



DEPARTMENT OF THE ARMY
CAMP STANLEY STORAGE ACTIVITY
25800 RALPH FAIR ROAD
BOERNE, TX 78015-4800

May 31, 2022

U-019-22

SUBJECT: Right-of-Entry Access Agreement for Camp Stanley Storage Activity Off-Post Groundwater Monitoring of Residential Drinking Water Wells, Water Well RFR-14, Located at 26445 Ralph Fair Rd.

[REDACTED]
[REDACTED]
Boerne, TX 78015
[REDACTED]

Camp Stanley Storage Activity (CSSA), U.S. Army, would like to welcome you to the neighborhood. CSSA maintains a robust environmental program, and one of its most significant projects involves a proactive groundwater monitoring program to investigate, delineate, and clean up, where possible, groundwater contaminant sources in the area. All activities are thoroughly discussed and coordinated with federal and state environmental regulators. Detailed information on the CSSA Environmental Program with regard to contaminant monitoring and clean-up efforts are included with this letter for your review.

The previous owner, maintaining the water well located at 26445 Ralph Fair Road, participated in our program by allowing Parsons, CSSA's environmental contractor, to sample your drinking water well on a 30-month basis. With your permission, CSSA would like to continue sampling your water well, which we refer to as well RFR-14 in our monitoring program. The sampling process involves notifying you in advance of a sampling activity, then collecting a water sample from a spigot attached directly to your wellhead. The sampling process does not require entry into your home, and can be completed in less than 30 minutes. Once the sample is analyzed and the results are validated by our chemists, we will send you a similar letter documenting the findings of the sampling event.

CSSA analyzes the water drawn from the well for volatile organic compounds (VOCs), more specifically tetrachloroethene (PCE), trichloroethene (TCE), and cis-1,2-dichloroethene (DCE). CSSA most recently collected a groundwater sample from your well RFR-14 (under prior ownership) on March 8, 2022. This sample was submitted to a laboratory for VOC analysis. This letter provides you with the VOC data from the laboratory results. Based on the analytical data, no VOCs related to

CSSA's groundwater investigation were identified in the water sample from your well, RFR-14. These results are provided as an attachment for the above sampling event.

As part of the ongoing CSSA environmental program, we are continuing to investigate and cleanup VOC source areas on the installation and to track these compounds in groundwater on- and off-post. As part of this effort, your well (RFR-14) is scheduled to be sampled again in June 2023, pending your permission.

If you wish to participate, please review and sign the attached right-of-entry access agreement, so we have permission to sample your well. Please return the agreement to CSSA in the self-addressed, stamped envelope enclosed. Upon receipt, I will sign the agreement and send you a copy by mail for your records. A copy of the most recent environmental program fact sheet provided to the community is also attached for your information.

We appreciate your assistance in this matter. Please contact CSSA's environmental contractor, Samantha Elliott, at (210) 347-6012 to discuss scheduling and technicalities of the groundwater monitoring program. If you have any questions concerning this letter, please contact Gabriel Moreno-Fergusson, Environmental Program Manager, at (210) 295-7067.

Sincerely,



T. Glenn Moore
Installation Manager

Enclosures

cc: Mr. Greg Lyssy, EPA Region 6
Mr. Timothy Brown, TCEQ Central Office
Mr. Jorge Salazar, TCEQ Region 13
Ms. Kyle Cunningham, San Antonio Metropolitan Health Dist.
Ms. Julie Burdey, Parsons

**DEPARTMENT OF THE ARMY
RIGHT-OF-ENTRY FOR WATER SAMPLING**

CAMP STANLEY STORAGE ACTIVITY
(Project, Installation or Activity)

26445 Ralph Fair Road (Well RFR-14)
(Property and Well Identification)

The undersigned, hereinafter called the "Owner", hereby grants the UNITED STATES OF AMERICA, hereinafter called the "Government", a permit or right-of-entry upon the following terms and conditions:

1. The Owner hereby grants to the Government an irrevocable right to enter in, on, over and across the lands and buildings hereinafter described at any time within a period of sixty (60) months from the date of this instrument, to obtain well water samples as may be necessary to complete the groundwater investigation being made within the local community by the Government and to maintain the Government installed GAC water treatment system.

2. This permit includes the right of ingress and egress on adjacent lands of the Owner not described below, provided that such ingress and egress is necessary and not otherwise conveniently available to the Government.

3. All hand tools, equipment, and other property taken upon or placed upon the land by the Government shall remain the property of the Government and will be removed by the Government immediately following sampling. Sampling is not expected to require more than thirty minutes per event.

4. If any action of the Government's employees or agents in the exercise of this right-of-entry results in damage to the real property, the Government will, in its sole discretion, either repair such damage or make an appropriate settlement with the owner. In no event shall such repair or settlement exceed the fair market value of the fee interest of the real property at the time immediately preceding such damage. The Government's liability under this clause is subject to the availability of appropriations for such payment, and nothing contained in this agreement may be considered as implying that Congress will at a later date appropriate funds sufficient to meet any deficiencies. The provisions of this clause are without prejudice to any rights the Owner may have to make a claim under applicable laws for any damages other than those provided for herein.

5. The land and buildings (see address and well number above) affected by this permit or right-of-entry are located in the County of Bexar, State of Texas.

WITNESS MY HAND this _____ day of _____, 2022.

Owner's Signature

Home Phone Number

Owner's Printed Name

Best Phone Number for Sample Scheduling
(Renter's/Tenant Information, if applicable)

Owner's Address

**CSSA ACKNOWLEDGEMENT
UNITED STATES OF AMERICA**

By: _____

T. Glenn Moore
Installation Manager
Camp Stanley Storage Activity, U.S. Army
25800 Ralph Fair Road
Boerne, TX 78015-4800
(210) 295-7432

Client Sample Results

Client: Parsons Corporation
 Project/Site: Camp Stanley Quarterly Sampling 2022

Job ID: 280-159712-1

Client Sample ID: RFR-14_030822_N1345

Lab Sample ID: 280-159712-17

Date Collected: 03/08/22 13:45

Matrix: Water

Date Received: 03/14/22 08:50

Method: 8260C DOD - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.150	U	1.00	0.400	0.150	ug/L		03/20/22 15:41	1
Tetrachloroethene	0.200	U	1.00	0.400	0.200	ug/L		03/20/22 15:41	1
Trichloroethene	0.160	U	1.00	0.400	0.160	ug/L		03/20/22 15:41	1
Vinyl chloride	0.100	U	1.50	0.200	0.100	ug/L		03/20/22 15:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		81 - 118		03/20/22 15:41	1
4-Bromofluorobenzene (Surr)	95		85 - 114		03/20/22 15:41	1
Dibromofluoromethane (Surr)	103		80 - 119		03/20/22 15:41	1
Toluene-d8 (Surr)	100		89 - 112		03/20/22 15:41	1

Definitions/Glossary

Client: Parsons Corporation
Project/Site: Camp Stanley Quarterly Sampling 2021

Job ID: 280-156314-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



The purpose of this Fact Sheet is to provide an update on the status of Camp Stanley Storage Activity's (CSSA) environmental program, as well as an overview of quarterly groundwater sampling conducted in 2020. CSSA's Administrative Record and results for all groundwater sampling events are available in the CSSA Environmental Encyclopedia located on the internet at www.340de.gov/ENR.

Overview of CSSA's Environmental Program

In 1991, routine water well testing by the Texas Department of Health detected the presence of dissolved cleaning solvent tetrachloroethene (PCE) and related degradation products above maximum contaminant levels (MCLs) in a former CSSA water supply well (Well CS-MW-16). Subsequent sampling showed volatile organic compound (VOC) contaminant concentrations greater than MCLs in other wells. VOCs make up substances such as paint thinners, dry cleaning solvents, and some constituents of petroleum fuels (e.g. gasoline and natural gas). CSSA ceased using VOC solvents in the mid-1990s and monitors for VOCs and metals associated with its past industrial processes.

In May 1999, the U.S. Environmental Protection Agency (USEPA) issued a Resource Conservation and Recovery Act (RCRA) 3008(h) Administrative Order on Consent (Order) requiring CSSA to identify, investigate, and prevent further spread of releases of hazardous wastes and/or hazardous constituents to the environment, and to ensure that corrective action activities are implemented to protect human health and the environment.

Sources of CSSA's groundwater contamination were determined to be Solid Waste Management Unit (SWMU) O-1 and SWMU B-3; this area is referred to as Plume 1. Area of Concern 65 (AOC-65) was identified as the source of groundwater contamination at Plume 2.

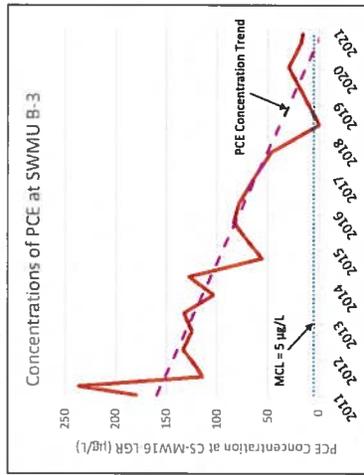
Following completion of a RCRA Facility Investigation and Corrective Measures Study in 2014, the following corrective measures were documented in the Decision Document, approved by USEPA in July 2015:

- Source area treatment for Plume 1 at SWMU B-3.
- Source area treatment for Plume 2 at AOC-65.
- Granular activated carbon (GAC) units on six off-post private drinking water wells.
- Long-term monitoring of on- and off-post groundwater; and
- Land use controls (restricted entry to CSSA and underground/dig activity permits)

Plume 1 Remediation Status

Plume 1 continues to be treated using an in-ground bio-reactor which has been operating since 2007. Contaminated groundwater is pumped out of the ground and into the bio-reactor where contaminants are broken down by natural bacteria into nonhazardous substances. Since the construction of the bio-reactor, over 257 million gallons of contaminated groundwater have been treated by the system.

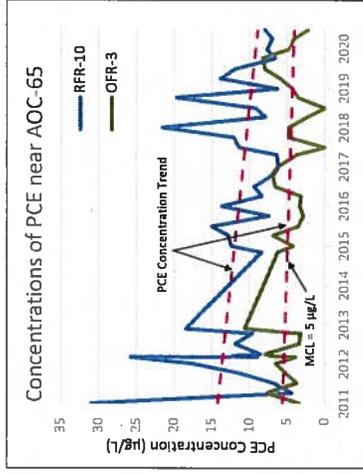
Groundwater collected from monitoring wells within and surrounding SWMU B-3 is analyzed to evaluate the effectiveness of the bio-reactor treatment. Concentrations of PCE in groundwater at SWMU B-3 have continued to show a decreasing trend over time. The chart below shows concentrations in PCE (in milligrams per liter [$\mu\text{g/L}$]) at monitoring well CS-MW16-LGR over the past 10 years of bio-reactor treatment.



Plume 2 Remediation Status

Plume 2 continues to be treated using in-situ chemical oxidation, a process by which a substance called an oxidant is applied to the surrounding groundwater where it reacts with contaminants to break them down into nonhazardous substances. This process has been in place since 2012, and prior to that, the area was treated using various other remediation techniques.

Groundwater collected from monitoring wells at AOC-65 and off-post private wells near AOC-65 is analyzed to evaluate the effectiveness of the ISCO treatment, and to determine if additional oxidant is needed to treat the groundwater. Concentrations of PCE in groundwater downgradient from AOC-65 have continued to show a decreasing trend over time. The chart below shows concentrations in PCE (in $\mu\text{g/L}$) at off-post well RFR-10 over the past 10 years of treatment.



2020 Groundwater On- and Off-Post Sampling Results
On- and off-post groundwater monitoring has been conducted for nearly 30 years and continues on a regular basis. Samples collected during monitoring events are analyzed by a laboratory, and the results are evaluated to determine if the corrective measures in place remain protective of human health and the environment.

The locations of all on- and off-post wells sampled in 2020 are shown on the map on the back side of this Fact Sheet. Table 1 on the map presents off-post groundwater data for PCE and trichloroethene (TCE) from all 2020 sampling events. Two on-post monitoring wells (CS-MW1-LGR and CS-MW36-LGR) exceeded the MCLs for PCE and TCE in 2020. Two off-post wells (OFR-3 and RFR-10) exceeded the MCLs for PCE and TCE in samples collected prior to treatment within the well's GAC filter. In all other wells tested, any VOCs that were detected had concentrations below the drinking water MCLs for PCE and TCE.

All GAC-filtered samples collected in March 2020 and September 2020 were non-detect, indicating the GAC units were functioning properly as shown on Table 2. Semi-annual GAC maintenance was performed in March and September 2020. This involved replacing the first carbon canister in each GAC system and other routine maintenance. Carbon canisters were replaced in March 2021 and will be replaced again in September 2021.

CSSA will continue to sample both on- and off-post groundwater wells at frequencies approved by USEPA and TCEQ, and to coordinate the groundwater monitoring program with the regulatory agencies and other potentially affected parties in the community.

Activities Planned for the Remainder of 2021

- Continued monitoring and operation & maintenance of the AOC-65 in-situ chemical oxidation remediation area and the SWMU B-3 bio-reactor system to assess the corrective measures impacts on source area contaminant concentrations
- Enhance the bioremediation process at SWMU B-3 through the addition of lactate within the bio-reactor trenches.
- Apply additional oxidants throughout AOC-65 to distribute ISCO solution over a wider area
- Continued groundwater monitoring at on- and off-post wells in accordance with the most recent long-term monitoring optimization results and data quality objectives approved by USEPA and TCEQ
- On-post drinking water system monitoring, operation, and maintenance

Public Outreach and Future Fact Sheets

CSSA has been issuing Fact Sheets similar to this one since 2000. We will continue to mail Fact Sheets annually to provide information on sampling results, ongoing investigations, and cleanup activities. Each well owner involved in the groundwater monitoring program will continue to receive a separate letter concerning laboratory results for their wells after sampling by CSSA. The public is welcome to comment on this Fact Sheet and the environmental activities at CSSA by writing or calling:

- CSSA Installation Manager at (210) 295-7416, at (214) 665-8317.
- USEPA Regional Program Manager, Mr. Greg Lyssy, at (512) 239-6526, or
- TCEQ Regional Program Manager, Mr. Timothy Brown, at (512) 239-6526, or
- SGM Dean Welch, ARNORTH Public Affair Office, office (210) 221-0765, mobile (210) 216-5546, email usarmy.jba.amorth@army.mil

TABLE 1 OFF-POST GROUNDWATER SAMPLING RESULTS

Well ID	Date (2020)	PCE (ppb)	TCE (ppb)
II-10	Dec	ND	ND
LS-5	Mar	0.89F	3.3
	Jun	ND	2.79
	Sep	ND	3.57
	Dec	0.85F	3.11
LS-6	Mar	0.89F	1.53
	Jun	0.59F	1.51
	Sep	1.07F	1.66
	Dec	0.96F	1.81
LS-7	Mar	ND	0.43F
	Jun	1.05F	ND
	Sep	1.77	ND
	Dec	1.76	0.71F
OFR-3	Mar	7.89	4.77
	Mar	8.26	5.19
	Jun	4.79	2.22
	Sep	4.05	1.88
	Dec	2.2	1.44
REFR-10	Mar	1.21F	1.87
	Jun	0.73F	2.17
	Sep	1.05F	2.33
	Dec	0.94F	2.36
REFR-11	Mar	0.91F	ND
	Jun	1.28F	ND
	Sep	1.42	1.46
	Dec	1.43	2.01
REFR-12	Dec	ND	0.65F
REFR-14	Dec	ND	ND



TABLE 2 POST-GAC SYSTEM SAMPLING RESULTS

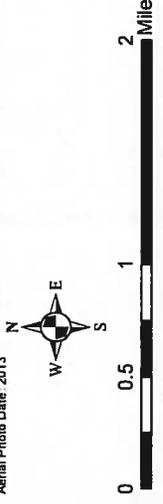
Well ID	Date (2020)	PCE (ppb)	TCE (ppb)
REFR-10-A2	Mar	ND	ND
	Sep	ND	ND
REFR-10-B2	Mar	ND	ND
	Sep	ND	ND
REFR-11-A2	Mar	ND	ND
	Sep	ND	ND
LS-5-A2	Mar	ND	ND
	Sep	ND	ND
LS-6-A2	Mar	ND	ND
	Sep	ND	ND
LS-7-A2	Mar	ND	ND
	Sep	ND	ND
OFR-3-A2	Mar	ND	ND
	Sep	ND	ND

2020 Sampled On-Post and Off-Post Groundwater Wells
Camp Stanley Storage Activity

PARSONS

Table Legend
 F = The analyte was positively identified but the associated numerical value is below the RL.
 ppb = parts per billion (equivalent to milligrams per liter)
 ND = not detected

● Wells with VOC concentrations > MCL
 ● Wells with VOC concentrations between RL and MCL
 ● Wells with VOC concentrations < RL
 ○ Non-detect
 ● Multi-port Westbay Wells
 ● Other wells
 - - - - - Fence Line



Aerial Photo Date: 2013