



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

No. 12 – December 2002

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.

On-post Groundwater Monitoring

As part of Camp Stanley Storage Activities (CSSA's) environmental program, on-post groundwater monitoring has been conducted since 1991. The wells sampled include drinking water, agricultural, and monitoring 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 – 11. On-post wells were also examined for substances conducive to the natural bacterial cleanup of contamination within the groundwater, or natural attenuation. This analysis is meant to provide a historical basis for these natural processes in order to determine how it may assist CSSA in future cleanup efforts.

On-post groundwater monitoring will continue in the future. The results of all sampling are available in the CSSA Environmental Encyclopedia located at the San Antonio Public Library (2nd floor, Government Documents), or on-line 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 drinking water meets U.S. Environmental Protection Agency (EPA) and TNRCC 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 per the Plan if contaminant levels in these wells exceed standards. As part of the Plan, 27 off-post wells were sampled in September 2002.

Off-post water wells were selected for sampling based on how well information collected might answer questions or provide details in our environmental investigation. Factors such as well location, screened interval, and sampling access were also considered.

CSSA takes action if VOC contamination is detected in off-post wells at concentrations greater than 90 percent of the MCL or above 4.5 parts per billion (ppb) for tetrachloroethene (PCE) and trichloroethene (TCE). This action includes supplying bottled water to the impacted residents within 24 hours of the notification of a detection and resampling the well for confirmation. Later, CSSA will either install and maintain a granular activated carbon (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. Four GAC filter systems have been installed on off-post private water wells during 2001, at LS-7 (August 7), LS-6 (August 15), RFR-10 (October 9) and RFR-11 (October 16). Off-post wells were also tested for natural attenuation possibilities.

September/October 2001 Groundwater Sampling Results

The locations of all off-post wells sampled in September 2002 are shown on Figure 1 (see back). According to the EPA, 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 monitor groundwater on a quarterly basis both on and off-post for the foreseeable future. CSSA will continue to coordinate this groundwater monitoring program with many regulatory agencies and other potentially affected parties, including the EPA, TNRCC, Fort Sam Houston, City of Fair Oaks, Fair Oaks Water Utilities, Bexar County Commissioners' office, State Representatives' offices, local, state, and federal elected officials, and others.

Source Area Cleanup

Contamination at CSSA is associated with three source areas that have been identified to date. Two source areas, SWMU B-3 and SWMU O-1, are in the central portion of CSSA and affect the area designated as Plume 1. Contaminated soil and trenched wastes at SWMU B-3 will be excavated and disposed of properly in 2002. A third source area, AOC 65, was identified in the southwest corner of CSSA and is designated Plume 2. AOC 65 is the site that has probably impacted most of the affected off-post wells. Remediation (cleanup activities) for the AOC 65 source area is also planned to begin in 2002. CSSA will install, test and evaluate a soil vapor extraction system at AOC 65.

Other CSSA Fact Sheets

- Fact Sheet No. 1, Environmental Program
- Fact Sheet No. 2, CSSA's Soil and Groundwater Contamination
- Fact Sheet No. 3, Groundwater Contamination – Plume 1
- Fact Sheet No. 4, Groundwater Contamination – Plume 2

- Fact Sheet No. 5, CSSA's Groundwater Contamination – September 2001 Sampling
- Fact Sheet No. 6, CSSA's Groundwater Contamination – December 2001 Sampling
- Fact Sheet No. 7, CSSA's Groundwater Contamination – March 2002 Sampling
- Fact Sheet No. 8, CSSA's Groundwater Contamination – June 2002 Sampling
- Fact Sheet No. 9, CSSA Environmental Program Information
- Fact Sheet No. 10, CSSA Cleanup Activities SWMU B3 and AOC 65
- Fact Sheet No. 11, Groundwater Contamination – Chloroform

Public Comment

CSSA will distribute additional fact sheets 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:

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

Table 1 - Sampling Results from September 2002

Off-post wells near Plume 1

Well Number	PCE (ppb)	TCE (ppb)
JW-9	ND	ND
JW-14	0.12	ND
JW-26	ND	ND

Off-post wells near Plume 2

Well Number	PCE (ppb)	TCE (ppb)
I10-2	0.1	0.15
I10-4	ND	ND
HS-2	0.17	ND
LS-1	0.3	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	0.1
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

You may also comment by calling:

- CSSA Commander, LTC Jason D. Shirley, at (210) 295-7416;
- EPA 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.

Definition of terms:

AOC Area of Concern, an area of potential or suspected environmental concern.

CSSA	Camp Stanley Storage Activity
GAC	Granular Activated Carbon
MCL	Maximum Contaminant Level
PCE	Tetrachloroethene
Plan	Off-Post Monitoring Program and Response Plan
SWMU	Solid Waste Management Unit
TCE	Trichloroethene
VOC	Volatile organic compound

Figure 1 – Off-post Well Locations