FINAL
COMMUNITY RELATIONS PLAN UPDATE

Prepared for:

Department of the Army
Camp Stanley Storage Activity
Boerne, Texas

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ACRONYMS AND ABBREVIATIONS

µg/L	Microgram per liter
AOC	Area of Concern
CMI	Corrective Measures Implementation
CMS	Corrective Measures Study
COC	Contaminants of Concern
CRP	Community Relations Plan
CSSA	Camp Stanley Storage Activity
DCE	Dichloroethene
EA	Environmental Assessment
GAC	Granular Activated Carbon
IM	Interim Measure
LTMO	Long-Term Monitoring Optimization
MCL	Maximum Contaminant Level
MDL	Method Detection Limit
Order	Section 3008(h) Administrative Order on Consent
PAO	Public Affairs Officer
PCE	Tetrachloroethene
PCL	Protective Concentration Limit
ppb	parts per billion
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RFA	RCRA Facility Assessment
RMU	Rifle Management Unit
RRS1	Risk Reduction Standard One
RTC	Response to comment
SB	Statement of Basis
SVE	Soil Vapor Extraction
SWMU	Solid Waste Management Unit
TAC	Texas Administrative Code
TCE	Trichloroethene
TCEQ	Texas Commission on Environmental Quality
the Plan	Off-post Monitoring Response Plan
TRRP	Texas Risk Reduction Program
U.S.	United States
USEPA	U.S. Environmental Protection Agency
VOC	volatile organic compound

SECTION 1
INTRODUCTION

1.1 PURPOSE

The Community Relations Plan (CRP) for Camp Stanley Storage Activity (CSSA) is a formal plan for documenting community relations activities related to the environmental program. The CRP is a requirement under the May 5, 1999, **§3008(h) Administrative Order on Consent** (Order) issued by the United States Environmental Protection Agency (USEPA).

The initial CRP was completed in August 1999, and outlined the process of community involvement, availability of the document, and public comment opportunities to be conducted throughout the investigation and remediation processes. CSSA conducted various community outreach activities from August 1999 to the present. The CRP was updated in 2002 with recommendations for additional community outreach activities, in May 2006 to summarize CSSA's activities to involve the local community in the environmental program at CSSA through April 2006, and again in July 2014.

The CRP focuses on environmental work conducted under the Resource Conservation and Recovery Act (RCRA). The August 1999 CRP, the three updates (December 2002, May 2006, and July 2014), and this update are located in **Volume 1-6, Other Plans and Approaches**.

The CRP helps provide the widest possible dissemination of information regarding post restoration activities at CSSA. Further information about this CRP can be obtained by contacting Mr. Jason D. Shirley, CSSA Installation Manager. The Public Affairs Officer (PAO) from Fort Sam Houston, SGM Dean Welch, supports Mr. Shirley in responding to inquiries from the public. The Environmental Encyclopedia, an administrative record of environmental activities being performed at CSSA, is available for public review on the internet at www.stanley.army.mil.

This updated CRP is consistent with federal and state guidance for implementing community relations efforts and will be updated, as appropriate, throughout the environmental restoration process. The restoration processes are collectively referred to as the "environmental program" throughout the remainder of this document.

1.2 REGULATORY COMPLIANCE

An environmental assessment (EA) conducted under RCRA was performed in 1993 to identify and describe potential environmental impacts associated with current and past operations. The EA serves as the RCRA Facility Assessment (RFA) required under the RCRA Corrective Action Process. The Order sets out the RCRA requirements and time frames for the Corrective Action Process at CSSA, including the Interim Measures (IM), RCRA Facility Investigations (RFI), and Corrective Measures Study (CMS). A key component of the Corrective Action Process is to inform the public of the issues and remediation alternatives, and to solicit public input. This CRP describes the activities that CSSA has performed to inform the public and solicit public input. Appendix A provides an overview of the Corrective Action Process, the required documents, and the associated public involvement activities.

SECTION 2
LOCATION AND HISTORY OF CAMP STANLEY STORAGE ACTIVITY

CSSA, formerly known as Leon Springs Military Reservation, is located in Bexar County, northwest of downtown San Antonio (**Figure 1**). The post consists of approximately 4,000 acres immediately east of Farm-to-Market (FM) 3351, approximately 0.5 mile east of Interstate Highway 10. Camp Bullis borders CSSA on the east and south. The land on which CSSA is located was used for ranching and agriculture until the early 1900s. During 1906 and 1907, six tracts of land were purchased by the U.S. Government and designated the Leon Springs Military Reservation, and other lands were acquired through the 1950s and 1960s. The land included campgrounds and cavalry shelters.

In October 1917, the post was designated Camp Stanley. The United States (U.S.) involvement in World War I spurred extensive construction to provide housing for temporary cantonments and installation support facilities. In 1931, Camp Stanley was selected as an ammunition depot, and construction of standard magazines and igloo magazines began in 1938. Camp Stanley was transferred to the jurisdiction of the Red River Army Depot in 1949. In addition to ammunition storage, CSSA land was used to test, fire, and overhaul ammunition components.

Today, the primary mission of CSSA is the receipt, storage, issuance, and maintenance of ordnance materiel. Because of its ordnance mission, CSSA is a controlled-access facility. No significant changes to the CSSA mission and military activities are expected in the foreseeable future.

Figure 1 CSSA Location Map

SECTION 3
HISTORY OF ENVIRONMENTAL ASSESSMENTS AT CSSA

This section provides a brief overview of ongoing groundwater and waste management unit investigations at CSSA. **Appendix B** provides a comprehensive listing of corrective action events from 1991 to the present along with the status of each site.

3.1 GROUNDWATER

The Trinity aquifer is the principal aquifer underlying CSSA. The Middle Trinity aquifer is composed of the Lower Glen Rose Limestone, the Bexar Shale, and the Cow Creek Limestone formations. The Middle Trinity aquifer is the primary source of drinking water in northern-most Bexar County, including the area surrounding CSSA.

Like the surrounding community, CSSA uses the Middle Trinity aquifer as its water source. During a routine screening site visit on August 9, 1991, the Texas Department of Health sampled CSSA's five water supply wells. Analytical results revealed that water supply well CS-16 contained 127 micrograms per liter (µg/L) *cis*- and *trans*-1,2-dichloroethene (DCE) (*cis*-1,2-DCE and *trans*-1,2-DCE), 151 µg/L trichloroethene (TCE), and 137 µg/L tetrachloroethene (PCE). These concentrations exceed the drinking water maximum contaminant levels (MCL) of 70 µg/L for *cis*-1,2-DCE, 100 µg/L for *trans*-1,2-DCE, 5 µg/L for TCE, and 5 µg/L for PCE. Subsequent sampling on August 23, 1991, confirmed the earlier results, and well CS-16 was taken out of service and disconnected from the potable water system. Well locations are shown on **Figure E-1** in **Appendix E**.

Detection of contaminants above MCLs in groundwater spurred groundwater investigation and monitoring programs at CSSA. Since 1992, numerous groundwater monitoring events have been conducted at CSSA. As part of these events, all on-post wells and selected off-post wells were sampled. Quarterly monitoring of drinking water wells began on-post in December 1999, was expanded to include off-post wells in September 2001, and currently continues to include both on- and off-post wells. Additional wells have been installed to monitor groundwater quality in various locations at CSSA.

Groundwater monitoring at CSSA includes a total of 49 wells, including potable water supply wells, agricultural water supply wells, discrete interval and standard groundwater monitoring wells, on-post. As new wells are installed in the vicinity by private landowners and utilities off-post, CSSA evaluates them for inclusion in its groundwater monitoring program, using the *Off-Post Groundwater Monitoring and Response Plan* (Parsons, 2002; amended 2016). For detailed information pertaining to analytical results from groundwater monitoring events, refer to **Volume 5**, **Groundwater Investigation** of the **CSSA Environmental Encyclopedia**.

The Edwards aquifer does not occur within CSSA boundaries. However, the Edwards Underground Water District has defined two recharge and transition zones of concern for the Edwards aquifer; one north and one south of CSSA. One recharge area is along Cibolo Creek

where outcrops of the Lower Glen Rose are present. This is the only area of the Lower Glen Rose that is defined as a recharge zone to the Edwards aquifer. The Cibolo Creek recharge area is 0.5 mile north of the northeast corner of CSSA. A second recharge zone located on Edwards Limestone is about 4 or 5 miles to the south-southeast of CSSA.

3.2 WASTE MANAGEMENT UNITS

Thirty-nine potential solid waste management units (SWMUs) were identified. A review of records and historic aerial photographs, interviews with CSSA personnel, and field CSSA investigations (**Figure 2**). The identified sites were areas used for solid waste disposal, four burn areas (B-1, B-2, B-4, and B-22), two ordnance demolition areas (B-20 and Building 43), one incinerator (I-1), one oxidation pond (O-1), and one less than 90-day waste materials storage area (F-14).

Forty-one potential Areas of Concern (AOC) were also identified. AOCs are those sites where field investigations and/or historical aerial photograph research indicate a possibility that waste disposal activities may have taken place, as evidenced by disturbed areas or exposed surface debris.

Field surveys indicated spent ammunition at five Range Management Units (RMUs). One RMU (RMU-1) is situated within the active firing range. As of 2013, the active range complex also includes SWMUs B-2, B-8, B-20/21, and B-24. **Table 3.1** summarizes site statuses.

Table 3.1 Site Status Summary

Status	SWMUs	AOCs	RMUs
RRS1 Closure	23	14	
De-listed	2	5	
No Further Action/Texas Risk Reduction Program	9	20	4
Investigation or Remediation in Progress	1	1	
Within Active Range Fan*			1
Total:	39	41	5

*SWMUs B-2, B-8, B-20/21, and B-24 were combined with RMU-1 as part of the active range complex in 2013.

Most of CSSA's sites have been closed to residential standards (unlimited use and unrestricted exposure [UU/UE]), as described in the following paragraphs.

3.3 SITE CLOSURES

CSSA environmental investigations identified 39 SWMUs, 41 AOCs, and five RMUs as potential contamination source areas. Through May 2005, the clean-up or closure strategy for CSSA's SWMUs and AOCs followed Texas Commission on Environmental Quality (TCEQ)

Figure 2 Site Location and Status Map

Risk Reduction Rules (30 Texas Administrative Code [TAC] §335 Subchapter S). After May 2005 the clean-up or closure strategy for these sites fell under the Texas Risk Reduction Program (TRRP) 30 TAC §350, which became effective May 1, 2000. The TCEQ approved Risk Reduction Standard 1 (RRS1) closure of 37 sites, de-listing of seven sites, and No Further Action/TRRP closure for 33 sites. Both RRS1 and NFA/TRRP closure allow for UU/UE of the sites. Table 3.2 provides a list of waste management units at CSSA. Information specific to each site is included in **Volume 1-1** of the **Environmental Encyclopedia**.

Remaining open sites (highlighted in **Table 3.2**) will eventually be closed in accordance with TRRP. TRRP has three tiers of acceptable Protective Concentration Limits (PCLs) which are established levels for constituents in an environmental medium considered safe for human health and the environment. Tier I PCLs are based on conservative default assumptions regarding chemical mobility or exposure risk factors about the contaminant and site conditions. Tiers II and III incorporate increasing amounts of site-specific information to calculate a PCL that is more reflective of actual site conditions. While Tiers II and III provide more accurate representations of site conditions, they are more labor intensive and thus are more expensive.

For sites with constituent level concentrations exceeding the applicable PCLs, there are two Remedy Standards available to complete the remedial action (Remedy Standards A and B). Remedy Standard A requires that constituents above the PCL be removed or decontaminated to acceptable levels in all areas. This standard is useful for small sites, sites that are being sold or transferred, and sites near the property boundaries. Remedy Standard B allows consideration of migration of the constituents to a point of exposure not necessarily at the source of the contamination. This standard will allow constituents to remain in place at concentrations greater than the PCL with controls, but will not allow the migration of contaminants off-site.

The choice of the appropriate Tier and Remedy Standard is dependent on numerous site conditions. Therefore, the choice for each site must be evaluated carefully before a decision is made.

Table 3.2 Waste Sites at CSSA

Solid Waste Management Units	Areas of Concern	Range Management Units
SWMU B-1 (RRS1 closed)	AOC-35 (RRS1 closed)	RMU-1
SWMU B-2*	AOC 36 (RRS1 closed)	RMU-2 (NFA closed)
SWMU B-3	AOC-37 (RRS1 closed)	RMU-3 (NFA closed)
SWMU B-4 (TRRP closed)	AOC-38 (NFA closed)	RMU-4 (NFA closed)
SWMU B-5 (RRS1 closed)	AOC-39 (RRS1 closed)	RMU-5 (NFA closed)
SWMU B-6 (RRS1 closed)	AOC-40 (RRS1 closed)	
SWMU B-7 (RRS1 closed)	AOC-41 (NFA closed)	
SWMU B-8*	AOC-42 (NFA closed)	
SWMU B-9 (RRS1 closed)	AOC-43 (RRS1 closed)	
SWMU B-10 (RRS1 closed)	AOC-44 (de-listed)	
SWMU B-11 (RRS1 closed)	AOC-45 (NFA closed)	
SWMU B-12 (RRS1 closed)	AOC-46 (RRS1 closed)	
SWMU B-13 (NFA closed)	AOC-47 (RRS1 closed)	
SWMU B-14 (de-listing requested)	AOC-48 (RRS1 closed)	
SWMU B-15/16 (NFA closed)	AOC-49 (de-listed)	
SWMU B-19 (RRS1 closed)	AOC-50 (RRS1 closed)	
SWMU B-20/21*	AOC-51 (NFA closed)	
SWMU B-22 (RRS1 closed)	AOC-52 (NFA closed)	
SWMU B-23 (RRS1 closed)	AOC-53 (RRS1 closed)	
SWMU B-23A (RRS1 closed)	AOC-54 (RRS1 closed)	
SWMU B-24*	AOC-55 (RRS1 closed)	
SWMU B-25 (RRS1 closed)	AOC-56 (RRS1 closed)	
SWMU B-26 (de-listed)	AOC-57 (NFA closed)	
SWMU B-27 (NFA closed)	AOC 58 (NFA closed)	
SWMU B-28 (NFA closed)	AOC-59 (NFA closed)	
SWMU B-29 (RRS1 closure requested)	AOC-60 (de-listed)	
SWMU B-30 (RRS1 closed)	AOC-61 (RRS1 closed)	
SWMU B-31 (RRS1 closed)	AOC-62 (NFA closed)	
SWMU B-32 (RRS1 closed)	AOC-63 (TRRP closed)	
SWMU B-33 (RRS1 closed)	AOC-64 (TRRP closed)	
SWMU B-34 (NFA closure requested)	AOC-65	
SWMU F-14 (RRS1 closed)	AOC-66 (NFA closed)	
SWMU B-71 (TRRP closed)	AOC-67 (NFA closed)	
SWMU Bldg 40 (RRS1 closed)	AOC-68 (NFA closed)	
SWMU Bldg. 43 (RRS1 closure requested)	AOC-69 (NFA closed)	
SWMU DD Area (RRS1 closed)	AOC-70 (NFA closed)	
SWMU I-1 (NFA closed)	AOC-72 (NFA closed)	
SWMU O-1 (RRS1 closed)	AOC-73 (NFA closed)	
SWMU Coal Bins (de-listing requested)	AOC-74 (NFA closed)	
	AOC-75 (NFA closed)	
	AOC-76 (NFA closed)	

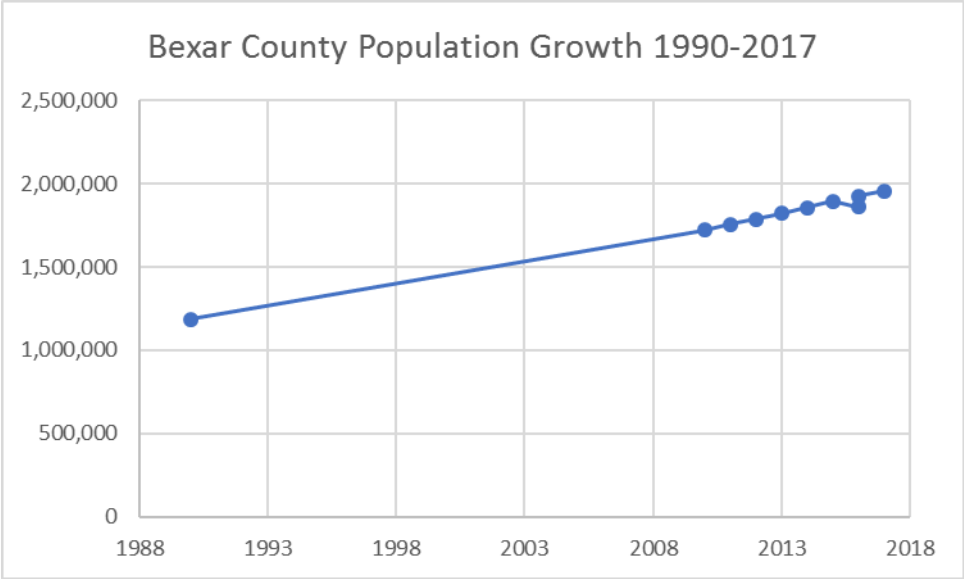
*****SWMUs B-2, B-8, B-20/21, and B-24 are part of the active range.

3.3.1 Remediation

In 1991, routine water well testing by the Texas Department of Health (TDH) detected the presence of dissolved cleaning solvent PCE and related degradation products above maximum contaminant levels (MCLs) in a CSSA water supply well (Well 16 [CS-16]). Consequently, the well was taken out of service. Subsequent sampling showed volatile organic compound (VOC) contaminant concentrations greater than MCLs in several other wells. The potential sources of the contamination were identified as the former oxidation pond (SWMU O-1) and Burn Area 3 (SWMU B-3); this area is referred to as Plume 1 (Figure 3). Later, AOC-65, an area of past solvent use, was identified as an-other source of groundwater contamination, referred to as Plume 2 (Figure 3). In 1999, VOCs were detected in privately owned wells off-post near Plume 2. A synopsis of historical use and remedial activities at each of these sites is provided in the RFI Report (Parsons 2014b), and a brief description of the contaminant plumes is provided in the Facility Investigation portion of this document. The main CSSA Contaminants of Concern (COCs) are PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride (VC).

SECTION 4
COMMUNITY BACKGROUND

CSSA is located in northernmost Bexar County, Texas, southeast of the City of Fair Oaks Ranch, Texas, and east of Interstate 10. Bexar County has a population of approximately 1.9 million, with 1.5 million located in San Antonio, Texas. The population of Bexar County is expected to grow by another 1.1 million people by the year 2040 (San Antonio Express News, 2016). The population of Bexar County grew 23 percent to over 1.7 million people between 2000 and 2010. Significantly, the unincorporated area of Bexar County grew to over 260,000 people, an increase of almost 90 percent (TischlerBrown, 2014).



Bexar County Population. (2017-12-16). Retrieved 2018-10-02, from http://worldpopulationreview.com/texas-counties/bexar-county/

Most of the development in San Antonio in recent years has occurred north of the city. The area surrounding CSSA was primarily rural when the Order was issued in 1999, and since then the density of residential development on the north, west, and south of the post has increased. Adjacent communities include:

- City of Fair Oaks bordering CSSA on the northwest;
- Village Green, a large-lot single-family subdivision to the west;
- Jackson Woods, single-family homes bordering CSSA on the west;
- Trailwood, Indian Hills, Country Estates, and Scenic Oaks, various single family residential subdivisions across Interstate 10 from CSSA to the west;
- Hidden Springs Estates and The Dominion, single-family large lot subdivisions to the southeast bordering CSSA and Camp Bullis;
- Leon Springs, a few small businesses (light industrial, shopping, and restaurants), a single-family subdivision, and a mobile home park, bordering CSSA on the southwest;

- Lost Creek and Heights of Lost Creek, two contiguous small lot subdivisions by CENTEX Homes that are mostly built out, north of the main gate of CSSA along FM 3351, all of the way back to Old Fred Rd;
- Stonehaven by Pulte Homes, a small lot subdivision about half a mile north of Heights of Lost Creek along FM 3351;
- Gombert tract by Pulte Homes, a small lot subdivision to the north of Stonehaven that is just starting construction (planned for 545 homes on 130 acres of the Gombert tract); and
- Sablechase, a small lot subdivision which is behind Jackson Woods.

SECTION 5
PAST COMMUNITY RELATIONS ACTIVITIES

CSSA has maintained good relations with the surrounding community. Public interviews, public meetings, and fact sheet mailings have been conducted to maintain public relations. Additional information on past community relations activities are located in **Volume 1.5 Other Plans and Approaches** of the **CSSA Environmental Encyclopedia**. The following activities have been conducted to promote CSSA's community relations since December 2002.

As part of CSSA's initial community relations efforts, 13 people were interviewed and their responses reported in the August 1999 CRP. Two public meetings (Subsection 5.7) were held in October 2001 and October 2002, and numerous fact sheets (Subsection 5.4) were prepared and distributed to people on the CSSA mailing list (Subsection 5.5) as part of CSSA's public information program. The initial CRP was implemented in August 1999. An update describing CSSA's activities from 1999 to 2002 and reporting the results of the 16 persons interviewed was completed in December 2002.

5.1 ADMINISTRATIVE RECORD

CSSA maintains an administrative record for its environmental program (the Environmental Encyclopedia) on DVD at the main branch of the San Antonio Public Library, 600 Soledad Plaza, San Antonio, TX 78205 and online at www.stanley.army.mil. The administrative record contains copies of all Order-related plans and reports submitted to regulators, meeting minutes from regulatory meetings, and key correspondence between CSSA and the regulatory agencies. The internet website has been made more accessible to the public through the addition of keyword search capability.

5.2 OFF-POST MONITORING RESPONSE PLAN AND OFF-POST GROUNDWATER MONITORING

In July 2001, CSSA created its Off-post Monitoring Response Plan (later re-titled *Data Quality Objectives [DQOs] for the Groundwater Monitoring Program*). The DQOs were most recently revised in February 2016 (**Volume 5, Groundwater** of the **CSSA Environmental Encyclopedia)**. The purpose of the Plan/DQOs is to:

- Confirm that area drinking water meets USEPA and TCEQ standards;
- Determine the lateral and vertical extent of contamination released from CSSA;
- Identify any potential off-post source areas of groundwater contamination;
- Provide the framework to monitor off-post water wells located downgradient of known source areas within proximity to CSSA; and
- Provide action levels and Army response guidance when off-post ground water contamination is encountered.

The Plan describes the well access agreements signed by off-post well owners before sampling their wells and describes sampling procedures and laboratory analytical methods. The contaminants of concern (COC) identified in off-post wells have been VOCs, such as *cis*-1,2-DCE, PCE, and TCE. The action levels for VOCs are based on MCLs established by the USEPA under the Safe Drinking Water Act. The Plan sets out the following guidelines for action by CSSA dependent upon laboratory analytical results:

- If VOC contaminant levels are ≥ 90% of the MCL based on preliminary data received from the laboratory [≥ 4.5 micrograms per liter (µg/L) for PCE and TCE] and the well is used as a potable water source, bottled water will be supplied within 24 hours of receipt of the data, and a confirmation sample will be collected from the well. The re-sampling will take place within 14 days of the receipt of the final validated analytical report. If the follow-up sampling confirms a COC is above MCLs, the residence or supply well will be evaluated and an appropriate method for wellhead protection, either installation of GAC or connection to an alternative water source will be selected. Cost related to the installation and maintenance of wellhead treatment equipment or connection to an alternative water source will be borne by CSSA.
- If VOC contaminant levels are ≥ 80% of the MCL during any single monitoring event based on preliminary data from the laboratory (4.0 µg/L for PCE and TCE) and the well is used as a potable water source, it shall be monitored **monthly**. If the follow-up sampling confirms a COC is ≥ 80% of the MCL, it will be re-sampled until the level falls below the 80% value. If the concentration increases to ≥ 90% of the MCL see above.
- If any VOC COC is detected at levels ≥ the method detection limit (MDL) (historically around 0.06 ppb for PCE and 0.05 ppb for TCE), and less than 80% of the MCL the well will be re-sampled on a **quarterly** basis. This sampling will be conducted concurrently with on-post sampling events and will be used to develop historical trends in the area. Quarterly sampling will continue for a minimum of one year, after which the sampling frequency will be reviewed and possibly decreased.
- If any VOC COC is detected at levels ≤ the MDL (U-Flagged [non-detect] results) or ≤ than the RL (F-Flagged detections), the sampling frequency will depend on the well owner requests, distance from CSSA, and duration of consecutive results as follows:
    - If the sampling events were specifically requested by the well owner, the well is sampled quarterly until 4 consecutive quarters of non-detects (U-Flag) results are attained. Upon reaching that milestone, the well is moved to an annual sampling frequency.
    - For those off-post wells greater than 1.5 miles from CSSA and with a sample result less than the RL (either U-Flag or F-Flag detections), the well will be retained and sampled on an as needed basis. The basis of a need may include owner requests, regulator requests, or in support of regional-scale plume mapping and modeling.
    - For those off-post wells less than 1.5 miles from CSSA and with a sample result less than the RL (either U-Flag or F-Flag detections), the well will be retained and sampled on an annual basis. Sampling will continue until 3 consecutive years of U-Flag (non-detect) results have been attained. At that time groundwater sampling

will be suspended from annual sampling, but the well will be retained in the program for future needs.

- If VOCs are not detected during the initial sampling event, (i.e. no VOC contaminant levels above the MDL), further sampling of the well would be considered on an as needed basis. A well that has no detectable VOCs can be removed from the monitoring program, unless plume migration could influence the well. The well owner will be apprised of any re-sampling decisions regarding the non-detect wells.

Action levels for detection of VOCs and decisions to sample an off-post public well are based on the following:

- If an off-post public supply system is ≥ 90% of the MCL, CSSA will coordinate solutions to the maximum extent feasible. The system operator and CSSA will determine the best course of action for providing potable water when data suggests an exceedance of the MCL. Possible options include:
  - Potable water could be brought in by tanker truck.
  - Potable water could be provided by another water system.
  - A wellhead treatment system (i.e., GAC) can be installed and maintained by CSSA.

Expansion or reduction of the off-post drinking water wells to be sampled will be dependent on an evaluation of previous results. The original LTMO recommendations for on-post wells were implemented in December 2005. In November 2009 a public meeting was held, and information regarding the LTMO study and possible changes to the off-post sampling program were presented. In 2010 the LTMO study was updated with 5 additional years of groundwater monitoring data. The updated LTMO plan was implemented at both on- and off-post locations in 2011.

In 2015, the on- and off-post LTMO study was updated with another 5 years of groundwater monitoring data which demonstrated the long-term stability of the plumes, and further refined the sampling approach. The 2015 DQO update reflects those recommendations presented in the 2015 LTMO, and provides a mechanism by which monitoring locations may be suspended from the prescribed monitoring program based upon distance from CSSA and the demonstration of prolonged contaminant concentrations below either the RL (F-Flagged data) or the MDL (non-detect U-Flagged data). CSSA implemented the recommendations of the updated 2015 LTMO study upon TCEQ and USEPA approval.

New off-post drinking water wells may be added to the program in the future. Locations of new wells to be sampled will be based on the inferred-flow direction of the off-post VOC plume derived from historical data. Concerns of area residential well owners or municipal water purveyors will be dealt with on a case-by-case basis. These decisions will be made based on the action levels given above. Additional information on the inclusion of off-post wells to the sampling program is available in **Volume 5, Groundwater**, of the **CSSA Environmental Encyclopedia**.

5.3 GRANULAR ACTIVATED CARBON FILTRATION SYSTEMS INSTALLED OFF-POST

CSSA has installed seven granular activated carbon (GAC) treatment systems at private off-post wells in which COC concentrations reached 90% or greater of the MCL for PCE and TCE (i.e., ≥ 4.5 milligrams per liter [mg/L]). Well locations that routinely exceed the MCL for PCE and/or TCE and are used for consumption include:

- Three private residences (LS-5, LS-7 and RFR-10 [2 GAC units]);
- Two businesses (OFR-3 and RFR-11); and
- One church (LS-6).

These wells are all located southwest of CSSA, within the extent of Plume 2 (**Figure E-1 in Appendix E**). Prior to 2008, two public supply wells (LS-2 and LS-3) for the Leon Springs Villas were also treated by a centralized hi-capacity GAC unit. However, this Public Water Supply (PWS) system no longer derives its groundwater from the Middle Trinity aquifer, and therefore the system was dismantled. This method of groundwater treatment employs activated carbon to remove organic contaminants from the groundwater. In general, contaminated groundwater produced from the well is pumped through two carbon vessels, each containing 90 pounds of granular activated carbon. The carbon vessels are placed in "series" in ensure all VOCs are removed. The treatment systems also include 5-micron cartridge filters to remove sediment and ultraviolet light treatment to destroy microbial contaminants. The entire system is self-contained within a small shed at each well location. There are multiple configurations of treatment dependent upon the well and water supply equipment that each well owner operates. Figure 2.11 shows the GAC system configuration for well RFR-10. Regular maintenance is performed both by an environmental services contract provider (Parsons) and the carbon vendor (ProAct, Inc).

5.4 NEWSLETTERS/FACT SHEETS

To inform the public, an initial newsletter and various fact sheets were distributed to residents in the area of CSSA. An initial mailing to the public in December 1999 was intended to gauge public interest in CSSA's environmental program and create an initial mailing list. In October 2000, CSSA provided responses to questions submitted by the public. A Congressional Fact Sheet was generated in July 2001. Early Fact Sheets mailed in 2001 supplied general information about CSSA, the environmental program, and specific information regarding the contamination plumes at CSSA.

To continue to inform the public, various Fact Sheets were mailed from 2002 to the present, providing results of quarterly groundwater monitoring and specific items of interest such as chloroform detections or clean-up activities at specific sites. See Table 5.1 for a complete list of Fact Sheets to date. Additional fact sheets will continue to be prepared and distributed by U.S. Mail and e-mail to present results of sampling events and/or clean-up activities at CSSA.

Table 5.1 Summary of Fact Sheets Distributed

Fact Sheet	Title	Subject	Date Issued
11	Groundwater Contamination – Chloroform	To inform area residents about the chemical nature, uses and action levels for Chloroform	December 2002
12	Groundwater Contamination – Sept 2002 Sampling	September 2002 sampling results for on-post and off-post wells.	February 2003
13	Groundwater Contamination – Dec 2002 Sampling	December 2002 sampling results for on-post and off-post wells.	February 2003
14	Groundwater Contamination – March 2003 Sampling	March 2003 sampling results for on-post and off-post wells.	May 2003
15	Groundwater Contamination – June 2003 Sampling	June 2003 sampling results for on-post and off-post wells.	September 2003
16	Groundwater Contamination – Sept 2003 Sampling	September 2003 sampling results for on-post and off-post wells.	January 2004
17	Groundwater Contamination – Dec 2003 Sampling	December 2003 sampling results for on-post and off-post wells.	March 2004
18	Groundwater Contamination – March 2004 Sampling	March 2004 sampling results for on-post and off-post wells.	May 2004
19	Groundwater Contamination – June 2004 Sampling	June 2004 sampling results for on-post and off-post wells.	June 2004
20	Groundwater Contamination – Sept 2004 Sampling	September 2004 sampling results for on-post and off-post wells.	Nov 2004
21	Groundwater Contamination – Dec 2004 Sampling	December 2004 sampling results for on-post and off-post wells.	March 2005
22	Groundwater Contamination – March 2005 Sampling	March 2005 sampling results for on-post and off-post wells.	June 2005
23	Groundwater Contamination – June 2005 Sampling	June 2005 sampling results for on-post and off-post wells.	March 2006
24	Groundwater Contamination – September 2005 Sampling	September 2005 sampling results for on-post and off-post wells.	March 2006
25	Groundwater Contamination – December 2005 Sampling	December 2005 sampling results for on-post and off-post wells.	March 2006
26	Cleanup Activities at SWMU B-3	An overview of cleanup activities SWMU B-3, and removal actions as well as the remediation system to be installed.	March 2006
27	Groundwater Contamination – 2006 Sampling	2006 sampling results for on-post and off-post wells. Updates on source area cleanup and the 2006 public meeting.	March 2007
28	Groundwater Contamination – 2007 Sampling	2007 sampling results for on-post and off-post wells. Updates on source area cleanup.	March 2008
29	Fact Sheet	Extended fact sheet prepared for the 2009 public meetings. An overview of source area cleanup, groundwater sampling program, 2008 sampling results, Long-Term Monitoring Optimization (LTMO), and public meeting details.	November 2009
30	Groundwater Contamination – 2009 Sampling	2009 sampling results for on-post and off-post wells. Updates on source area cleanup.	March 2010
31	Groundwater Contamination – 2010 Sampling	2010 sampling results for on-post and off-post wells. Updates on source area cleanup.	March 2011
32	Groundwater Contamination – 2011 Sampling	2011 sampling results for on-post and off-post wells. Updates on source area cleanup.	March 2012
33	Groundwater Contamination – 2012 Sampling	2012 sampling results for on-post and off-post wells. Updates on source area cleanup.	March 2013
34	Groundwater Contamination – 2013 Sampling	2013 sampling results for on-post and off-post wells. Updates on source area cleanup.	March 2014
35	Annual Fact Sheet	2014 sampling results for on-post and off-post wells. Updates on source area cleanup.	May 2015

Fact Sheet	Title	Subject	Date Issued
36	Annual Fact Sheet	2015 sampling results for on-post and off-post wells. Updates on source area cleanup.	May 2016
37	Annual Fact Sheet	2016 sampling results for on-post and off-post wells. Updates on source area cleanup.	June 2017
38	Annual Fact Sheet	2017 sampling results for on-post and off-post wells. Updates on source area cleanup.	June 2018

5.5 MAILING LIST

The initial mailing list for fact sheets and newsletters included over 2,700 local residents and landowners in the CSSA area and was based on addresses obtained from county appraisal records. The current mailing list was created based on responses to a postcard mailout by local residents and landowners which requested that the postcard be returned by the recipient in order to remain on the mailing list.

Approximately 225 area residents requested to join the original CSSA mailing list. In addition, the mailing list includes media representatives, city and county officials, state and federal agencies, and key regulatory officials. Newspaper notices invited community members and local residents attending public meetings to be added to the mailing list. Following each newsletter or fact sheet mail out, the mailing list was edited as appropriate based on forwarding order notices or returned mail items. More recent mailing lists have been compiled using past recipients and new recipients who have requested to join the mailing list by phone/mail/email or in person at a public meeting. The current version of the mailing list contains approximately 212 recipients including nearby residents, businesses, and local officials. Invitations to public meetings are sent out to a wider general mailing list to all residents within a one-mile radius of the CSSA boundary.

5.6 CONTACT PERSON

The contact person in the newsletters and fact sheets is listed as Mr. Jason D. Shirley, CSSA Installation Manager, 25800 Ralph Fair Road, Boerne, Texas 78015, telephone: (210) 295-7416. The PAO from Fort Sam Houston, SGM Dean Welch, supports Mr. Shirley in responding to inquiries from the public and statements to various media. Mr. Shirley and Mr. Welch respond to requests for information from community members in person at public meetings and from telephone requests. Mr. Shirley attends meetings with local City and Homeowner Association boards and has occasionally presented information on CSSA's environmental program.

5.7 PUBLIC MEETINGS

CSSA held public meetings in 2001, 2002, 2006, 2009, 2014, and 2015. Approximately 120 people attended the public meetings hosted in October 2001, less than 25 people attended the subsequent meetings. The low public turnout for the meetings in 2002 through 2014 suggest that community concerns are being effectively addressed by the proactive approach CSSA has taken to address off-post environmental concerns and CSSA's community relations program set out in this CRP Update report. Additional information on those public meetings

can be found in previous updates of the CRP located in **Volume 1-6, Other Plans and Approaches** of the **CSSA Environmental Encyclopedia**.

The most recent public meeting was held on April 23, 2015 to present the Statement of Basis and proposed remedy for groundwater contamination at CSSA. USEPA solicited feedback from the community and addressed public comments on the proposed remedy. Presentations were made by CSSA, Parsons, and Mr. Greg Lyssy of USEPA. The meeting was held at the Leon Springs Baptist Church, 24133 Boerne Stage Road, San Antonio, TX 78255. Approximately two weeks prior to the meeting, invitation postcards were sent to stakeholders and 230 landowners within one-mile of Plume 2 (see Figure E-1 in Appendix E) and/or CSSA boundary. Landowners were identified using Bexar County Appraisal District records. A public notice was published in the San Antonio Express-News (English), Conexion (Spanish), and the Boerne Star (English) newspapers.

A total of 16 nearby residents and three local officials attended the 2015 meeting. Representatives from USEPA and TCEQ, as well as the former Fort Sam Houston Public Affairs Officer, Phil Reidinger, were available to discuss issues specific to concerns raised by those in attendance.

The 2015 meeting was conducted in an open house format, with several laptop stations playing continually-looped PowerPoint presentations. Parsons personnel were available at each station to discuss the site and answer questions. The presentation topics included: CSSA History and Mission, Restoration Efforts, Groundwater Compliance, SWMU B-3 Treatment Technologies, and AOC-65 Treatment Technologies. Several attendees had questions or concerns that were discussed with CSSA representatives at each meeting.

5.8 ORDER-RELATED PUBLIC NOTICES AND RESPONSES

5.8.1 Statement of Basis

A Statement of Basis (SB) was prepared by USEPA which summarized the information contained in the RFI and CMS reports. The SB was designed to facilitate public participation in the remedy selection. The SB was placed in the administrative record and made available for public review and comment from April 9 through May 9, 2015.

5.8.2 Public Notice

A notice and brief analysis of the SB was published following completion of the CMS and SB, and appropriate documents were made available to the public for review. Information was included in the notice and analysis to provide a reasonable explanation of the proposed remedy and a list of the remedial alternatives analyzed during the CMS (**Table 5.2**). The notice and was published in a major local newspaper of general circulation in both Spanish and English. The notification will also be sent to facility mailing list recipients. **Appendix D**, **Media Contacts**, lists local newspapers available to carry public notices.

5.8.3 Public Meeting

USEPA held a meeting on April 23, 2015 at the Leon Springs Baptist Church to present to the public its SB for the closure of the CSSA Administrative Order (see Section 5.7).

Table 5.2 Newspaper Notification Content Summary

The newspaper notification should include the following:
• *Facility name and location*
• *Date and location of public meeting* (if scheduled) - If a meeting has not been requested or scheduled, the notice will inform the public of its right to request one.
• *Public participation* - The notice will inform the public of its role in the remediation selection process and provide the following information: 1. Location of the information repositories and administrative record 2. Methods by which the public may submit comments 3. The dates of the public comment period
• *Identification of a proposed remedy*
• *Remedies evaluated in the CMS*
• *Request for public comments* - The notice will emphasize that the agency is soliciting public comment on ALL of the corrective measure alternatives, as well as on the proposed remedy. It will include a clear statement that the proposed remedy is only a preliminary determination and that other options could be selected as the remedy based upon public comment, new information, or a reevaluation of existing information.

SECTION 6
FUTURE PUBLIC INVOLVEMENT PLANS

The public involvement activities implemented since August 1999 have both maintained and improved CSSA's existing relations with the community. Public participation in the corrective action process is required to begin upon completion of the RFI and CMS. The CMS was completed in October 2014, and CSSA is currently in the Corrective Measures Implementation (CMI) phase of RCRA. Details of the RCRA Corrective Action Process and the associated documents required by the USEPA can be found in Appendix A.

To comply with the Order, and foster effective communication between CSSA and the community, interviews with community members were held in August 1999, April through June 2002, and May 2005. Discussions with state and local officials, well owners whose wells are sampled by CSSA, and interested citizens identified the public information needs, as well as the most effective method for disseminating this information. Input from the community provides information that maximizes efforts and provides effective management of the CRP.

Based on information gathered in the original CRP and updates, four objectives were developed for the CRP at CSSA:

- Provide the community with timely and accurate information;
- Establish and maintain two-way communication between CSSA and the community;
- Respond to specific community concerns and needs that arise for environmental activities; and
- Provide opportunities for citizen input and involvement.

These objectives guide the overall community relations activities. Past activities conducted to ensure the community is properly informed were discussed in Section 5 and in previous CRPs. The following paragraphs discuss future activities designed to ensure these four objectives are met:

6.1 PROVIDE THE COMMUNITY WITH INFORMATION

6.1.4 Administrative Record/Information Repository

The Environmental Encyclopedia Administrative Record will continue to be updated and maintained online. Updated information will be added to the Administrative Record on a quarterly basis.

6.1.5 Newsletters/Fact Sheets

Information releases in the form of fact sheets will be prepared on an annual basis. The most up-to-date mailing list will be used for each Fact Sheet. Fact Sheets will continue to be prepared to report the results of each groundwater monitoring event on an annual basis. All

information releases or Fact Sheets should include the name, address, and telephone number of a CSSA representative responsible for inquiries about the CSSA environmental program.

6.1.6 Mailing List

The mailing list will continue to be updated for forwarded addresses or returned items following each informational mail out. In addition, the mailing list will include media representatives, city and county officials, state and federal agencies with jurisdiction over wildlife resources, and key regulatory agency officials. Newspaper notices can be used to invite people to be added to the mailing list so they can receive any public notices or other information disseminated during the corrective action process.

6.1.7 Contact Person

The CSSA contact person is Mr. Jason D. Shirley, Installation Manager. The PAO from Fort Sam Houston, SGM Dean Welch, supports Mr. Shirley by responding to inquiries from the public.

6.2 ESTABLISH TWO-WAY COMMUNICATION BETWEEN CSSA AND THE COMMUNITY

As part of its CRP, CSSA will continue to conduct public meetings if the public continues to indicate that these meetings are helpful. CSSA will host future meetings in subsequent years based on community interest. These meetings will follow the format developed for the January 2014, with CSSA's environmental contractor technical staff presenting displays of information describing CSSA's environmental program. Representatives from the USEPA, TCEQ, Edwards Aquifer Authority, Bexar Metropolitan Water District, San Antonio Metropolitan Health District, and other entities involved in the environmental program at CSSA will be invited to participate in the public meetings.

6.3 RESPOND TO COMMUNITY CONCERNS AND NEEDS THAT ARISE FOR ENVIRONMENTAL ACTIVITIES

CSSA will continue to respond to concerns and questions from citizens or groups, to the need for environmental activities such as GAC filtration units, under the guidelines of the Off-post Groundwater Monitoring Response Plan, LTMO Plan, and the data quality objectives for the Groundwater Monitoring Program. The CSSA contact point for the community, Mr. Shirley, will continue to be identified in all newsletters and Fact Sheets. Any change in contact person, as may be affected by any future change in post command, will be noted on subsequent mailouts. Each question or comment will receive a telephone response or written response, if requested, in a timely manner.

6.4 PROVIDE FOR CITIZEN INPUT AND INVOLVEMENT

6.4.1 Five-Year Reviews

Five-year reviews will be conducted to provide an opportunity to evaluate the implementation and performance of the remedies in place at CSSA, and to determine whether they remain protective of human health and the environment. Five-year reviews will continue throughout the life of the site until contaminants no longer remain on site at levels that do not allow for UU/UE. The basis for this finding will be documented in the final five-year review report.

6.4.2 Hold Public Meetings

CSSA will hold a public meeting approximately every 5 years to facilitate continued community participation in the CSSA environmental program, if deemed necessary. These meetings will be advertised in local newspapers, and through invitation to community members on the CSSA mailing list. The next public meeting will be held in approximately May 2020, prior to the first five-year review.

6.4.3 Public Comment Period

A public notice will be made available in local newspapers and through invitation to community members on the CSSA mailing list stating that there was a five-year review and inviting the public to submit any comments to the USEPA. The results of the review and the report will be made available in **Volume 7** of the **CSSA Environmental Encyclopedia**.

SECTION 7
SCHEDULE OF COMMUNITY RELATIONS ACTIVITIES

The Administrative Record will continue to be updated and maintained electronically once per quarter. Fact Sheets will be issued annually to update the public on significant events related to the CSSA environmental program. The CSSA mailing list will be used for fact sheet mailouts. A public meeting will be tentatively planned for every 5 years in subsequent years. Public notice will be given to individuals on the mailing list and through the media for public meetings.

APPENDIX A
RCRA CORRECTIVE ACTION PROCESS

- **Figure A-1** shows the stages of a corrective action process and the documents required for each stage. Following is a brief summary of each stage. *
- RCRA Facility Assessment - The RFA is often the first step in the corrective action process. An RFA is conducted prior to the issuance of a corrective action order. The RFA process is for identifying and gathering information on potential releases at RCRA facilities, and evaluating and identifying SWMUs and other areas of concern.
- Interim Measures - IMs for corrective action may be initiated, when appropriate, prior to the initiation or completion of the RFI, CMS, or CMI. Decisions concerning interim measures are made based on the immediacy and magnitude of the potential threat to human health or the environment. It is not necessary to prepare an SB or a public notice for IM implementation.
- RCRA Facility Investigation - If the regulatory agency determines that an RFI is necessary, the owner or operator will be required to perform an RFI either under a permit schedule of compliance or under an administrative order. The RFI generally includes the characterization/identification of the hydrogeological setting, the type and concentration of hazardous waste or hazardous constituents released, the rate and direction at which the releases are migrating, and the extent over which releases have migrated. A risk assessment can also be a part of the RFI. A risk assessment at CSSA will follow the Risk Reduction Rules (30 TAC § 335 Subchapter S) or the TRRP, depending on the current applicability. The risk assessment determines the potential threat to human health and the environment. The information generated during the RFI is used not only to determine the need for CMI, but also to aid in the selection and implementation of these measures. The findings of the RFI provide the rationale and basis for the CMS.

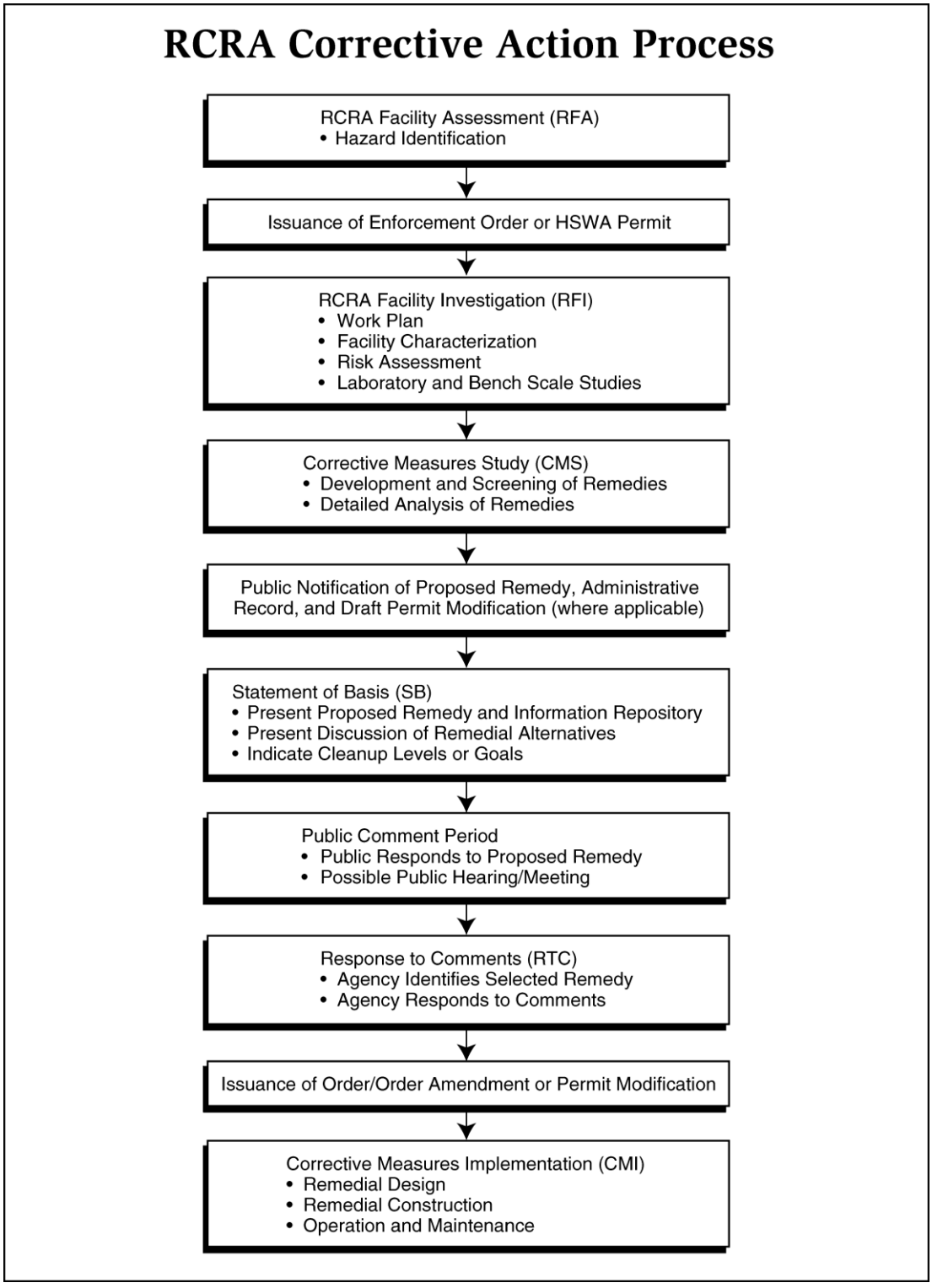
  If no evidence of a release is observed (*i.e.*, metals concentrations do not exceed background and organics are not detected), the site can be closed. The State of Texas or the EPA, depending on the jurisdiction of the particular site, will approve the closure using the appropriate regulations.

- Corrective Measures Study - If the need for corrective measures is verified during the RFI process, the owner or operator is then responsible for performing a CMS. A CMS is required for closure under the Texas RRS3. During this step, the owner or operator will identify, evaluate, and recommend specific remedies that will remediate the release(s) based on a detailed engineering evaluation of the data and the corrective measure technologies.
- Statement of Basis - The SB summarizes the information contained in the RFI/CMS reports. The SB is designated to facilitate public participation in the remedy selection by identifying the proposed remedy, explaining the reasons for the proposal, and soliciting public review and comment on all possible remedies considered in the RFI and CMS reports.

** Source: Guidance on RCRA Corrective Action Decision Documents, U. S. EPA, February, 1991.*
TCEQ Risk Reduction Rules (30 TAC §335, Subchapter S)

- Public Comment Period for Selection of Remedy(ies) - The regulatory agency's proposed remedy for a facility is presented to the public in a SB. The SB provides a brief summary of all the alternatives studied in the detailed analysis phase of the CMS, highlighting the key factors that lead to the identification of the proposed remedy.
- Response to Comments - Following receipt of public comments, the regulatory agency is required to prepare a RTC prior to the issuance of any final permit decision. A RTC should also be prepared after the public comment period but prior to those facilities undertaking corrective action pursuant to an administrative order. The RTC responds to comments received during or prior to the public comment period and describes the technical parameters of the selected remedy.
- Corrective Measures Implementation - The permit modification or corrective action order provides the framework for the transition into the next phase of the remedial process, CMI. The CMI program includes designing, constructing, operating, maintaining, and monitoring the performance of the remedy(ies) selected to protect human health and the environment.

Figure A-1 Stages of the Corrective Action Process



APPENDIX B
STATUS OF ACTIONS/INVESTIGATIONS

APPENDIX B
STATUS OF SWMUs, AOCs, AND RMUs at CSSA

Unit No.	*Description*	*Investigation Report(s)*	*Recommendations*	Requested Action				*Closure Approved*	*Closure Type*
				RRS1	*NFA*	*Delisting*	*TRRP*		
B-1	Powder and ammo burn area (1954).	RFI/Closure Report July 2002	NA	**X**				November-02	RRS1
B-2	Small arms ammunition burning area (1954) - North Pasture	RFI/Closure Report June 2002 Closure Report March 2005	Closure once range is inactive						
B-3	Landfill area (garbage disposal and burning trash); filled in 1990-91.	RFI Report March 2005	Bioreactor remediation ongoing						
B-4	Classified burn area (documents and trash).	APAR October 2012	Closure				**X**	February-13	TRRP
B-5	Possible fired small arms ammo brass area. Not located.	RFI/Closure Report July 2002	NA	**X**				October-02	RRS1
B-6	Possible solid waste disposal area.	RFI/Closure Report July 2002	NA	**X**				October-02	RRS1
B-7	Possible fired small arms ammunition brass disposal area	RFI/Closure Report July 2002	NA	**X**				October-02	RRS1
B-8	Fired small arms ammo brass disposal area (piles of fire bricks, ammo shells) - North Pasture	RFI Report December 2003	Excavate as necessary once range is inactive						
B-9	Miscellaneous solid waste (metal and weapons) disposal area.	RFI/Closure Report September 2002	NA	**X**				March-03	RRS1
B-10	Ammunition disposal area.	RFI/Closure Report May 2003	NA	**X**				January-04	RRS1
B-11	Miscellaneous solid waste disposal (ammo, scrap metal, const. debris).	RFI Closure Report June 04	NA	**X**				September-04	RRS1
B-12	Landfill, WPA trash when igloos were being built	RFI Report April 2005	NA	**X**				July-05	RRS1
B-13	Trash dump area.	RIR April 2013	Closure		**X**			July-13	NFA
B-14	*Possible fired brass area - not located.*	Delisting Request November 2007	NA			**X**		February-08	Delisting
B-15/16	Landfill (target vehicles, weapons mounts)	RIR June 2011	NA		**X**			September-11	NFA
B-19	Solid waste disposal area (metals and weapons).	RFI/Closure Report June 2002	NA	**X**				September-02	RRS1
B-20/21	Former OB/OD area & ammunition disposal areas - North Pasture	RFI Report July 2002	Closure once range is inactive						
		Combined with B-20							
B-22	Burn area (artillery shells).	RFI/Closure Report August 2002	NA	**X**				December-02	RRS1

APPENDIX B
STATUS OF SWMUs, AOCs, AND RMUs at CSSA

Unit No.	*Description*	*Investigation Report(s)*	*Recommendations*	**Requested Action**				*Closure Approved*	*Closure Type*
				RRS1	*NFA*	*Delisting*	*TRRP*		
B-23	Disposal trenches (two green canisters)	RFI Report April 2005	NA	**X**				July-05	RRS1
B-23A	Disposal Trench (glass ampoules of liquid)	RFI Closure Report September 2004	NA	**X**				March-05	RRS1
B-24	Spent ammo/rockets area - North Pasture	RFI Report May 2002	MC removal once range is inactive						
B-25	Possible disposal trench	RFI Report April 2005	NA	**X**				July-05	RRS1
B-26	Possible disposal trench	Delisting Report August 2004	NA			**X**		November-04	Delisting
B-27	Sanitary landfill, consisting of 5-6 trenches (6 ft deep, 3 ft wide).	RFI Report July 2002 RIR September 2011	NA		**X**			December-11	NFA
B-28	Disposal trenches (molten metal, ammo, ammo parts)	RFI Report April 2002 RIR July 2011	NA		**X**			November-11	NFA
B-29	Solid waste disposal area (in old quarry)	RFI Report April 2005	NA	**X**				February-08	RRS1
B-30	Solid waste disposal area	RFI Report September 2004	NA	**X**				February-05	RRS1
B-31	Lead shot/sand pipe bedding	RFI/Closure Report July 2002	NA	**X**				November-02	RRS1
B-32	Lead shot/sand pipe bedding	RFI/Closure Report January 2003	NA	**X**				November-03	RRS1
B-33	Lead shot/sand pipe bedding	RFI Report September 2004	NA	**X**				November-04	RRS1
B-34	Maintenance pit floor drain and discharge point	RFI Report August 2002	Closure		**X**			April-14	NFA
B-71	Livestock area. Inner cantonment, SW of Well 16.	APAR	NA				**X**	October 2011	TRRP
AOC-64	Area east of SWMU B-4; flares observed in the area	APAR	NA				**X**	October 2011	TRRP
Bldg 40	less-than 90-day accumulation container storage area	RFI/Closure Report September 2003	NA	**X**				January-04 and January-06	RRS1
Bldg 43	Inactive makeshift ammo demolition facility	RFI Report April 2005	NA	**X**				August-05	RRS1
DD	Dud ammunition disposal area	RFI Report January 2005	NA	**X**				April-05	RRS1
F-14	*Hazardous waste storage area (<90-day)*	RFI/Closure Report, 1995	NA	**X**				November-95	RRS1

APPENDIX B
STATUS OF SWMUs, AOCs, AND RMUs at CSSA

Unit No.	*Description*	*Investigation Report(s)*	*Recommendations*	Requested Action				*Closure Approved*	*Closure Type*
				RRS1	*NFA*	*Delisting*	*TRRP*		
I-1	Inactive incinerator (built in 1943), currently used for transformer storage	RFI Report February 2003	NA				**X**	November-08	NFA
O-1	Waste liquid/sludge oxidation pond (1975)	RFI/Closure Report October 2000	NA	**X**				April-02	RRS1
Coal Bins	*Coal bins (no longer in use)*	Delisting Requested January 2003	NA			**X**		February-08	Delisting
AOC-35	Area immediately around Well 16. Northeast area of inner cantonment.	RFI/Closure Report October 2002	NA	**X**				February-03	RRS1
AOC-36	Area between Well 16 and B-3. Possible waste verified not present by magnetometer survey.	RFI/Closure Report April 2002	NA	**X**				August-02	RRS1
AOC-37	Livestock area. NW of Well 16 and N of Well D.	RFI/Closure Report June 2004	NA	**X**				January-05	NFA
AOC-38	Livestock area. Inner cantonment, SW of Well 16.	RFI Report September 2004	NA	**X**				February-05	RRS1
AOC-39	None. Area west of Well 16 between North Outer Rd and cantonment fence.	RFI/Closure Report April 2002	NA	**X**				September-02	RRS1
AOC-40	None. Area east of Well 16 between North Outer Rd and cantonment fence.	RFI/Closure Report May 2002	NA	**X**				August-02	RRS1
AOC-41	Gate area east of well 16. North Pasture, north of gate 6.	NFA Report April 2005	NA		**X**			July-05	NFA
AOC-42	None. South of SWMUs B-28 and B-19, west of B-4.	RFI Report October 2002 RIR August 2011	NA		**X**			December-11	NFA
AOC-43	Shallow trench without mounds. Metal, UXO. Located 50 ft south of B-7.	RFI/Closure Report October 2002	NA	**X**				February-03	RRS1
AOC-44	Fox holes and trenches south of B-9 along west slope of hill. UXO includes Stokes mortars and 20-lb bombs.	Delisting Report April 2005	NA			**X**		July-05	Delisting
AOC-45	Flat area with spent and undamaged bullets. Located east of B-31, near bend in road.	RIR July 2011	NA		**X**			October-11	NFA
AOC-46	Bermed area with stockpile of lead shot and sand. Located south of Engineering on east side of Thompkins Road.	RFI/Closure Report April 2005	NA	**X**				July-05	RRS1
AOC-47	Area of trenches and mounds (similar to B-15/16). South of B-15/16, in SW area of East Pasture.	RFI/Closure Report June 2002	NA	**X**				September-02	RRS1
AOC-48	Three N-S trending mounds and a construction debris pile. Located north of B-15/16.	Delisting Report August 2004	NA			**X**		November-04	Delisting

APPENDIX B
STATUS OF SWMUs, AOCs, AND RMUs at CSSA

Unit No.	Description	Investigation Report(s)	Recommendations	Requested Action				Closure Approved	Closure Type
				RRS1	NFA	Delisting	TRRP		
AOC-49	Trench (4 x 7 ft) without surficial debris. Located SW of deer stand 41 in central East Pasture.	Delisting Report April 2005	NA			**X**		July-05	Delisting
AOC-50	Area with orange discolored material (most likely nickel penetrate) at ground surface. South of B-30 along gravel road.	RFI/Closure Report January 2005	NA	**X**				April-05	RRS1
AOC-51	East pasture, east of active range, approximately 25 acres, area around B-9	RIR July 2012	Closure		**X**			October-12	NFA
AOC-52	Area west of B-4 towards Salado Creek near trees, two trenches	RIR August 2011	NA		**X**			December-11	NFA
AOC-53	Building foundation near B-27 at Central Road and road to "D" Tank, batteries at rear of slab	RFI/Closure Report April 2005	NA	**X**				July-05	RRS1
AOC-54	Area near gutting pit, east of Welding Shop Building, right side of road batteries were stored in the area	Closure Report July 2004	NA	**X**				November-04	RRS1
AOC-55	Landfill, south of Tenberg Drive, east of Salado Creek	RFI/Closure Report Feb 04	NA	**X**				June-08	RRS1
AOC-56	Landfill, at intersection of Bernard Road and East Outer Road, surface depression on south side of intersection	Closure Report June 04	NA	**X**				September-04	RRS1
AOC-57	East of Building 98 and KOA Area, cleaning/maintenance activities performed at temporary structures	RIR May 2011	NA		**X**			September-11	NFA
AOC-58	Suspected disposal trench within Inner Cantonment	RFI Report October 2002 RIR August 2011	NA		**X**			December-11	NFA
AOC-59	Trench-type anomaly located west Test Pad in the East Pasture	RIR July 2011	NA		**X**			October-11	NFA
AOC-60	Trench located west of tunnel and entrance roadway in the East Pasture.	Delisting Report April 2005	NA			**X**		July-05	Delisting
AOC-61	Suspected landfill	RFI/Closure Report October 2002	NA	**X**				February-03	RRS1
AOC-62	Located west of monitoring well MW-2 and east of Salado Creek.	RIR August 2011	NA		**X**			December-11	NFA
AOC-63	Area consisting of 3 barrels containing rocks, south of deer stand 41 in the East Pasture.	APAR October 2008	NA				**X**	July-09	TRRP

APPENDIX B
STATUS OF SWMUs, AOCs, AND RMUs at CSSA

Unit No.	*Description*	*Investigation Report(s)*	*Recommendations*	Requested Action				*Closure Approved*	*Closure Type*
				RRS1	*NFA*	*Delisting*	*TRRP*		
AOC-65	A concrete pit area that housed a metal vat that contained TCE and PCE.	RFI Report August 2003	Additional investigation, ISCO remediation ongoing						
AOC-66	Area north of Well 16 in the outer cantonment.	Closure Report June 04	NA	**X**				February-05	NFA
AOC-67	Concrete pad near Building 90 housed a vat containing cleaning solvents.	RIR July 2010	NA		**X**			September-10	NFA
AOC-68	Area includes metal slag/debris storage area from Wheelabrator operations next to Building 90-2.	RIR July 2010	NA		**X**			September-10	NFA
AOC-69	Located on west side of CSSA.	RIR June 2009	NA		**X**			October-09	NFA
AOC-70	Building used to mix pesticides. Near Building 1.	RIR June 2011	NA		**X**			September-11	NFA
AOC-72	Area containing concrete, possible asbestos. Located east of Building 94, in SW CSSA.	RIR March 2012	Closure		**X**			May-12	NFA
AOC-73	Ranch landfill with overgrown trenches. Near Well I1, in northwest corner of CSSA.	RIR September 2008	NA		**X**			January-09	NFA
AOC-74	Area with scattered building debris near Building 605 in the inner cantonment.	RIR February 2012	Closure		**X**			May-12	NFA
AOC-75	Area with high levels of mercury and barium.	RIR July 2013	Closure		**X**			November-13	NFA
AOC-76	Parking area and roadway located to the west of the swimming pool in the residential area of CSSA with lead-contaminated subsurface soils	*Investigation in progress*	*Delineate contamination, excavation and disposal of soil*						
RMU-1	Active firing range in the East Pasture	--	Investigation once range is inactive.						
RMU-2	Rifle range located in the inner cantonment.	RIR November 2011	NA		**X**			February-12	NFA
RMU-3	Firing range berm.	RIR May 2013	Closure		**X**			May-13	NFA
RMU-4	Former rifle range in East Pasture.	RIR October 2013	Closure		**X**			February-14	NFA
RMU-5	Former rocket range in North Pasture.	RIR June 2012	Closure		**X**			September-12	NFA

APPENDIX C
KEY CONTACTS

CAMP STANLEY STORAGE ACTIVITY

Mr. Jason D. Shirley, Installation Manager
Camp Stanley Storage Activity
25800 Ralph Fair Road
Boerne, Texas 78015
(210) 295-7416

SGM Dean Welch
ARNORTH Public Affair Office
1212 Stanley Rd. (Bldg. 124)
Fort Sam Houston, Texas 78234
(210) 221-0765

CSSA Environmental Project Manager
Camp Stanley Storage Activity
25800 Ralph Fair Road
Boerne, Texas 78015
(210) 295-7320

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Mr. Timothy Brown, Project Manager, MC 127
VCP-CA Section, Remediation Division
TCEQ
P.O. Box 13087
Austin, TX 78711-3087
Timothy.Brown@tceq.texas.gov
(512) 239-6526

Mr. Jorge Salazar
San Antonio Region 13
14250 Judson Rd.
San Antonio, TX 78233-4480
(210) 490-3096

U. S. ENVIRONMENTAL PROTECTION AGENCY, REGION 6

Mr. Greg Lyssy
USEPA
New Mexico Liaison
1445 Ross Avenue (MC 6PD-F)
Dallas, TX 75202
(214) 665-8317

APPENDIX D
LIST OF ELECTED OFFICIALS AND MEDIA

ELECTED OFFICIALS

Texas Governor	**Mayors**
Governor Greg Abbott Office of Governor P.O. Box 12428 Austin, TX 78711 (512) 463-2000	Mike Shultz Mayor, City of Boerne 402 E. Blanco Boerne, TX 78006 (830) 249-9511 Garry Manitzas Mayor, City of Fair Oaks Ranch 7286 Dietz-Elkhorn Road Fair Oaks, TX 78015 (210) 698-0900
Texas U.S. Senators	**Texas State Senator**
Senator John Cornyn 517 Hart Senate Office Bldg. Washington, DC 20510 202-224-2934 Senator Ted Cruz Russell Senate Office Bldg, 404 Washington, DC 20510 (202) 224-5922	Senator Donna Campbell, Senate District 25 Capitol Address: P.O. Box 12068, Capitol Station, Austin, TX 78711 District Address: 13750 San Pedro, Suite 250, Commercial Bank Plaza Bldg San Antonio TX 78232 Phone: (210) 979-0013
Texas U.S. Representative	**Texas State Representative**
Congressman Will Hurd, Congressional District 23 317 Cannon House Office Building Washington, DC 20515 Phone: (202) 225-4511	Representative Lyle Larson House District 122 Capitol Office: EXT E2.604 Capitol Phone: (512) 463-0646 Capitol Address: P.O. Box 2910 Austin, TX 78768 District Address: 14607 San Pedro, Ste. 180 San Antonio TX 78232
County Judge	**Bexar County Commissioners**
Hon. Nelson W. Wolff Bexar County Judge Bexar County Courthouse 100 Dolorosa, Suite 1.20 San Antonio, Texas 78205 Phone: (210) 335-2626	Bexar County Courthouse 100 Dolorosa, Suite 1.20 San Antonio, Texas 78205 Sergio “Chico” Rodriguez (Precinct 1) (210) 335-2611 Paul Elizondo (Precinct 2) (210) 335-2612 Kevin Wolff (Precinct 3) (210) 335-2613 Tommy Adkisson (Precinct 4) (210) 335-2614
City of San Antonio – District 8	
Manny Pelaez San Antonio City Council District 8 P.O. Box 839966 San Antonio, TX 78283 Phone: (210) 207-7086	

OTHER LOCAL ORGANIZATIONS

The Dominion Homeowners Association	**Fair Oaks Ranch Homeowners Association**
20 Dominion Drive San Antonio, TX 78257 (210) 698-1232 http://dominionhoa.com/	7286 Dietz Elkhorn Fair Oaks Ranch, TX 78015 (210) 698-2225 http://forha.org/
Lost Creek and Village Green Homeowners Association	**Scenic Oaks Property Owners Association**
1600 N.E. Loop 410, Suite #202 San Antonio, Texas 78209 (210) 829-7202	27000 Hazy Hollow Drive San Antonio, TX 78255 (210) 698-3588 (Guard House Phone) http://scenicoaks.org
Hidden Springs Estates Homeowners Association	**Indian Hills Estates Property Owners Association**
25010 Aue Road San Antonio, TX 78257 (210) 344-2222	P.O. Box 743 Spring Branch, TX 78070 IndianHillsPOASpringBranch@gmail.com

MEDIA CONTACTS

Newspapers

Boerne Star
941 N. School St.
Boerne, TX 78006
Phone: 830-249-2441

San Antonio Express-News
400 3rd Street
San Antonio, TX 78287
Phone: 210-250-3000
Fax: 210-250-3105

Television

KABB 29
4335 NW Loop 410
San Antonio, TX 78229
Phone: 210-366-1129
Fax: 210-442-6333

KENS 5 CBS
5400 Fredericksburg Rd.
San Antonio, TX 78229
Phone: 210-366-5000
Fax: 210-366-2716

KHCE 23 SPN
15533 Capital Port
San Antonio, TX 78249
Phone: 210-479-0123

KLRN 9 PBS
501 Broadway
San Antonio, TX 78215
Phone: 210-270-9000
Fax: 210-270-9078

KSYM 1300
San Antonio, TX 78212

WOAI 4 NBC
P.O. Box 2641
San Antonio, TX 78299
Phone: 210-226-4444
Fax: 210-224-9898

KRRT WB 35
4335 NW Loop 410
San Antonio, TX 78229
Phone: 210-366-1129

KSAT 12 ABC
1408 N. Saint Mary's St.
San Antonio, TX 78215
Phone: 210-351-1200
Fax: 210-351-1310

KVDA 60 SPN
6234 San Pedro Avenue
San Antonio, TX 78216
Phone: 210-340-8860
Fax: 210-341-3962

KWEX 41 UNI
411 E. Durango Blvd.
San Antonio, TX 78204
Phone: 210-227-4141
Fax: 210-226-0131

Radio

KCHL (Gospel)
P.O. Box 200880
San Antonio, TX 78220
Phone: 210-333-0050
Fax: 210-333-0081

KCOR/KROM (Spanish/Romantic)
1635 NE Loop 410, Ste 500
San Antonio, TX 78209
Phone: 210-826-3876
Fax: 210-826-2992

KEDA (Spanish)
510 S. Flores Street
San Antonio, TX 78204
Phone: 210-226-5254
Fax: 210-227-7937

KENS (News)
1635 NE Loop 410, Ste 500.

KISS (Rock)
8930 Four Winds Drive, Suite 500
San Antonio, TX 78239
Phone: 210-646-0105
Fax: 210-871-6116

KKYX/KCYY/KCJZ (Classic Country/Country/Jazz)
8122 Datapoint Drive, Suite 500
San Antonio, TX 78229
Phone: 210-615-5400
Fax: 210-615-5300

KONO (Oldies)
7800 NW IH-10, Suite 330
San Antonio, TX 78230
Phone: 210-340-1234
Fax: 210-344-7611

KJ 97

San Antonio, TX 78209
Phone: 210-826-3876
Fax: 210-826-2992

KCHG
1802 NE Loop 410 #530
San Antonio, TX

KSAH
7800 IH-10 West, Ste 300
San Antonio, TX 78230
Phone: 210-340-1234

KSLR (Religious)
9601 McAllister Freeway, Suite 1200
San Antonio, TX 78216
Phone: 210-344-8481
Fax: 210-340-1213

KSJL (Contemporary)
6222 NW IH-10
San Antonio, TX 78201
Phone: 210-736-9700

KXTN (Tejano)
1777 NE Loop 410, Suite 400
San Antonio, TX 78217
Phone: 210-829-1075
Fax: 210-804-7825

KZDC
2700 NE Loop 410, Ste 300
San Antonio, TX 78217
Phone: 210-226-6444

KZEP-AM/FM (Hard Rock/Classic Rock)
427 E. 9th Street
San Antonio, TX 78215
Phone: 210-226-6444
Fax: 210-225-5736

WOAI (News Talk)
6222 NW IH-10
San Antonio, TX 78201
Phone: 210-736-9700
Fax: 210-735-8811

6222 NW IH-10
San Antonio, TX 78201
Phone: 210-736-9700
Fax: 210-736-9777

KRIO
7800 W IH10
San Antonio, TX
Phone: 210-340-1234

KLUP
9601 McAllister Freeway, Ste 1200
San Antonio, TX 78216
Phone: 210-344-8481

KSYM (Alternative)
1300 San Pedro Avenue
San Antonio, TX 78212
Phone: 210-733-2787
Fax: 210-733-2778

KTSA/KTFM (News Talk/Contemporary)
4050 Eisenhower Road
San Antonio, TX 78218
Phone: 210-599-5500
Fax: 210-599-5539

Z-91
1566 NE Loop 410
San Antonio, TX
Phone: 210-824-9100

KPAC (Classical)/KSTX (News/Talk)
8401 Datapoint Drive, Suite 800
San Antonio, TX 78229
Phone: 210-614-8977
Fax: 210-614-8983

APPENDIX E
WELL LOCATION MAP

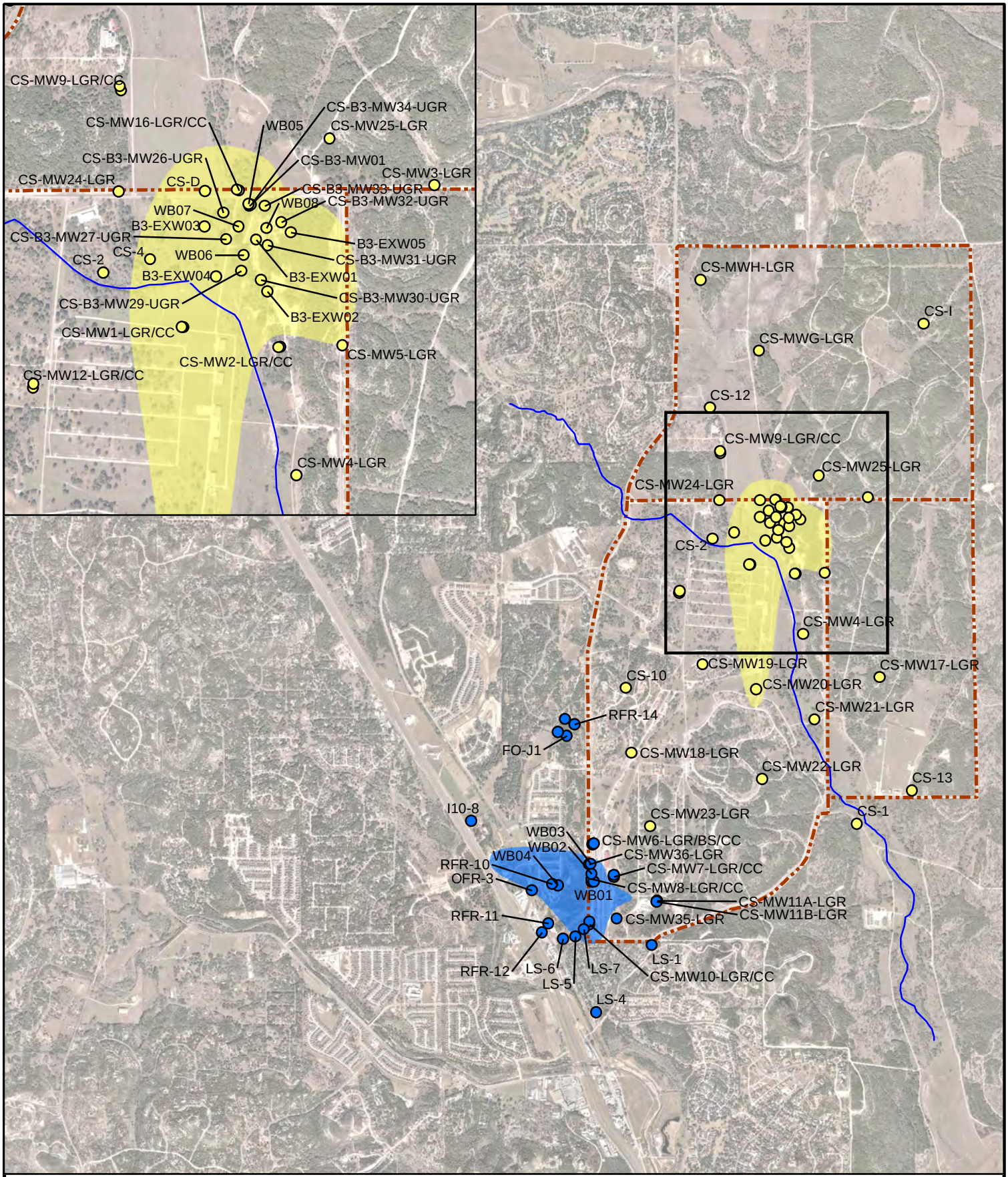


Figure E-1

Groundwater Wells and Associated Plumes

Camp Stanley Storage Activity

PARSONS