

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

No. 7 – May 2002

The purpose of this fact sheet is to provide an overview of the quarterly groundwater sampling conducted in March 2002. Volatile organic compounds (VOCs) have been detected in groundwater at Camp Stanley Storage Activity (CSSA) and off-post in selected wells. In the past, these compounds were used to degrease and clean metal parts. CSSA will continue to monitor groundwater both on- and off-post. Future fact sheets will be issued to provide additional information regarding on-going sampling, investigation, and cleanup activities.

Background/Mission

CSSA is a U.S. Army post located in Bexar County, approximately 19 miles northwest of downtown San Antonio, Texas. Its mission is the receipt, storage, issuance, quality assurance testing, and maintenance of ordnance materiel. Because of its ordnance mission, CSSA is a controlled-access facility.

On-Post Groundwater Monitoring

As part of 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 March 2002 sampling indicate no significant change to VOC levels from previous findings reported in Fact Sheets 3, 4, 5, and 6. Of the 27 wells sampled in March 2002, 19 had no VOC contamination. Four wells had VOCs detected below the maximum contaminant level (MCL) for drinking water, which is 5 parts per billion (ppb) for tetrachloroethene (PCE) and trichloroethene (TCE). The remaining four wells had VOC levels in excess of the MCL. The four wells with VOC detections above the MCL were CS-D, CS-16, MW-1-LGR, and MW-2-LGR. All of these wells are located near the center of the installation. VOC levels in these wells ranged from 9.1 to 100 ppb PCE and 7.1 to 160 ppb TCE. These wells also had detections below and above MCLs for *cis*-1,2-dichloroethene (DCE) from 4 to 150 ppb and *trans*-1,2-DCE from 0.1 to 1.6 ppb. The MCL for *cis*-1,2-DCE is 70 ppb and 100 ppb for *trans*-1,2,-DCE. On-post groundwater monitoring will continue and results are available in the CSSA Environmental Encyclopedia located at the San Antonio's Public Library, Main Branch.

Off-Post Groundwater Monitoring

The CSSA off-post groundwater monitoring program began in 1995, when four off-post wells were sampled. Since 1995, the program has been expanded. To date, a total of 34 different

off-post wells have been tested. Off-post water wells were selected for sampling based on proximity to the installation boundary and potential plume migration. Factors such as well location, water producing zone, and sampling access have also been considered. The locations of all off-post wells sampled in March 2002 are shown on Figure 1 (*see other side*).

In March 2002, 24 off-post wells were sampled by CSSA. Nine were found to contain no VOCs, 15 contained low-levels of VOCs, from 0.14 to 4.82 ppb (less than the MCL), and two were above the MCL. The highest off-post VOC levels were found in wells OFR-3 and RFR-11, located near the southwestern corner of the facility. VOC levels in OFR-3 were 12.15 ppb for PCE and 5.7 ppb for TCE and RFR-11 were 5.7 ppb for PCE and 1.1 ppb for TCE. A granular activated carbon (GAC) wellhead treatment unit was installed on OFR-3 in April 2002, while RFR-11 has had a GAC unit since October 2001. OFR-3 and RFR-10 had detections of *cis*-1,2-DCE at 0.14 and 0.87, respectively. A summary table of the March 2002 off-post samples is on the back of this fact sheet.

CSSA also installed a GAC unit at wells LS-2 and LS-3 in April 2002. This unit treats water for a public water system located south of the post. The construction project was coordinated with Bexar Metropolitan Water District and Texas Natural Resource Conservation Commission's San Antonio Regional Office.

Site Investigation and Cleanup

Three VOC source areas have been identified at CSSA (*locations on Figure 1, see other side*). Two of these source areas remain at CSSA, solid waste management unit (SWMU) B-3 and area of concern (AOC) -65. A contract was recently awarded for removal of trenched wastes at SWMU B-3, which will be excavated during the summer of 2002. Waste materials will be transported to an approved landfill. AOC-65, near the southwest corner of the post, will have approximately 600 cubic yards of wastes removed from the site, and will have a soil vapor extraction (SVE) system installed to pull vapors from the ground. CSSA recently conducted preliminary geophysical surveys around AOC-65 using various techniques. Additional geophysical testing is underway to verify faults and fractures in the vicinity of AOC-65 using seismic refraction and electronic resistivity to identify potential groundwater flow paths.

CSSA will install new monitoring wells from near surface to 500 feet below ground surface and recondition some existing

wells during 2002-2003. This project is expected to begin in June 2002.

Other CSSA Fact Sheets

- Fact Sheet No. 1, CSSA's 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, Groundwater Contamination – September and October 2001 Sampling
- Fact Sheet No. 6, Groundwater Contamination – December 2001 Sampling

Public Comment

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

Figure 1 - March 2002 Off-post Monitoring Locations

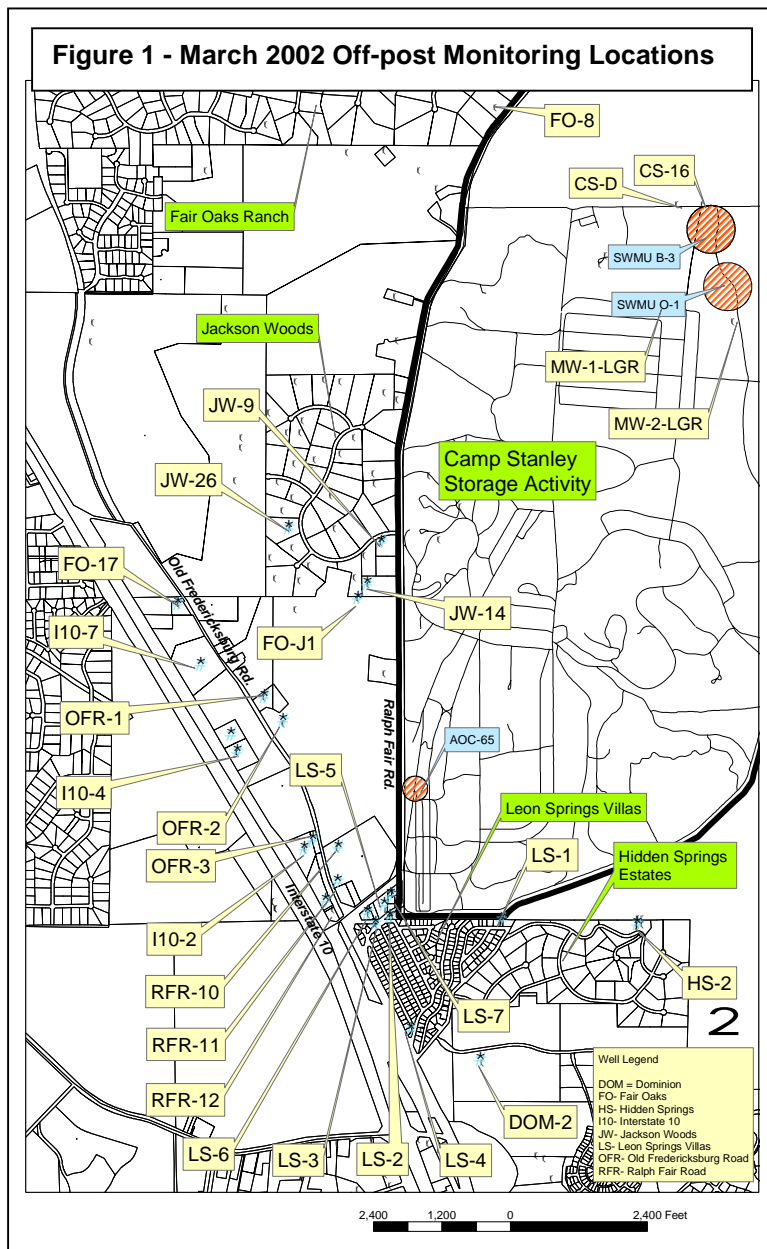


Table 1 - Sampling Results from March 2002

Off-post wells near Plume 1		
Well Number	PCE	TCE
	(ppb)	(ppb)
FO-8	ND	ND
FO-17	ND	ND
FO-J1	0.23 - 0.25 *	ND - 0.14 *
JW-9	ND	ND
JW-14	ND	ND
JW-26	ND	ND
OFR-1	0.42	ND
OFR-2	0.29	ND
I10-4	ND	ND
Off-post wells near Plume 2		
DOM-2	ND	ND
HS-2	0.18 - 0.25 *	ND
I10-2	ND	ND
I10-7	ND	ND
LS-1	0.30	0.51
LS-2	0.82 - 4.82 **	ND - 0.29 **
LS-2 & LS-3 Post-GAC	ND	ND
LS-3	1.30 - 1.53 **	0.63 - 0.69 **
LS-4	0.17	ND
LS-5	ND	0.26
LS-6 Pre-GAC	2.67	0.2
LS-6 Post-GAC	ND	ND
LS-7 Pre-GAC	2.71	0.24
LS-7 Post-GAC	ND	ND
OFR-3	2.66 - 12.15 **	2.08 - 5.7 **
RFR-10 Pre-GAC	4.48	2.22
RFR-10 Post-GAC	ND	ND
RFR-11 Pre-GAC	5.71	1.1
RFR-11 Post-GAC	ND	ND
RFR-12	ND	0.15

ND - Not Detected at or above the method detection limit (MDL).

Pre-GAC – Wellhead Sample

Post-GAC – Sample taken after GAC treatment

Bold - Greater than MCL

MCL for PCE and TCE = 5 ppb

* Ranges indicated are due to quality assurance/quality control samples taken (field duplicate or matrix spike duplicate).

** Ranges indicated are results from monthly sampling events from January – March 2002.

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