



Camp Stanley Storage Activity Groundwater Contamination – September 2002 Sampling FACT SHEET

No. 12 – February 2003

The purpose of this fact sheet is to provide an overview of the quarterly groundwater sampling conducted in September 2002. Future fact sheets will be issued to provide additional information regarding on-going sampling, investigation, and cleanup activities.

CSSA On-post Groundwater Monitoring

As part of the Camp Stanley Storage Activity (CSSA) environmental program, on-post groundwater monitoring has been conducted since 1991. The wells sampled include drinking water, monitoring, and agricultural/livestock wells. The laboratory results obtained from the September 2002 sampling indicate no significant change to volatile organic compound (VOC) levels from previous findings reported in Fact Sheets 3 – 10. On-post wells were also tested for factors conducive to the natural bacterial cleanup, or breakdown, of contamination within the groundwater, also called natural attenuation parameters. Natural attenuation parameter testing will provide baseline values for indicators of these natural processes to determine the rate at which breakdown of contamination is or may be occurring.

On-post groundwater monitoring will continue in the future. The results for on-post well samples are available in the CSSA Environmental Encyclopedia located behind the Reference Desk in the Government Documentation Section on the 2nd floor at the Downtown San Antonio Public Library, 600 Soledad Street, San Antonio, Texas, or on the internet at www.stanley.army.mil.

CSSA Off-post Groundwater Monitoring Plan

CSSA describes its off-post groundwater monitoring plan in its *Off-Post Monitoring Program and Response Plan*, July 2001 (Plan). The goals of this Plan are to confirm that off-post drinking water meets U.S. Environmental Protection Agency (USEPA) and Texas Commission on Environmental Quality (TCEQ) safe drinking water standards, to determine where VOC contamination has migrated, monitor off-post water wells near known VOC source areas at CSSA, and respond according to the Plan if contaminant levels in these wells exceed standards. As part of the Plan, 20 off-post wells were sampled in September 2002. In addition, samples were also collected from seven off-post granular activated carbon (GAC) filtration systems to confirm proper operation.

Off-post water wells were selected for testing to ensure continued protection of drinking water and to provide detailed information for the environmental program. Factors such as well location, screened interval, and sampling access were all considered.

CSSA takes action if VOC contamination is detected in off-post wells at concentrations greater than 90 percent of the maximum contaminant level (MCL) or above 4.5 parts per billion (ppb) for tetrachloroethene (PCE) and trichloroethene (TCE). This action includes supplying bottled water to the affected residents within 24 hours of the notification of detection and resampling the well for confirmation. If additional sampling confirms previous test results, CSSA will either install and maintain a GAC filter which will remove contaminants from the water or connect the well owner to an alternate water supply for as long as contaminant levels exceed standards. Seven GAC filtration systems have been installed for off-post water wells: LS-7 (August 2001), LS-6 (August 2001), RFR-10 (two units, October 2001), RFR-11 (October 2001), LS-2/LS-3 (April 2002), and OFR-3 (April 2002). Off-post wells were also sampled for natural attenuation parameters as a baseline for future natural attenuation evaluation.

September 2002 Groundwater Sampling Results

The locations of all off-post wells sampled in September 2002 are shown on Figure 1 (see back). According to the USEPA drinking water standards, concentrations below 5.0 ppb for PCE and TCE are considered safe for drinking water. Table 1 (see back) presents groundwater analytical data from September 2002.

CSSA will continue to sample both on- and off-post groundwater on a quarterly basis for the foreseeable future. CSSA will continue to coordinate this groundwater monitoring program with many regulatory agencies and other potentially affected parties, including the USEPA, TCEQ, Fort Sam Houston, City of Fair Oaks, Fair Oaks Water Utilities, Bexar Metropolitan Water District, Bexar County Commissioners' office, State Representatives' offices, local, state, and federal elected officials, and others.

Source Area Cleanup

Groundwater contamination at CSSA is associated with three VOC source areas that have been identified to date. Two source areas, Solid Waste Management Unit (SWMU) B-3 and SWMU O-1, are in the central portion of CSSA and affect the area designated as Plume 1. Cleanup activities at SWMU B-3 have involved soil vapor extraction (SVE) and removal of over 700 cubic yards of VOC contaminated soils. A third source area, Area of Concern (AOC)-65, was identified in the southwest corner of CSSA and affects the area designated as Plume 2. AOC-65 is the site most likely to impact off-post wells. Cleanup activities at AOC-65 include the installation and testing of a SVE system, removal of over 600 cubic yards of contaminated soils, and rework of a surface drainage ditch to route rain water run-off away from the site. For additional information on cleanup of these source areas, see Fact Sheet 10.

Public Comment

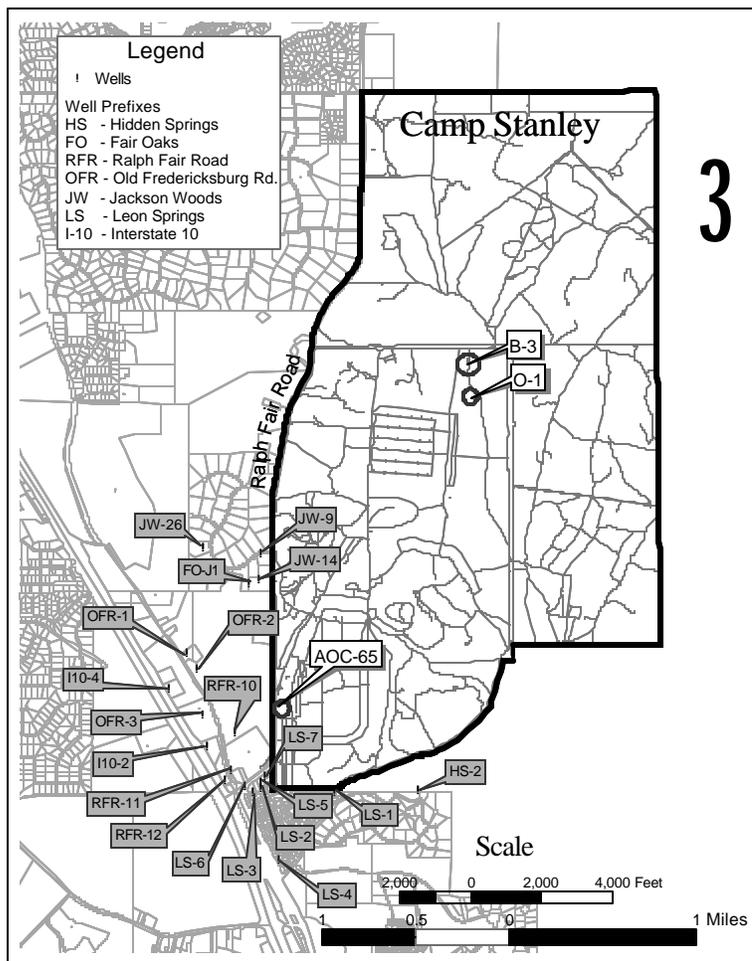
CSSA will continue to inform the public about different aspects of its environmental program. The public is welcome to comment on this fact sheet and the environmental activities at CSSA by writing to:

Installation Manager
 Camp Stanley Storage Activity
 25800 Ralph Fair Road
 Boerne, Texas 78015-4800

You may also comment by calling:

- CSSA Installation Manager, Mr. Jason D. Shirley, at (210) 295-7416;
- USEPA Regional Program Manager, Mr. Greg Lyssy, at (214) 665-8317; or
- U.S. Army Corps of Engineers, Fort Worth District Public Affairs Office, Ms. Anita Horky, at (817) 978-3395.

Figure 1 – Off-post Well Locations



**Table 1 - Sampling Results
 September 2002**

Off-post wells near Plume 1

Well Number	PCE (ppb)	TCE (ppb)
JW-9	ND	ND
JW-14	ND	ND
JW-26	ND	ND

Off-post wells near Plume 2

Well Number	PCE (ppb)	TCE (ppb)
I10-2	0.12	0.15
I10-4	ND	ND
HS-2	0.17	ND
LS-1	0.30	0.45
LS-2	2.62	0.17
LS-3	2.90	0.21
LS-2/LS-3-A1	ND	ND
LS-2/LS-3-A2	ND	ND
LS-4	0.19	ND
LS-5	ND	0.22
LS-6	1.58	0.10
LS-6-A2	ND	ND
LS-7	2.41	0.34
LS-7-A2	ND	ND
OFR-1	0.35	ND
OFR-2	0.2	ND
OFR-3	2.96	2.59
OFR-3-A2	ND	ND
RFR-10	9.19	4.84
RFR-10-A2	ND	ND
RFR-11	8.44	0.67
RFR-11-A2	ND	ND
RFR-12	ND	0.14

The MCL for PCE and TCE is 5.0 ppb
 ND = The VOC was not detected above the method detection limit.

Bold = Concentration > MCL

EP = Entry point into water system

A1 = After GAC canister number one

A2 = After GAC canister number two