ERH APPLICATION AREA, DRAWING NO. AFPH-FIG-22.DWG, SCALE 1"=20'.

B181 SVE Treatment Treatment System – Operational Milestones

- **The B181 soil vapor and groundwater treatment system was originally constructed by ESE in 1993, and expanded by others in 1998.**
- **Shaw took over operation of the B181 System in 1999.**
- **The B181 system was operated by Shaw during the Electrical Resistance Heating (ERH) project conducted by URS.**

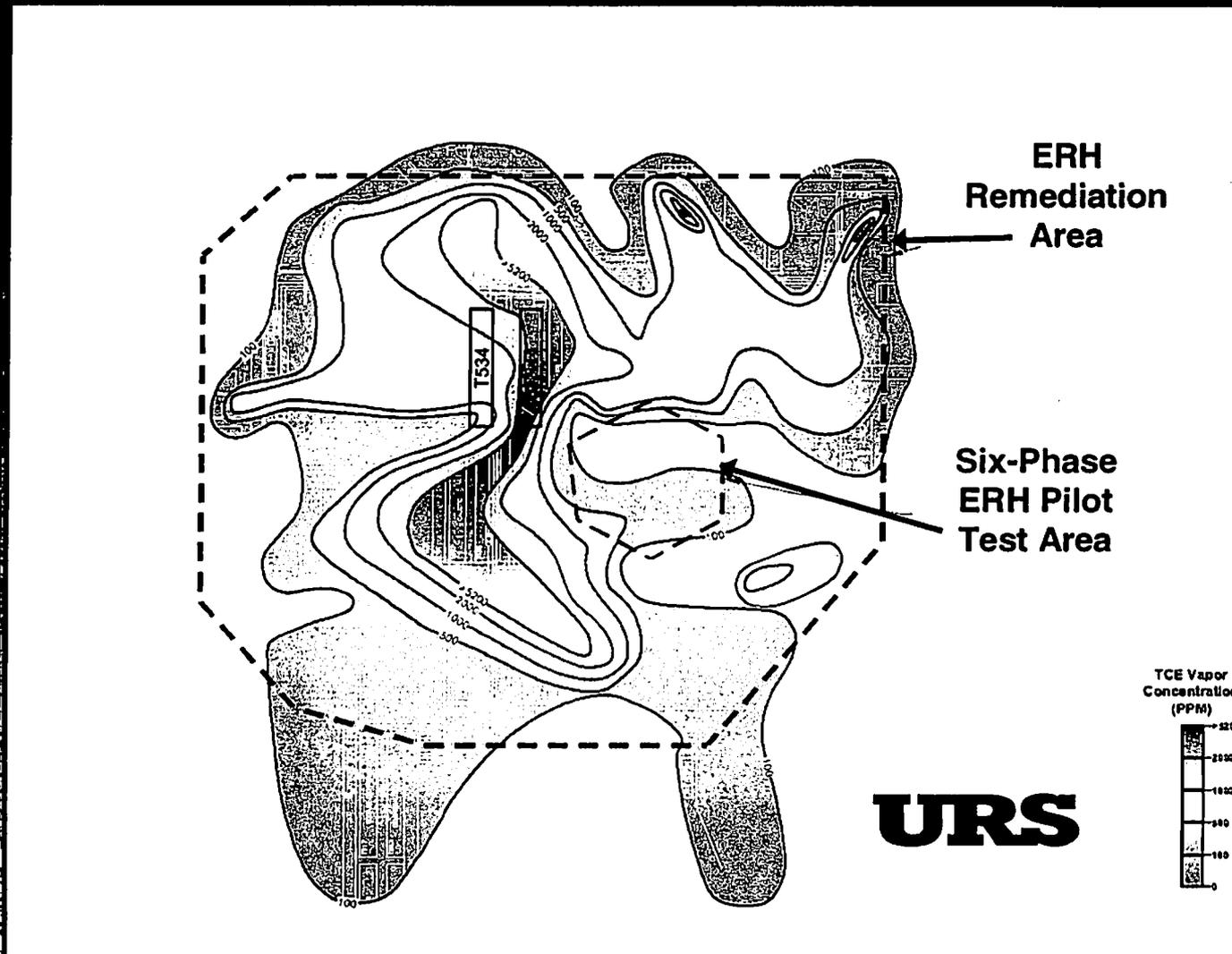


Building 181 Area—Use of Electrical Resistance Heating (ERH) to Treat TCE DNAPL and Soil Vapor

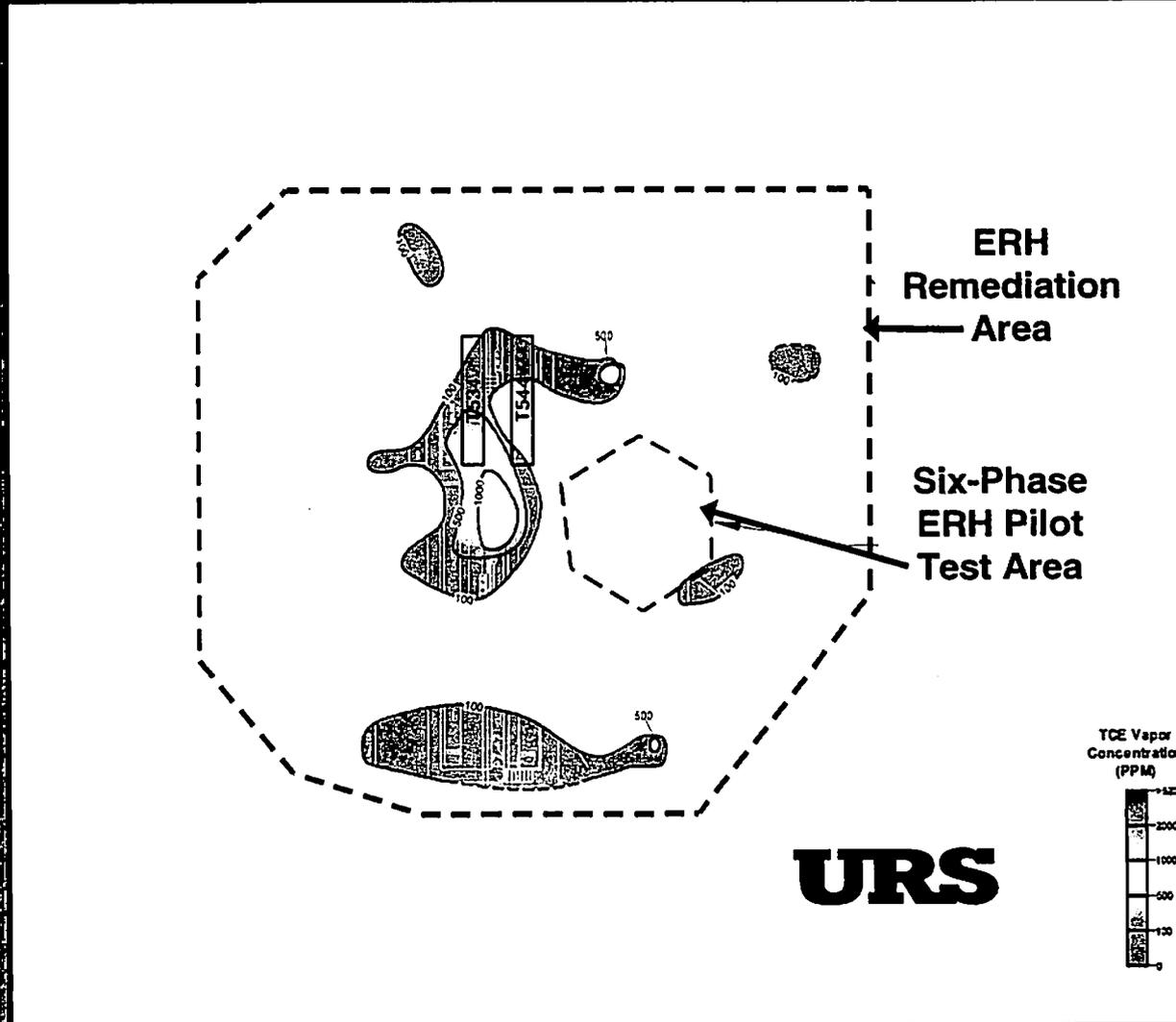
- **URS conducted ERH (six-phase) pilot-scale testing during August - November 2000.**
- **Full-scale ERH (three-phase) operations were performed during May - December 2002.**
- **Three-phase system had 63 electrodes and 92 Soil-Vapor Extraction (SVE) wells inside Building 181.**
- **Aboveground piping conveyed soil vapor to a water-cooled condenser.**
- **Non-condensed vapors were piped to Shaw's existing Building 181 SVE System for treatment.**
- **Condensate was conveyed to the existing air stripper in Shaw's Building 181 SVE System for treatment and subsequent discharge to the Fort Worth POTW.**



Building 181 Area—TCE Soil Vapor Concentrations Before ERH Application



Building 181 Area—TCE Soil Vapor Concentrations After ERH Application



Building 181 Area—TCE Soil Vapor Concentrations After ERH Application

Based on 150 soil-vapor samples collected before/after ERH operations:

- **Mean TCE concentration reduced by 93 percent (1,049 to 73.4 parts per million [ppm]).**
- **Marked reduction in the area of vapor plume greater than 100 ppm.**
- **Maximum results decreased from over 5,200 ppm to 1,358 ppm.**
- **The system was returned to a polishing soil vapor extraction (SVE) system in December 2002, and Shaw has continued to operate the system.**



B181 SVE Treatment System Performance

- **Treated 713,195 gallons since May 2002 (through March 2004), with an average treatment system operation flow rate of between 1 - 2 gpm.**
- **TCE influent concentrations in groundwater ranged from 850 to 2,100 $\mu\text{g/L}$ (through March 2004).**
- **Influent VOC concentrations (as measured by FID) ranged from 1 to 2 ppm during the first three months of 2004.**
- **POTW and air monitoring results have continued to meet discharge requirements.**



B181 Treatment System Operation and Maintenance—Recent Activities

- **B181 System shut down in May 2004.**
- **SVE readings were collected one month later (June) and three months later (August) to evaluate vapor levels and vapor level rebound (increases) for extraction points (next sampling in October 2004).**
- **Field parameters (temperature, pH, conductivity) were collected in March, June, and August of 2004 to evaluate subsurface conditions in the vicinity of Well MW-10, inside B181.**



B181 Area – Comparison of Operational and Static Organic Vapor Readings 2003 - 2004

WELL LOCATION	JUNE 2003 (SYSTEM RESTART) AVERAGE VAPOR READINGS (ppm)	MARCH 2004 (SYSTEM OPERATING) AVERAGE VAPOR READINGS (ppm)	JUNE/JULY 2004 (SYSTEM NOT OPERATIONAL) AVERAGE VAPOR READINGS (ppm)	AUGUST 2004 (SYSTEM NOT OPERATIONAL) AVERAGE VAPOR READINGS (ppm)
PZ-1	105.6	0.0	16.0	38.4
PZ-2	0	0.0	3.1	2.2
PZ-3	0	0.0	6.8	2.5
PZ-4	12.3	5.7	6.7	7.5
PZ-5	0	0.0	0.4	0.0
PZ-6	0.7	0.0	1.4	18.4
PZ-7	0	0.0	1.83	0.33
PZ-8	0.3	N/A	4.5	0.6
PZ-9	N/A	N/A	0.8	1.0
PZ-10	0	0.2	29.77	5.23
PZ-11	0.4	0.0	9.0	1.3
UZ-1	305.6	0.0	47.2	55.3
F-1	33.1	0.9	13.6	24.8
F-2	18.6	0.0	4.67	4.17
F-3	0	0.0	3.87	1.4
F-4	88.0	0.4	31.5	31.6
TA-1	31.9	11.4	3.8	1.7
TA-2	16.8	0.2	31.1	17.8
TA-3	143.3	1.2	39.9	32.9
TA-4	104.0	0.0	10.3	4.1

B181 Area – Comparison of Operational and Static Organic Vapor Readings 2003 - 2004

WELL LOCATION	JUNE 2003 (SYSTEM RESTART) AVERAGE VAPOR READINGS (ppm)	MARCH 2004 (SYSTEM OPERATING) AVERAGE VAPOR READINGS (ppm)	JUNE/JULY 2004 (SYSTEM NOT OPERATIONAL) AVERAGE VAPOR READINGS (ppm)	AUGUST 2004 (SYSTEM NOT OPERATIONAL) AVERAGE VAPOR READINGS (ppm)
TA-5	162.9	3.9	21.8	94.3
TA-6	59.9	0.0	7.0	7.4
TA-7	16.2	1.5	78.63	139.3
TA-8	N/A	N/A	14.8	9.1
TA-9	2.7	0.0	2.7	3.9
TA-10	8.7	0.0	3.4	5.3
TA-11	71.9	6.1	10.9	16.5
TA-12	19.5	0.0	9.4	12.9
TA-13	32.9	0.0	6.7	25.8
TA-14	6.4	0.0	2.0	1.6
VJETA-72	124.5	0.0	9.83	18.2
VJETA-73	582.7	0.0	23.6	73.7
VJETA-74	N/A	0.0	7.8	15.2
¹ Vapor readings collected using a Flame Ionization Detector (FID). Readings are for total volatile organic compounds (VOCs) in parts per million (ppm) and expressed in relation to the instrument calibration gas.				
N/A = Not Available (no data), due to locked access areas or blocked by equipment				

B181 Area – Collection of Temperature, pH, and Conductivity Readings Near MW-10

During 2004, a series of monitoring wells surrounding MW-10 (inside Building 181) were assessed for field parameters including pH, temperature, and conductivity, as shown below:

Well Location	Field Parameters ¹ – 03/12/2004			Field Parameters ¹ – 06/28/2004			Field Parameters ¹ – 08/24/2004		
	pH	Temp	Conductivity	pH	Temp	Conductivity	pH	Temp	Conductivity
MW-9	6.6	83.5	2,310	6.34	88.9	2,720	6.72	88.4	2,710
MW-11	6.33	79.7	792	6.54	81.2	860	6.96	82.4	861
MW-12	6.7	73	838	6.73	75.1	802	6.97	76.9	745
WJETA-065	7.2	84	844	6.92	84.7	730	7.23	84.8	730
WJETA-066	7.2	83.2	990	6.99	82.1	1,380	7.15	82.5	1,002
WJETA-067	7.27	88.6	1,480	6.84	88.9	2,120	7.32	88.1	1,824
MW-10	6.80	95.7	3,100	6.64	93.1	3,000	6.65	89.7	2,710
MW-8	Dry Well - Unable to Record Data			Dry Well - Unable to Record Data			Dry Well - Unable to Record Data		
MW-7	6.93	70.3	700	6.95	73.0	628	7.04	75.3	536
MW-13	Not Recorded/Not Accessible			6.88	77.3	705	7.05	78.0	603
¹ pH measured in standard units (S.U.), temperature measured in degrees Fahrenheit,									
and conductivity measured in microSeimens per centimeter (μ S/cm).									

B181 Treatment System—Planned O&M Activities and Goals

- ▣ **Restart B181 System with an emphasis to address SVE well locations showing a demonstrated vapor level rebound (B181 System treatment optimization).**
- ▣ **Evaluate local field conditions to support retrofit of Well MW-10 and/or other well points around inside B181 as SVE system wells.**
- ▣ **Continue remedial action optimization (RAO) activities at B181 System to improve contaminant recovery and optimize environmental monitoring.**



CARSWELL/PLANT 4 RESTORATION ADVISORY BOARD

Fact Sheet #24
September 23, 2004

NAS FORT WORTH JOINT RESERVE BASE INSTALLATION RESTORATION PROGRAM

This is the 24th 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 Real Property Agency (AFRPA). Under provisions of RCRA, the Air Force identified 68 solid waste management units (SWMU) and 19 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 UNIT 49

The first round of soil and groundwater sampling activities at SWMU 49, a former aircraft washing area used by the Air Force between 1955 and the 1990s, was conducted in January 2002. Soil samples were collected from four locations surrounding the former aircraft washing area. One monitoring well was installed and two rounds of groundwater sampling were conducted. Based on the results of these sampling efforts, additional sampling of SWMU 49 was conducted in January 2003. Three additional monitoring wells were installed and sampled. These sampling data were evaluated to determine if the site required additional sampling or if it could be submitted for closure. Based on the sampling results, the RCRA Facility Investigation (RFI) report recommend closure of SWMU 49 under the Texas Risk Reduction Standard (RRS) 2. The Final RFI report was submitted to the regulators for review in September 2003. In a letter dated January 13, 2004, the Texas Commission on Environmental Quality (TCEQ), conditionally approved closure of SWMU 49. Conditional closure required extending the surveyed area of SWMU 49 approximately 75

feet to the northeast and the addition of specific contaminants to the deed certification. A public notice was published in the Star Telegram on February 10, 2004. In May 2004, the metes and bounds survey was extended and specific contaminants identified by the TCEQ, were added to the deed certification. The revised SWMU 49 deed certification was filed with Tarrant County on June 10, 2004. Proof of the SWMU 49 deed certification was submitted to the TCEQ on July 26, 2004.

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

The Final Work Plans to conduct a limited RFI were completed in September 2000 for the Storm Water Interceptor (SWMU 54) and the East Gate Oil/Water Separator (SWMU 55). Soil and sediment sampling was conducted at 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 with subsequent sampling in June and December 2001 and September 2003. Sampling results indicated that contaminated soil and sediment existed at both SWMUs 54 and 55. Additional delineation sampling was conducted in February 2004. Following data review, it will be necessary for subsequent delineation and soil/sediment removal in order to obtain site closure under the Texas RRS 2. The necessary delineation and soil/sediment removal will occur in February 2005 and the draft report is scheduled to be submitted in April 2005.

RCRA FACILITY INVESTIGATION OF LANDFILL 1

An RFI was conducted at the former Landfill 1 (also referred to as SWMU 28), in order to determine if a source of potential contamination exists and if the source has impacted the soil, groundwater, surface water, or sediments at or near the Landfill. Based on data obtained to date, Landfill 1 required additional sampling to delineate contamination in the soil and to identify soil hot spots for removal. The additional sampling and soil removal was conducted in September 2003. Based on the analytical results, the RFI report recommend closure of SWMU 28 under the Texas RRS 2. The Final RFI report was submitted to the regulators for review on June 30, 2004, and upon approval, a public notice will be printed in the Fort Worth Star Telegram.

AREA OF CONCERN 1

AOC 1 consists of the former base gas and service station located at the intersection of Military Parkway and Dawson Drive near the east gate. In accordance with the approved Corrective Action Plan, a groundwater remediation system was installed at AOC 1 to address groundwater contaminated by a previous fuel release from the service station. Initial start-up of the remediation system occurred on June 10, 2003. At the close of August 2004, the system had treated approximately 2.3 million gallons of contaminated groundwater. Approximately 5 pounds of benzene and 45 pounds of total petroleum hydrocarbons have been removed since system start up.

The overall results from the July 2004 groundwater monitoring event indicate that in general, total contaminant concentrations in groundwater sampled from monitoring wells at the site continue to decrease. An increasing trend in contamination in the groundwater recovery wells indicates that contaminated groundwater is being drawn toward and captured by the recovery wells. The next quarterly groundwater monitoring event will occur in October 2004.

UNDERGROUND STORAGE TANK PROGRAM

The Plan A Reports and Site Closure Requests for the underground storage tanks (USTs) at Buildings 4210 and 1411 were submitted to the TCEQ in January 2003. Approval of the above submittals was received in April and June of 2003, respectively. Release Determination Reports (RDRs) for USTs at Buildings 1040, 1191, 1658, 1750, 4115, and 4136 were submitted to the TCEQ in June 2003. The RDR for the UST at Building 1658 was approved in March 2004, while the RDRs for the USTs at Buildings 1040, 1750, and 4136 were approved by the TCEQ in January 2004. No further action is necessary at Buildings 1040, 1658, 1750, and 4136. The RDRs for USTs at Buildings 1191 and 4115 are still being reviewed by TCEQ. In June 2004, the TCEQ requested additional information pertaining to the UST at Building 1140. This information was provided to the TCEQ in August 2004 and the site is currently under consideration for site closure.

MONITORING WELL DECOMMISSIONING

The Air Force previously installed a significant number of monitoring wells as part of IRP investigations. As the IRP is winding down, the Air Force has begun decommissioning monitoring wells that are no longer necessary. The first round of well decommissioning occurred in October 2003 with 97 wells being decommissioned. The second round occurred in January 2004 with 103 wells being decommissioned. All wells were decommissioned in accordance with the Texas Department of Licensing and Regulation Standards for Capping and Plugging of Wells. The Draft Work Plan for the third round of well decommissioning was submitted to AFCEE in early September 2004. Once AFCEE comments are incorporated into the Final Work Plan, well decommissioning is scheduled to commence in October 2004.

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.

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 Commission on Environmental Quality.

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

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

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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