

RELEASE INVESTIGATION REPORT

SOLID WASTE MANAGEMENT UNIT I-1

CAMP STANLEY STORAGE ACTIVITY

Contract No. DACA87-02-D-0005

Task Order No. DY01



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Camp Stanley Storage Activity
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ACRONYMS AND ABBREVIATIONS

AOC	Area of concern
APPL	Agriculture & Priority Pollutants Laboratory, Inc.
bgs	below ground surface
BS	Bexar Shale
CC	Cow Creek
CCV	Continuing calibration verification
CESWF	Corps of Engineers Fort Worth District
CFR	Code of Federal Regulations
COC	Chemical of concern
CSSA	Camp Stanley Storage Activity
EE	Environmental Encyclopedia
ft ²	square feet
^{GW} Soil _{Ing}	Groundwater soil ingestion (PCL)
LCS	Laboratory control spike
LGR	Lower Glen Rose
MQL	Method quantitation limit
NFA	No further action
PCB	Polychlorinated biphenyls
PCL	Protective concentration level
%R	Percent recovery
ppm	parts per million
QAPP	Quality Assurance Project Plan
QC	Quality control
RCRA	Resource Conservation and Recovery Act
RFI	RCRA facility investigation
RIR	Release Investigation Report
RL	Reporting limit
RMU	Range management unit
SDG	Sample delivery group
SWMU	Solid waste management unit
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TO	Task Order
^{Tot} Soil _{Comb}	Combined soil (PCL)
TRRP	Texas Risk Reduction Program
UGR	Upper Glen Rose
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency

VOC	Volatile organic compound
WWTF	Wastewater treatment facility

1.0 INTRODUCTION

Parsons is under contract with the U.S. Army Corps of Engineers (USACE), Fort Worth District (CESWF), Contract DACA87-02-D-0005, Task Order (TO) DY01, to provide investigations and environmental services for waste sites at Camp Stanley Storage Activity (CSSA) U.S. Army in Boerne, Texas (Parsons, 2007). The requirements for the TO DY01 scope of work include characterization of selected waste sites and preparation of appropriate documentation, including a Release Investigation Report (RIR) for Solid Waste Management Unit (SWMU) I-1. This work has been performed in accordance with requirements of the Resource Conservation and Recovery Act (RCRA) 3008(h) Order in effect for CSSA and in accordance with 30 Texas Administrative Code (TAC) §350, the Texas Risk Reduction Program (TRRP) of the Texas Commission on Environmental Quality (TCEQ). This RIR has been prepared following TCEQ reporting and documentation requirements for releases that do not trigger applicability to the TRRP rule.

This SWMU I-1 RIR is subsequent to the RCRA Facility Investigation (RFI) that was documented in the SWMU I-1 RFI Report (Parsons, 2003). The following work plans were prepared to govern the field work during the RFI.

- Work Plan Overview (Volume 1-1, RL17 and RL53 Addendum);
- Site-Specific Work Plan (Volume 1-2, SWMU I-1);
- Field Sampling Plan (Volume 1-4, RL17 and RL53 Addendum); and
- Health and Safety Plan (Volume 1-5, RL17 and RL53 Addendum).

For the SWMU I-1 RIR, the above plans were followed, as well as the plans listed below.

- Final Work Plan under USACE Contract DACA87-02-D-0005, TO DY01 (Parsons, 2007);
- CSSA Quality Assurance Program Plan (Parsons, 2002); and
- RFI and Interim Measures Waste Management Plan (Parsons, 2006).

For this report, Section 1 provides the introduction and the references used in support of this RIR. Section 2 provides the facility and site-specific historical background information. Section 3 describes the objectives and rationale for preparing an RIR for SWMU I-1 and the findings from previous investigations for the site. Section 4 summarizes the findings from completing the Tier 1 Ecological Exclusion Criteria Checklist, which is included as an appendix to this RIR. Section 5 summarizes the findings and recommendations for the site. All figures and tables are provided at the end of this RIR (pages 10 through 19). References cited in this report can be found in the CSSA Environmental Encyclopedia (EE) (Volume 1-1, Bibliography) at www.stanley.army.mil.

2.0 HISTORICAL BACKGROUND

2.1 CAMP STANLEY STORAGE ACTIVITY

Camp Stanley Storage Activity is located in northwestern Bexar County, about 19 miles northwest of downtown San Antonio. The installation consists of approximately 4,004 acres immediately east of Ralph Fair Road, and approximately 0.5 mile east of Interstate Highway 10 (Figure 1). Camp Bullis borders CSSA on the north, east, and south. The land was used for ranching and agriculture until the 1900s. During 1906 and 1907, six tracts of land were purchased by the U.S. Government and designated the Leon Springs Military Reservation. The land included campgrounds and cavalry shelters.

In October 1917, the installation was re-designated Camp Stanley. Extensive construction was started during World War I to provide housing for temporary cantonments and support facilities. In 1931, the installation was selected as an ammunition depot, and construction of standard magazines and igloo magazines began in 1938. Land was also used to test, fire and overhaul ammunition components. As a result of these historic activities, CSSA has several historical waste sites, including SWMUs, areas of concern (AOC), and range management units (RMU).

The present mission of CSSA is the receipt, storage, issue, and maintenance of ordnance as well as quality assurance testing and maintenance of military weapons and ammunition. Because of its mission, CSSA has been designated a restricted access facility. No changes to the CSSA mission and/or military activities are expected in the future.

2.2 SWMU I-1

SWMU I-1 is located in the southwestern portion of the Inner Cantonment Area of CSSA, approximately 1,000 feet from the western boundary and 650 feet from the southern boundary of the installation (Figure 2). The site covers approximately 0.223 acre, including Building 294 and the area immediately surrounding the building. As shown on Figure 2, there is a gravel road immediately west of the site and a paved road north of the site. The CSSA wastewater treatment facility (WWTF) is located approximately 200 feet south of SWMU I-1. "W-Tank" is the nearest perennial surface water body, approximately 500 feet north (upgradient) of the site. SWMU B-29, SWMU B-30, and AOC-50 are all located within 300 feet of the eastern edge of the site. These three sites have been closed with TCEQ approval.

SWMU I-1 consists of an inactive incinerator in Building 294 and the area immediately surrounding Building 294. The building has two floor levels and is approximately 250 square feet (ft²) in area, accounting for interior square footage of both levels. The building is constructed of red brick and rests on a concrete riser that elevates the building above the ground surface. The incinerator was operational from 1943 to the late 1960s and was reportedly used for burning classified documents. Later the building was used as a storage facility for electrical transformers. Although transformers were stored in the building, analytical data show the transformers to be non-polychlorinated biphenyl (PCB) transformers. This determination is

based on the U.S. Environmental Protection Agency (USEPA) definition of “non-PCB transformer” as cited in 40 Code of Federal Regulations (CFR) §761.3 (see Section 3.2.4.4). This site was identified as a potential SWMU because the site was known for being used to burn classified waste paper and for storage of electrical transformers. Additional information about these known uses of the site can be found in the CSSA EE (Volume 1-2, SWMU I-1). SWMU I-1 is not listed on CSSA’s Notice of Registration. At present, there are no plans to demolish or remove Building 294.

3.0 OBJECTIVES OF RIR FOR SWMU I-1

In accordance with TCEQ (2003) guidance, *Determining Which Releases are Subject to TRRP* (www.tceq.state.tx.us/assets/public/remediation/trrp/releasesTRRPprev.pdf), an RIR can be performed for a site when results of an investigation lead to the following conclusions:

- Concentrations of chemicals detected at the site do not exceed Tier 1 residential soil action levels;
- There is no evidence of other affected or threatened environmental media (groundwater, surface water, or sediment) at the site; and
- The site passes the Tier 1 Ecological Exclusion Criteria Checklist.

When these three criteria are met for a site, the release is not subject to TRRP. For such sites, an RIR can be submitted to document the results and a no further action (NFA) decision can be requested from the TCEQ.

It is noted that the Tier 1 residential soil action levels are selected following TCEQ (2007) guidance. Thus, the soil action level assumes a 0.5-acre source area and is the lower of the protective concentration levels (PCL) for either (a) the total soil combined ($T^{Tot}Soil_{Comb}$) pathways (*i.e.*, exposure to a chemical of concern [COC] from ingestion, dermal contact, and inhalation of volatiles and particulates) or (b) the PCL for the groundwater soil ingestion ($^{GW}Soil_{Ing}$) pathway (*i.e.*, soil-to-groundwater leaching of a COC to groundwater, where the PCL is the highest concentration of COC allowed in soil to be protective of Class 1 or Class 2 groundwater). Based on the TCEQ guidance, if the background level or the method quantitation limit (MQL) is a higher concentration than the PCL, then the higher of the background or MQL is used as the action level. TCEQ-approved background concentrations have been developed for CSSA for arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, and zinc (Parsons, 2002). The statistically calculated and TCEQ-approved background metal concentrations are shown, if applicable, in the summary tables in this RIR and are also available in the CSSA EE (Volume 2, Background Metals Levels).

3.1 FIELD ACTIVITIES AND INVESTIGATIONS

Various investigations have been conducted during the past 10 years at SWMU I-1 to assess whether historical activities at Building 294 affected the site. The site has been investigated by geophysical survey, soil gas survey, subsurface (soil/rock) sampling, and surface soil sampling. Wipe samples have also been collected from interior surfaces of Building 294. Transformer oil

from the transformers stored in Building 294 has also been sampled, and the transformers were removed in 2006. Additionally, concrete floor sampling has been conducted at the site.

The rationale for the type of analyses on the various samples is described below.

- Since SWMU I-1 was used for burning classified waste paper and storing electrical transformers, the COCs investigated during prior investigations included volatile organic compounds (VOC), metals, dioxins and furans, and PCBs.
- VOC analyses were included to test for the presence of contaminants commonly associated with disposal sites.
- Metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, and zinc) were included due to the metallic nature of waste commonly generated at CSSA.
- PCB analyses were included because the electrical transformers stored in the building may have contained oils with PCBs.
- Dioxins and furans were included because these contaminants can be associated with incineration activities.

Table 1 provides a summary of each of the investigations described above, including the media sampled, the types of analyses performed, and the results of the investigations.

No subsurface anomalies were detected during the geophysical survey, no VOCs were detected during the soil gas survey, the transformers were found to be non-PCB transformers, and analytical results for the soil samples mentioned above did not exceed Tier 1 residential soil action levels.

Before preparing this RIR and requesting NFA, the TCEQ, USEPA and CSSA agreed during a March 2007 meeting that CSSA would collect a composite concrete sample from the concrete floors (upper and lower) in Building 294, and submit the sample for PCB analysis. It was agreed the sample result would be compared to an appropriate USEPA standard to verify no residual contamination remains. If the sample had no PCB detection, an RIR would be submitted to document the results and a NFA decision for SWMU I-1 would be requested from TCEQ.

In accordance with TCEQ guidance, an RIR is submitted when results of an investigation lead to a conclusion that concentrations of COCs do not exceed Tier 1 residential soil action levels and there is no evidence of other affected media (groundwater, surface water, or sediment). Additionally, the site must pass the Tier 1 Ecological Exclusion Criteria Checklist. The ecological checklist for SWMU I-1 is included in Appendix E of this RIR.

3.2 FINDINGS FROM PREVIOUS INVESTIGATIONS

3.2.1 Site Geology

The Lower Glen Rose (LGR) is the uppermost geologic stratum in the area of SWMU I-1. The LGR is a massive, fossiliferous, vuggy limestone that grades upward into thin beds of limestone, marl, and shale. The LGR is approximately 300-330 feet thick in the CSSA area and is underlain by the Bexar Shale (BS) facies of the Hensell Sand, which is estimated to be from 60 to 150 feet thick under the CSSA area. The BS consists of silty dolomite, marl, calcareous shale, and shaley limestone. The geologic strata dip approximately 1 to 2 degrees to the south-southeast at CSSA.

Based on current published information, there are two major fault (shatter) zones at CSSA: the North Fault Zone and the South Fault Zone. SWMU I-1 is located approximately 400 feet north of the South Fault Zone. Additional information on structural geology at CSSA can be found in the CSSA EE (Volume 1-1, Background Information Report).

Boring logs for SWMU I-1 (I1-SB01, I1-SB02, and I1-SB03 [shown on Figure 3]) are provided in Appendix A. In general, these three boring logs show that the limestone bedrock occurs between approximately 3 to 13 feet below ground surface (bgs) depending on topography. Above the bedrock are clays and silts that are the result of weathering of the limestone parent material. Groundwater was not encountered in any of the borings.

3.2.2 Site Hydrology

The uppermost hydrogeologic layer at CSSA is the unconfined Upper Trinity aquifer, which consists of the Upper Glen Rose (UGR) Limestone. Locally at CSSA, very low-yielding perched zones of groundwater can exist in the UGR; however, it is very sporadic and seasonal. Transmissivity values are not available for the UGR. Regionally, groundwater flow is thought to be enhanced along the bedding contacts between marl and limestone; however, the hydraulic conductivity between beds is thought to be poor. This interpretation is based on the observation of discordant static water levels in adjacent wells, completed in different beds. Principal development of solution channels is limited to evaporite layers in the UGR Limestone.

The Middle Trinity aquifer is unconfined and functions as the primary source of groundwater at CSSA. It consists of the LGR Limestone, the BS, and the Cow Creek (CC) Limestone. The LGR Limestone outcrops north of CSSA, along Cibolo Creek, and within the central and southwestern portions of CSSA. As such, principal recharge into the Middle Trinity aquifer is via precipitation infiltration at outcrops and along creek beds during flood events. At CSSA, the BS is interpreted as a confining layer, except where it is fractured and faulted, allowing vertical flow from the up-dip CC Limestone into the overlying, down-dip LGR. Fractures and faults within the BS may allow hydraulic communication between the LGR and CC Limestones. Regional groundwater flow within the Middle Trinity aquifer is toward the south and southeast and the average transmissivity coefficient is 1,700 gallons per day per foot (Ashworth, 1983). In general, groundwater at CSSA flows in a northeast to southwest direction.

However, local flow gradient may vary depending on rainfall, recharge, and possibly well pumping.

No site-specific information regarding groundwater is available. The nearest wells, CS-MW10-LGR and CS-MW10-CC, are approximately 1,000 feet west of the site. These wells monitor both the LGR and CC portions of the Middle Trinity aquifer. Water levels have been monitored on a weekly basis at these wells since July 2002. Based on these monitoring data, water levels in the vicinity of SWMU I-1 vary from approximately 100 to 300 feet bgs, depending on whether it is a wet or dry season.

As shown on Figure 2, the nearest perennial surface water body is the “W-Tank,” a pond located approximately 500 feet north (upgradient) of the site. The pond is approximately 0.52 acre in size. There is a dam along the southern boundary of the pond. A small intermittent stream is below the dam. The stream only has water during and immediately after rain events. The creek bed runs to the south, less than 100 feet to the east of SWMU I-1. The creek bed is narrow, only approximately 5 feet wide.

Additional information on surface water in the area is described in the Tier 1 Ecological Exclusion Criteria Checklist (Appendix E).

3.2.3 Geophysical and Soil Gas Surveys

A geophysical survey of the area surrounding Building 294 was completed in March 1996. No subsurface anomalies potentially related to buried waste were detected. None of the 13 soil gas samples collected from 11 sampling locations (two duplicate samples were included) during August 1996 had detectable concentrations of VOCs. The soil gas sampling locations are shown on Figure 3. Results of the geophysical and soil gas surveys are provided in the SWMU I-1 RFI, which can be found in the CSSA EE (Volume 1-2, SWMU I-1).

3.2.4 Sampling

3.2.4.1 Subsurface (Soil/Rock) Samples

In March 2000, three soil borings (I1-SB01, I1-SB02, and I1-SB03) were advanced and soil/rock samples were obtained at three discrete intervals from each boring. Boring I1-SB01 was advanced to 15 feet bgs, I1-SB02 was advanced to 6 feet bgs, and I1-SB03 was advanced to 14 feet bgs. The borings were drilled adjacent to Building 294 at locations where contamination would be expected if a release had occurred at the site. The boring locations are shown on Figure 3. Boring I1-SB01 was placed approximately 4 feet north of Building 294, while I1-SB02 was placed approximately 8 feet from the southwest corner of the building. Boring I1-SB03 was placed approximately 5 feet south of the incinerator building.

The soil boring samples were analyzed for VOCs, arsenic, cadmium, lead, mercury, barium, chromium, copper, nickel, and zinc. At the time of sampling, no discernable evidence of

contamination was noted. As shown in Table 3, none of the sample results exceeded the Tier 1 residential soil action levels.

3.2.4.2 Surface Soil Samples

In April 2000, three surface soil samples were collected at SWMU I-1 and were analyzed for PCBs. The samples were collected adjacent to Building 294 at locations where contamination would be expected if a release had occurred at the site. No PCBs were detected in the samples. Sample locations (I1-SS01, I1-SS02, and I1-SS03) are shown on Figure 3. Analytical results are shown in Table 4.

3.2.4.3 Surface Wipe Sample

In March 2001, one surface wipe sample was collected in the interior of Building 294 and analyzed for dioxins and furans. The wipe sample was collected from within the incinerator stack and at the opening of the incinerator unit. The wipe sample analytical results are shown in Table 5. The results indicate very slight presence (<0.05 nanograms per square centimeter) of total hepta chloro dibenzodioxin and total hepta, hexa, peca, and tetra chloro dibenzofurans.

It is suspected that the dioxin and furan results are due to the burning of classified documents at the site between 1943 and the late 1960s. According to the most recent USEPA data, backyard burning of household trash is the most common source of dioxin and furan emissions (*An Inventory of Sources and Environmental Releases of Dioxin-Like Compounds in the United States for the Years 1987, 1995, and 2000*, EPA/600/P-03/002f, Final Report, November 2006). In the journal *Environmental Science & Technology* (February 1, 2000), open burning of household trash in barrels was identified as one of the largest sources of airborne dioxin and furan emissions. Emission tests from burning of “typical” household trash in 55-gallon drums were conducted at the USEPA’s Open Burning Test Facility in North Carolina. The composition of the trash included paper products (*e.g.*, newspapers, books, magazines, junk mail, *etc.*), food waste, and assorted plastic, cans, bottles, and jars. No paint, grease, oils, tires or other types of “household hazardous wastes” were included in the study.

Based on this information, the burning of classified paper documents at SWMU I-1 may be the likely source of the low concentrations of dioxins and furans detected in the wipe sample. Additionally, the low concentrations at which dioxins and furans were reported for the wipe sample do not warrant further investigation of their presence within the surrounding media. It is noted that because the building and the incinerator had never been cleaned or wiped down in the past, the results should be representative of worst-case conditions for the site. Therefore, the very low levels within the incinerator do not suggest that the surrounding soil would be affected.

3.2.4.4 Transformer Oil Sample

On July 12, 2006, the oil contained within 13 transformers that were being stored in Building 294 was sampled. An oil sample was collected from each transformer and submitted for PCB analysis. The transformer analytical data are presented in Appendix B. The data show

the transformers to be non-PCB transformers (per USEPA 40 CFR §761.3 definition). The analytical results indicated no PCB detections in 12 of the samples, while one of the samples had a very low PCB level of 6.1 parts per million (ppm), indicative of a “non-PCB transformer.” USEPA 40 CFR §761.3 defines non-PCB transformer as “any transformer that contains less than 50 ppm PCB.” The transformers were removed from SWMU I-1 in 2006.

3.2.4.5 Composite Concrete Floor Sample

During a March 9, 2007 meeting discussing closure of SWMU I-1, USEPA, TCEQ and CSSA agreed that CSSA would collect a composite concrete sample from the concrete floor in Building 294 and perform analysis for PCBs at a certified laboratory. As suggested during the meeting, the USEPA Region I *Draft Standard Operating Procedure for Sampling Concrete in the Field* was used to guide the sampling. On October 12, 2007, a Parsons sampling team used a hammer drill to complete five 1-inch diameter holes to a depth of 3 inches in the concrete floors of Building 294 (shown on Figure 3). The powdered/chipped concrete generated during the drilling of the five borings was composited into a single sample container, labeled, and sent to Agriculture & Priority Pollutants Laboratory, Inc. (APPL) for PCB analysis. Analysis was by USEPA *Test Methods for Evaluating Solid Waste* (SW-846) Method 8082. Pictures of Building 294, as well as two of the five boring locations, are shown in Appendix C.

The data verification summary report for the concrete analytical results is provided in Appendix D. The results are provided in Table 6. As shown in Table 6, PCBs were not detected in the composite concrete floor sample.

4.0 TIER 1 ECOLOGICAL EXCLUSION CRITERIA CHECKLIST

In accordance with TCEQ (2003) guidance, an RIR is submitted when the results of an investigation lead to a conclusion that COCs do not exceed Tier 1 residential soil action levels and there is no evidence of other affected media. The site must also pass the Tier 1 Ecological Exclusion Criteria Checklist. The checklist must be completed as part of the RIR for a site. The completed checklist is provided in Appendix E. Results show that the site passes the checklist and that there are no ecological exposure pathways of concern for SWMU I-1. Thus, based on the absence of any complete or significant ecological exposure pathways, the site may be excluded from further ecological assessment.

5.0 SUMMARY AND RECOMMENDATIONS

SWMU I-1 consists of an inactive incinerator located in Building 294 and the immediate area surrounding Building 294. This site was identified as a potential SWMU because the site was known for being used to burn classified waste paper and for storage of electrical transformers.

Previous surveys and sampling at SWMU I-1 have indicated the following results.

- A geophysical survey of the area surrounding Building 294 was completed in March 1996. No anomalies potentially related to buried waste were detected.

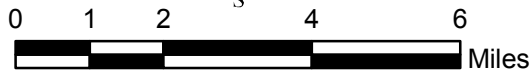
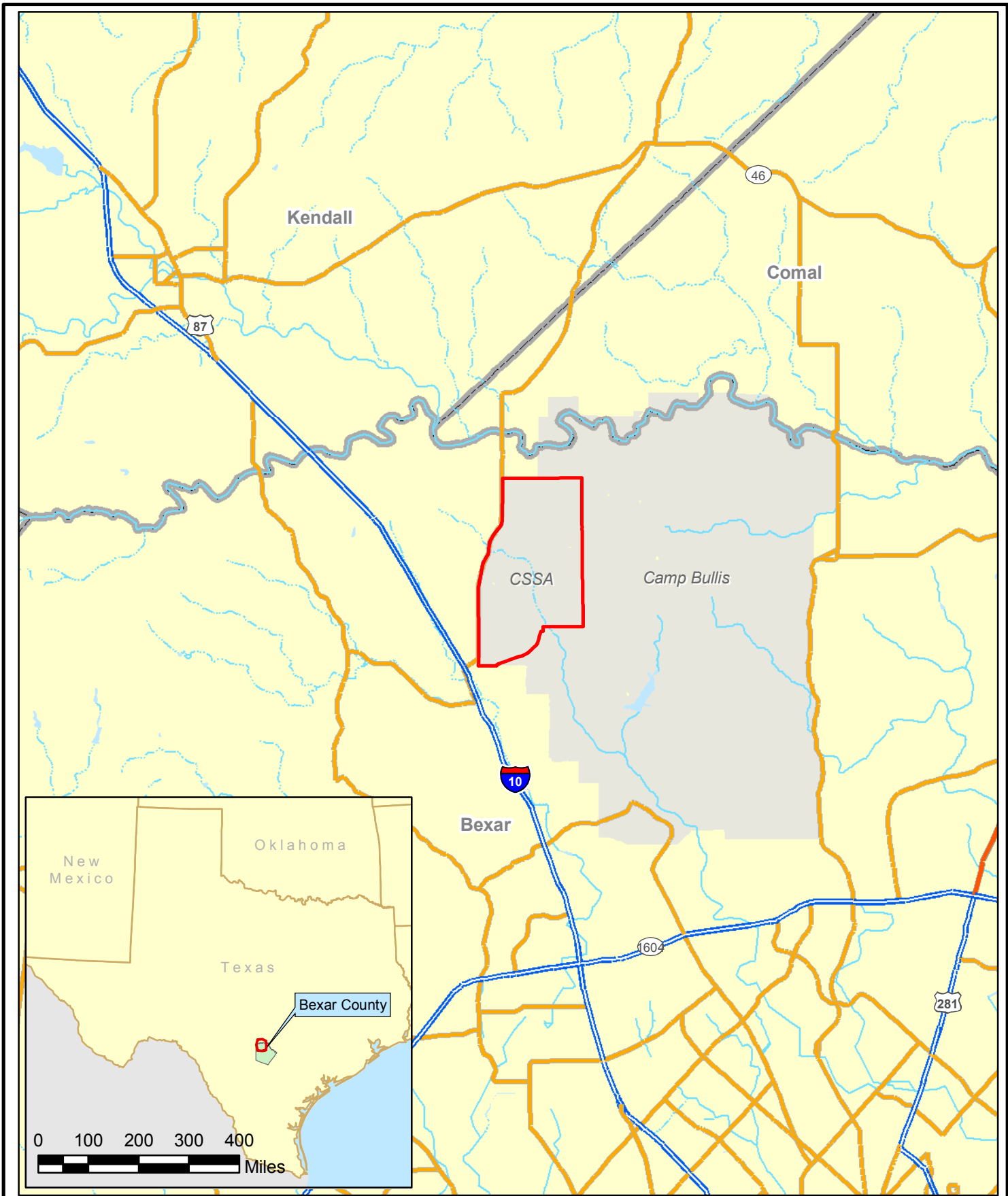
- None of the 13 soil gas samples collected at the site during August 1996 had detectable concentrations of VOCs.
- In March 2000, nine samples collected from three borings installed around Building 294 were analyzed for VOCs and metals (arsenic, cadmium, lead, mercury, barium, chromium, copper, nickel, and zinc). None of the samples exceeded the Tier 1 residential soil action levels.
- In April 2000, three surface soil samples were collected at SWMU I-1 and were analyzed for PCBs. No PCBs were detected in the samples.
- In March 2001, one wipe sample was collected from within the incinerator stack and at the opening of the incinerator unit and analyzed for dioxins and furans. The levels within the incinerator were extremely low and do not suggest that the surrounding soil would be affected.
- In July 2006, a transformer oil sample was collected from the 13 transformers stored at Building 294. The analytical results showed the transformers to be non-PCB transformers. These transformers were removed from SWMU I-1 in 2006.
- One composite concrete floor sample was collected in October 2007 and analyzed for PCBs. PCBs were not detected in the sample.

From the information summarized above and presented in this report, the results of the investigations at AOC-73 meet the three criteria as described in TCEQ's (2003) guidance *Determining Which Releases are Subject to TRRP*. Thus, the following criteria were met.

- Concentrations of chemicals detected in subsurface (soil/rock) samples and surface soil samples do not exceed Tier 1 residential soil action levels.
- There is no evidence of other affected or threatened environmental media (groundwater, surface water, or sediment) at SWMU I-1. Since no contamination was found in the site investigations (geophysical survey, soil gas survey, subsurface sampling, surface soil sampling, transformer oil sampling, and concrete floor sampling) and only slight contamination was found in the wipe sample collected from the surface of the incinerator stack and at the opening of the incinerator unit (likely a result of the former burning of waste paper at the site from the 1940s through the 1960s), there would be no impact to groundwater, surface water, or sediment in the area.
- SWMU I-1 passes the Tier 1 Ecological Exclusion Criteria Checklist.

Because these three criteria are met, SWMU I-1 is not subject to TRRP. Therefore, this RIR has been prepared to document the results and a NFA decision will be requested from the TCEQ.

FIGURES AND TABLES



- CSSA
- Freeway
- Highway
- Major Road
- County Boundary
- Military Installation

Figure 1
CSSA Location
Camp Stanley Storage Activity

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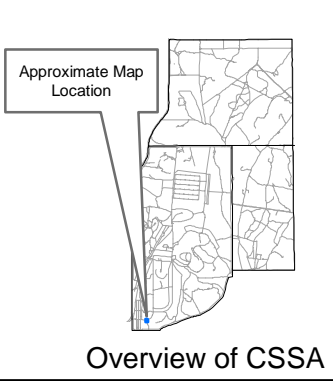
Aerial Photo Date: 2003



0 40 80 120 160 Feet

- SWMU I-1 Boundary
- AOC
- SWMUs
- Intermittent Stream

Figure 2
SWMU I-1
Site Location Map
Camp Stanley Storage Activity
Parsons



Aerial Photo Date: 2003



0 7.5 15 22.5 30 Feet

- Composite concrete floor sample locations for RIR
- Surface soil sample and boring locations
- Soil gas survey locations
- Intermittent stream
- SWMU boundary

Figure 3
SWMU I-1
Sample Location Map
Camp Stanley Storage Activity

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Table 1 Summary of Investigations and Results

Date	Investigation Description [†]	Type of Investigation / Laboratory Analyses	Results
March 1996	Geophysical survey of the area surrounding Building 294	Subsurface anomalies potentially related to buried waste	No subsurface anomalies detected.
August 1996	13 soil gas samples collected in the area surrounding Building 294 ^{††}	VOCs	No VOCs detected. See Table 2.
March 2000	9 subsurface (soil/rock) samples from 3 boring locations adjacent to Building 294 ^{††}	VOCs and metals	No sample results exceeded Tier 1 residential soil action levels. See Table 3.
April 2000	3 surface soil samples from locations adjacent to Building 294 ^{††}	PCBs	No PCBs detected. See Table 4.
March 2001	1 wipe sample collected from within the incinerator stack and at the opening of the incinerator unit ^{†††}	Dioxins and furans	Concentrations within the incinerator stack and at the opening of the incinerator unit were extremely low and do not indicate that the surrounding soil would be affected. See Table 5. Concentrations are likely due to the burning of classified documents at the site between 1943 and the late 1960s. According to 2006 USEPA data (see Section 3.2.4.3), backyard burning of household trash (including newspapers, books, magazines, junk mail, <i>etc</i>) is the most common source of dioxin and furan emissions in the United States.
July 2006	1 transformer oil sample collected from the 13 transformers stored at Building 294 – all transformers have been removed from the building	PCBs	Results showed the transformers to be non-PCB transformers. No PCBs were detected in 12 of the samples. One sample had a very low level of PCB (6.1 ppm). USEPA 40 CFR §761.3 defines “non-PCB transformer” as “any transformer that contains less than 50 ppm PCB.” See Appendix B.
October 2007	1 composite concrete floor sample (from 5 locations in Building 294) [†]	PCBs	No PCBs detected. See Table 6.

[†] All samples were collected in locations where contamination would be expected if a release had occurred at the site.

^{††} Sample locations are shown on Figure 3.

^{†††} Since the building and the incinerator had never been cleaned or wiped down in the past, the results are considered representative of worst-case conditions for the site.

Table 2 Sampling Results for Soil Gas Samples, August 1996

Sample ID	A,2	B,0	A,0	A,1	A,0	C,0	#10
Sample Date	22-Aug-96	22-Aug-96	22-Aug-96	22-Aug-96	22-Aug-96	23-Aug-96	23-Aug-96
Sample Type	N1	N1	N1	N1	Dup	N1	N1
Soil Type	Kr	Kr	Kr	Kr	Kr	Kr	Kr
Depth (ft)	3	3	3	3	3	5	3
	Result/Flag	Result/Flag	Result/Flag	Result/Flag	Result/Flag	Result/Flag	Result/Flag
Benzene	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Toluene	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Ethyl benzene	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Total xylenes	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
cis -1,2-DCE	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,1,1-TCA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
TCE	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
PCE	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U

Sample ID	B,2	#11	B,1	C,2	C,1	C,1
Sample Date	23-Aug-96	23-Aug-96	23-Aug-96	23-Aug-96	23-Aug-96	23-Aug-96
Sample Type	N1	N1	N1	N1	N1	Dup
Soil Type	Kr	Kr	Kr	Kr	Kr	Kr
Depth (ft)	3	3	3	5	3	3
	Result/Flag	Result/Flag	Result/Flag	Result/Flag	Result/Flag	Result/Flag
Benzene	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Toluene	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Ethyl benzene	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Total xylenes	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
cis -1,2-DCE	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,1,1-TCA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
TCE	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
PCE	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U

Notes and Abbreviations:

Concentrations reported in µg/L.

N1 - Environmental sample.

Dup - Duplicate environmental sample.

U - The analyte was analyzed for, but not detected.

Table 3 Sampling Results for Subsurface (Soil/Rock) Samples, March 2000

	Res SurfSoil PCL	Res SurfSoil PCL Source	Lab RL	Lab MDL	Sample ID		Sample Date		Sample Type		Beginning Depth		Ending Depth		Lab ID																	
					Result	Flags	Result	Flags	Result	Flags	Result	Flags	Result	Flags	Result	Flags	Result	Flags	Result	Flags	Result	Flags	Result	Flags	Result	Flags	Result	Flags	Result	Flags		
SW6010B (mg/kg)																																
Barium	443.8323	R05acr_GW_Soil_Ing	1	0.08	86.29	J	6.43	J	1.87	J	11.93	M	14.75	M	2.19	J	106.76	J	110.74	J	5.96	J	6.77	J	1.75	J						
Chromium (total)	2400.191	R05acr_GW_Soil_Ing	20	0.1	28.2		5.4	F	2.7	F	3.4	M	4.4	F	2.5	F	26		25.3		3.6	F	3.8	F	2.6	F						
Copper	547.8886	R05acr_Tot_Soil_Comb	2	0.19	12.96	J	3.31	J	1.44	F	3.6		3.28		1.29	F	14.16		14.56	J	2.43	J	3.94	J	1.72	F						
Nickel and compounds	157.3653	R05acr_GW_Soil_Ing	2	0.12	19.74	J	6.07	J	3.26	J	3.84	M	3.78	M	3.11	J	26.55	J	17.65	J	3.49	J	6.78	J	2.27	J						
Zinc	2360.479	R05acr_GW_Soil_Ing	5	0.63	46.85	J	5.62	J	3.67	F	4.72	M	6.19		2.86	F	25.4		35.85	J	4.54	F	4.37	F	4.7	F						
SW7060A (mg/kg)																																
Arsenic	19.6	Background	0.5	0.04	2.15		2.94		0.04	U	0.86	M	0.04	M	0.04	J	9.33	J	3.27		0.36	F	2.13		0.04	U						
SW7131A (mg/kg)																																
Cadmium	1.509581	R05acr_GW_Soil_Ing	0.1	0.05	0.41		0	U	0.02	F	0.05	U	0.13		0.05	U	0.1		0.22		0.02	F	0.05	U	0.05	U						
SW7421 (mg/kg)																																
Lead	84.5	Background	5	0.13	32.19	J	2.95	J	0.71	J	2.73	M	4.35	M	0.42	F	30.56	J	15.45	J	1.84	J	2.4	J	0.42	F						
SW7471A (mg/kg)																																
Mercury	0.77	Background	0.1	0.01	0.04	F	0.01	U	0.01	U	0.01	U	0.03	F	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U				
SW8260 (mg/kg)																																
Chloroform	1.019425	R05acr_GW_Soil_Ing	0.002	0.0003	0.0003	U	0.0004	F	0.0003	B	0.0003		0.0003	U	0.0003	U	0.0005	F	0.0005	F	0.0004	F	0.0004	F	0.0004	F	0.0004	F	0.0004	F		
Dichlorodifluoromethane	239.4952	R05acr_GW_Soil_Ing	0.005	0.0008	0.1451		0.0029	F	0.0027	F	0.0008	U	0.0008	U	0.0008	U	0.0037	F	0.0024	F	0.0022	F	0.0028	F	0.0011	F						
Methylene chloride	0.0130754	R05acr_GW_Soil_Ing	0.005	0.0007	0.0018	F	0.002	F	0.0025	F	0.0007	U	0.0034	F	0.0007	U	0.002	F	0.0007	U	0.0033	F	0.0036	F	0.0031	F						
Naphthalene	31.24623	R05acr_GW_Soil_Ing	0.02	0.001	0.001	U	0.001	U	0.001	U	0.001	M	0.001	M	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U				
Toluene	8.210362	R05acr_GW_Soil_Ing	0.005	0.0003	0.0006	F	0.0003	U	0.0003	U	0.0003	U	0.0003	U	0.0003	U	0.0003	U	0.0003	U	0.0003	U	0.0003	U	0.0003	U	0.0003	U				
Trichlorobenzene, 1,2,3-	26.28822	R05acr_GW_Soil_Ing	0.004	0.0008	0.0008	U	0.0008	U	0.0008	U	0.0008	M	0.0008	M	0.0008	U	0.0008	U	0.0008	U	0.0008	U	0.0008	U	0.0008	U	0.0008	U				
Trichlorobenzene, 1,2,4-	4.791367	R05acr_GW_Soil_Ing	0.004	0.0006	0.0006	U	0.0006	U	0.0006	U	0.0006	M	0.0006	M	0.0006	U	0.0006	U	0.0006	U	0.0006	U	0.0006	U	0.0006	U	0.0006	U				

Notes and Abbreviations:

This table presents laboratory results for analytes detected over the method detection limit; no results exceeded the Tier 1 0.5-acre residential soil action levels.

Samples analyzed by APPL, Inc.

FD - field duplicate.

MDL - Method detection limit.

RL - Reporting limit (RL).

F - The analyte was positively identified, but the associated numerical value is below the RL.

J - The analyte was positively identified, but the quantitation is an estimation.

M - Matrix effect was present.

Table 4 Sampling Results for Surface Soil Samples, April 2000

					Sample ID	I1-SS01	I1-SS02	I1-SS03		
					Sample Date	27-Apr-00	27-Apr-00	27-Apr-00		
					Sample Type	N	N	N		
					Beginning Depth	0	0	0		
					Ending Depth	0.5	0.5	0.5		
					Lab ID	AP91878	AP91878	AP91878		
Res SurfSoil PCL (carc)	Res SurfSoil PCL Source	Lab RL	Lab MDL		Result	Flags	Result	Flags	Result	Flags
SW8082 (mg/kg)										
Aroclor 1016	0.00973	R05acr_Tot_Soil_Comb	0.7	0.001	0.001	U	0.001	U	0.001	U
Aroclor 1221	0.00973	R05acr_Tot_Soil_Comb	0.7	0.001	0.001	U	0.001	U	0.001	U
Aroclor 1232	0.00973	R05acr_Tot_Soil_Comb	0.7	0.001	0.001	U	0.001	U	0.001	U
Aroclor 1242	0.00973	R05acr_Tot_Soil_Comb	0.7	0.001	0.001	U	0.001	U	0.001	U
Aroclor 1248	0.00973	R05acr_Tot_Soil_Comb	0.7	0.001	0.001	U	0.001	U	0.001	U
Aroclor 1254	0.00973	R05acr_Tot_Soil_Comb	0.7	0.001	0.001	U	0.001	U	0.001	U
Aroclor 1260	0.00973	R05acr_Tot_Soil_Comb	0.7	0.001	0.001	U	0.001	U	0.001	U

Notes and Abbreviations:

This table presents laboratory results for analytes detected over the method detection limit; no results exceeded the Tier 1 0.5-acre residential soil action levels.

Samples analyzed by APPL, Inc.

(carc) - Based on carcinogenic PCL.

MDL - Method detection limit.

RL - Reporting limit.

ND - Not detected.

Table 5 Sampling Results for Surface Wipe Sample, March 2001

Sample ID		I-1-WIPE 1		
Sample Date		03/21/01		
Normal or Field Dup		N		
Matrix (Swipe)		SW		
Lab Sample ID		285-88-2		
Run Number		1		
		Result	Flag	Dilution
SW8290 (ng/cm²)	1,2,3,4,6,7,8-HpCDD	0.01	F	1
	1,2,3,4,6,7,8-HpCDF	0.008	F	1
	1,2,3,4,7,8,9-HpCDF	0.005	U	1
	1,2,3,4,7,8-HxCDD	0.004	U	1
	1,2,3,4,7,8-HxCDF	0.01	F	1
	1,2,3,6,7,8-HxCDD	0.004	U	1
	1,2,3,6,7,8-HxCDF	0.004	F	1
	1,2,3,7,8,9-HxCDD	0.003	U	1
	1,2,3,7,8,9-HxCDF	0.003	U	1
	1,2,3,7,8-PeCDD	0.003	U	1
	1,2,3,7,8-PeCDF	0.005	J	1
	2,3,4,6,7,8-HxCDF	0.002	U	1
	2,3,4,7,8-PeCDF	0.007	F	1
	2,3,7,8-TCDD	0.003	U	1
	2,3,7,8-TCDF	0.02	F	1
	HpCDDs (total)	0.01		1
	HpCDFs (total)	0.008		1
	HxCDDs (total)	0.003	U	1
	HxCDFs (total)	0.02		1
	OCDD	0.02	F	1
	OCDF	0.01	U	1
	PeCDDs (total)	0.003	U	1
	PeCDFs (total)	0.05		1
	TCDDs (total)	0.003	U	1
	TCDFs (total)	0.11		1

Notes and Abbreviations

Sample analyzed by Triangle Laboratories.

Referenced laboratory package number: 53443.

ng/cm² - nanograms per square centimeter.

F - The analyte was positively identified, but the associated numerical value is below the RL.

J - The analyte was positively identified, the quantitation is an estimation.

U - The analyte was analyzed for, but not detected. The associated numerical value is the MDL.

Table 6 Sampling Results for Composite Concrete Floor Sample, October 2007

Sample ID Sample Date Normal or Field Dup Matrix (Swipe) Lab Sample ID Run Number						I1-CHIP01 10/12/07 Not collected Concrete Chips/Powder AX69103 1		
		Res SurfSoil PCL (carc)	Res SurfSoil PCL Source	MDL	RL	Results	Flags	Dilution
EPA 8082 (mg/Kg)	PCB-1016	1.135944	R05acr_Tot_Soil_Comb	0.02	0.7	0.02	U	1
	PCB-1221	1.135944	R05acr_Tot_Soil_Comb	0.015	0.7	0.015	U	1
	PCB-1232	1.135944	R05acr_Tot_Soil_Comb	0.022	0.7	0.022	U	1
	PCB-1242	1.135944	R05acr_Tot_Soil_Comb	0.009	0.7	0.009	U	1
	PCB-1248	1.135944	R05acr_Tot_Soil_Comb	0.011	0.7	0.011	U	1
	PCB-1254	1.135944	R05acr_Tot_Soil_Comb	0.014	0.7	0.014	U	1
	PCB-1260	1.135944	R05acr_Tot_Soil_Comb	0.005	0.7	0.005	U	1

Notes and Abbreviations

Sample analyzed by APPL, Inc.

Referenced laboratory package number: ARF 54628

mg/kg- milligrams per kilograms.

(carc) - Based on carcinogenic PCL.

MDL - Method detection limit.

RL - Reporting limit.

U - The analyte was analyzed for, but not detected. The associated numerical value is the MDL.

APPENDIX A
Soil Boring Logs

SOIL BORING LOG

CAMP STANLEY STORAGE ACTIVITY

SITE LOCATION: I1		BORING NUMBER: I1-SB01	
CLIENT: CAMP STANLEY STORAGE ACTIVITY		CONTRACTOR: PARSONS ENGINEERING SCIENCE, INC.	
PROJECT: F11023-94-D0024, RL53		DRILLING CONTRACTOR: JEDI	
LOGGED BY: WB MARTIN		REF. LOGBOOK: 732345	
BORING DEPTH (ft-BGL): 15		DRILLER: D. CASTILLO	
BORING ELEVATION (ft-MSL): NA		DRILLING RIG: MOBILE B-01	
EAST COORDINATE: 535901		DRILLING METHOD: HOLLOW STEM AUGER/AIR CORE	
NORTH COORDINATE: 3283247		SAMPLING METHOD: SPLIT SPOON/CORE BARREL	
BEGIN DRILLING: 3/2/00		END DRILLING: 3/2/00	

DEPTH (feet)	SAMPLE RECOVERY	ANALYTICAL SAMPLE	PTD (feet)	LITHOLOGIC DESCRIPTION	USCS GRAPHIC LOG	COMMENTS
0	1/1	✕	0	SILT, dark brown 10YR 4/3, no odor.	OH	
1.5				No recovery.		Refusal at 1.5'.
2	0/4					
4						
6				CLAY, slightly hard, white 2.5YR N8/, dry, marl and weathered limestone, pale yellow mottling 2.5Y 7/4, slightly plastic, no odor.		
8	5/5		0			
10		✕		CLAY, same as above.		
12	3/3		0			
14	/2	✕	0	CLAY/MUDSTONE, white 10YR 8/2, dry, fossils, no odor.		
15				TOTAL DEPTH = 15		
16						

SOIL BORING LOG

CAMP STANLEY STORAGE ACTIVITY

SITE LOCATION: II		BORING NUMBER: II-SB02	
CLIENT: CAMP STANLEY STORAGE ACTIVITY		CONTRACTOR: PARSONS ENGINEERING SCIENCE, INC.	
PROJECT: F11623-94-D0024, RL53		DRILLING CONTRACTOR: JEDI	
LOGGED BY: WB MARTIN		REF. LOGBOOK: 732345	
BORING DEPTH (ft-BGL): 6		DRILLER: D. CASTILLO	
BORING ELEVATION (ft-MSL): NA		DRILLING RIG: MOBILE B-61	
EAST COORDINATE: 535959		DRILLING METHOD: HOLLOW STEM AUGER/AIR CORE	
NORTH COORDINATE: 3283233		SAMPLING METHOD: SPLIT SPOON/CORE BARREL	
BEGIN DRILLING: 3/1/00		END DRILLING: 3/1/00	

DEPTH (feet)	SAMPLE RECOVERY	ANALYTICAL SAMPLE	PID (psm)	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	COMMENTS
0.7/0.7			0	CLAY, pebbly, cobby, very poorly sorted, loose, white 10YR 8/1, damp, no odor.	CL		Refusal at 0.7'.
0.7/0.7			0	CLAY, dark brown 10YR 3/3.	OH		
2	0/1.6		0	No recovery.			
4	2.8/2.8		0	WACKESTONE, very hard, white 10YR 8/1, dry, no odor.			
6			0	CLAY, hard, white 10YR 8/1, dry, no odor. <i>TOTAL DEPTH = 6 FT.</i>			
8							
10							
12							
14							
16							

SOIL BORING LOG

CAMP STANLEY STORAGE ACTIVITY

SITE LOCATION: I1	BORING NUMBER: I1-SB03
CLIENT: CAMP STANLEY STORAGE ACTIVITY	CONTRACTOR: PARSONS ENGINEERING SCIENCE, INC.
PROJECT: F11823-04-D0024, RL53	DRILLING CONTRACTOR: JEDI
LOGGED BY: WB MARTIN	REF. LOGBOOK: 732345
BORING DEPTH (ft-BGL): 14	DRILLER: D. CASTILLO
BORING ELEVATION (ft-MSL): NA	DRILLING RIG: MOBILE B-01
EAST COORDINATE: 535972	DRILLING METHOD: HOLLOW STEM AUGER/AIR CORE
NORTH COORDINATE: 3283233	SAMPLING METHOD: SPLIT SPOON/CORE BARREL
BEGIN DRILLING: 3/2/00	END DRILLING: 3/2/00

DEPTH (feet)	SAMPLE RECOVERY	ANALYTICAL SAMPLE	PTD (Down)	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COMMENTS
0.15/1.5	✘		0	CLAY, cobbly, soft, dark brown 10 YR 4/3, damp, plastic, no odor.	CL	
2				No recovery.		Refusal at 1.5'
0/3.5			0			
4						
6				CLAY, white 2.5Y N8/, dry, marl/weathered limestone, pale yellow mottling 2.5Y 7/4, rootlets at 9.5', no odor.		
5/5			0			
8						
10	✘			CLAY, very hard, white 7.5Y N8/, dry, fossils, no odor.		
1.7/3			0			
12						
14	✘		0	PACKSTONE, very hard, white 2.5Y N8/, dry, fossils, no odor.		
14				TOTAL DEPTH = 14 FT.		
16						

APPENDIX B

Sampling Results for Transformer Oil Sample, July 2006

WEIDMANN
ELECTRICAL TECHNOLOGY

WEIDMANN-ACTI INC.
4011 Power Inn Road • Sacramento, CA • 95826 USA
Phone 916 455 2284 • Fax 916 455 0191
www.weidmann-acti.com



Polychlorinated Biphenyls (PCBs) Report

MORLAND ELECTRIC
9425 OLD CORPUS CHRISTI

SAN ANTONIO, TX 78223 US
ATTN: LAURIE RICHARDSON

EPA Method 8082

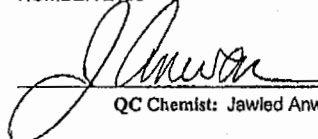
Account: 390
PCB Order #: 165475
Date Received: 07/18/2006
Date Reported: 07/19/2006
Project ID:
P.O. Number: IP
Lab Contact: Jawled Anwar

Lab Control #	Date Sampled	Sample Identification Serial Number	Analyst ID Batch #	Date Extracted Date Analyzed	Matrix	Results	PCB Aruclor	Reporting Limit
5363386	07/12/2006	02796	TN	07/18/2006	MIN	< 1.0 PPM	ND	1.0
		851038271	1941	07/18/2006				
5363388	07/12/2006	02798A	TN	07/18/2006	MIN	< 1.0 PPM	ND	1.0
		851038266	1941	07/18/2006				
5363390	07/12/2006	02800A	TN	07/18/2006	MIN	< 1.0 PPM	ND	1.0
		CANT READ	1941	07/18/2006				
5363392	07/12/2006	02801A	TN	07/18/2006	MIN	< 1.0 PPM	ND	1.0
		A1712A10AA1	1941	07/18/2006				
5363393	07/12/2006	02802A	TN	07/18/2006	MIN	6.1 PPM	1260	1.0
		C288301R	1941	07/18/2006				
5363394	07/12/2006	02799	TN	07/18/2006	MIN	< 1.0 PPM	ND	1.0
		851014762	1941	07/18/2006				
5363397	07/12/2006	02792A	TN	07/18/2006	MIN	< 1.0 PPM	ND	1.0
		851023703	1941	07/18/2006				
5363398	07/12/2005	02793A	TN	07/18/2006	MIN	< 1.0 PPM	ND	1.0
		851014136	1941	07/18/2006				
5363400	07/12/2006	02794A	TN	07/18/2006	MIN	< 1.0 PPM	ND	1.0
		851017245	1941	07/18/2006				
5363401	07/12/2006	02795A	TN	07/18/2006	MIN	< 1.0 PPM	ND	1.0
		851038267	1941	07/18/2006				
5363402	07/12/2006	02803A	TN	07/18/2006	MIN	< 1.0 PPM	ND	1.0
		851012121	1941	07/18/2006				
5363403	07/12/2006	02804A	TN	07/18/2006	MIN	< 1.0 PPM	ND	1.0
		851012131	1941	07/18/2006				
5363404	07/12/2006	02805A	TN	07/18/2006	MIN	< 1.0 PPM	ND	1.0
		851012141	1941	07/18/2006				

Notations: Oils reporting units (mg/kg). Solids dry wt. reporting units (mg/kg). Wipe reporting units in micrograms (ug). Water reporting units in PPB. All other PCB tests in PPM. Quality control documentation available upon request.

CA DOHS ELAP
ACCREDITATION/CERTIFICATE
NUMBER 2130

The analyses, opinions or interpretations contained in this report are based upon material and information supplied by the client. Weidmann-ACTI Inc. does not imply that the contents of the sample received by this laboratory are the same as all such material in the environment from which the sample was taken. Our test results relate only to the sample or samples tested. Any interpretation or opinion expressed represents the best judgement of Weidmann-ACTI. Weidmann-ACTI assumes no responsibility and makes no warranty or representation, expressed or implied as to the condition, productivity or proper operation of any equipment or other property for which this report may be used or relied upon for any reason whatsoever.


QC Chemist: Jawled Anwar

Page 1 of 1

APPENDIX C
Site Photographs



View of Building 294 looking east with gravel road in foreground.



One of the five concrete sample locations.



Manway access on second floor of Building 294 with one of five concrete sample locations in the upper center of photo.

APPENDIX D

**Data Verification Summary Report
(Composite Concrete Floor Sample)**

DY01 DATA VERIFICATION SUMMARY REPORT

for sample collected from

CAMP STANLEY STORAGE ACTIVITY

BOERNE, TEXAS

Data Verification by: Tammy Chang and Katherine LaPierre

Parsons - Austin, TX

INTRODUCTION

The following data verification summary report covers one solid sample collected from the Camp Stanley Storage Activity (CSSA) under DY01 on October 12, 2007. The sample in the following Sample Delivery Group (SDG) was analyzed for polychlorinated biphenyls (PCBs):

54628

There were no field quality control (QC) samples collected in association with this SDG. This sample was collected by Parsons and analyzed by Agriculture & Priority Pollutants Laboratory, Inc. (APPL) following procedures outlined in the Statement of Work and CSSA Quality Assurance Project Plan (QAPP), version 1.0.

The cooler associated with this SDG was received by the laboratory at a temperature of 3.0°C which was within the 2-6°C range recommended by the CSSA QAPP.

EVALUATION CRITERIA

The data submitted by the laboratory has been reviewed and verified following the guidelines outlined in the CSSA QAPP, version 1.0. Information reviewed in the data packages includes sample results; the summary of laboratory quality control results; case narrative; raw data; and chain-of-custody forms. The analyses and findings presented in this report are based on the reviewed information, and whether guidelines in the CSSA QAPP were met.

POLYCHLORINATED BIPHENYLS

General

This SDG consisted of one (1) solid sample which was collected on October 12, 2007 and was analyzed for PCBs.

The PCB analyses were performed using United States Environmental Protection Agency (USEPA) SW-846 Method 8082. This sample was prepared and analyzed following the procedures outlined in the CSSA QAPP and within the holding time required by the method.

Accuracy

Accuracy was evaluated using the percent recovery (%R) obtained from the laboratory control spike (LCS) sample and the surrogate spikes.

All LCS and surrogate spike recoveries were within acceptance criteria.

Precision

Precision could not be evaluated for this SDG because no duplicate analyses were performed.

Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represent actual site conditions. Representativeness has been evaluated by:

- Comparing the chain-of-custody forms to those described in the CSSA QAPP;
- Comparing actual analytical procedures to those described in the CSSA QAPP;
- Evaluating holding times; and
- Examining laboratory blanks for cross contamination of samples during analysis.

The sample was prepared and analyzed following COC and analytical procedures described in the CSSA QAPP within the holding time required by the method.

- All initial calibration criteria were met.
- All second source verification criteria were met.
- All continuing calibration verification (CCV) criteria were met.

There was one method blank associated with the PCB analyses in this SDG. The blank was free of PCBs above the reporting limit (RL).

Completeness

Completeness has been evaluated by comparing the total number of samples collected with the total number of samples with valid analytical data.

All reported PCB results were considered usable. The completeness of this SDG is 100% which meets the minimum acceptance criteria of 90%.

APPENDIX E

Tier 1 Ecological Exclusion Criteria Checklist

Figure: 30 TAC §350.77(b)

TIER 1: Exclusion Criteria Checklist

This exclusion criteria checklist is intended to aid the person and the TNRCC in determining whether or not further ecological evaluation is necessary at an affected property where a response action is being pursued under the Texas Risk Reduction Program (TRRP). Exclusion criteria refer to those conditions at an affected property which preclude the need for a formal ecological risk assessment (ERA) because there are **incomplete or insignificant ecological exposure pathways** due to the nature of the affected property setting and/or the condition of the affected property media. This checklist (and/or a Tier 2 or 3 ERA or the equivalent) must be completed by the person for all affected property subject to the TRRP. The person should be familiar with the affected property but need not be a professional scientist in order to respond, although some questions will likely require contacting a wildlife management agency (i.e., Texas Parks and Wildlife Department or U.S. Fish and Wildlife Service). The checklist is designed for general applicability to all affected property; however, there may be unusual circumstances which require professional judgement in order to determine the need for further ecological evaluation (e.g., cave-dwelling receptors). In these cases, the person is strongly encouraged to contact TNRCC before proceeding.

Besides some preliminary information, the checklist consists of three major parts, **each of which must be completed unless otherwise instructed**. PART I requests affected property identification and background information. PART II contains the actual exclusion criteria and supportive information. PART III is a qualitative summary statement and a certification of the information provided by the person. **Answers should reflect existing conditions and should not consider future remedial actions at the affected property**. Completion of the checklist should lead to a logical conclusion as to whether further evaluation is warranted. Definitions of terms used in the checklist have been provided and users are strongly encouraged to familiarize themselves with these definitions before beginning the checklist.

Name of Facility:

Camp Stanley Storage Activity (CSSA), Boerne, Texas.

Affected Property Location:

SWMU I-1 is located in the southwestern portion of the Inner Cantonment Area of CSSA, approximately 1,000 feet from the western boundary and 650 feet from the southern boundary of CSSA.

Mailing Address:

**Camp Stanley Storage Activity
25800 Ralph Fair Road
Boerne, TX 78015**

TNRCC Case Tracking #s:

**Water Customer No.: CN602728206.
Air Customer No.: CN600126262.**

Solid Waste Registration #s:

Texas Solid Waste Registration No.: 69026.

Voluntary Cleanup Program #:

Not applicable.

EPA I.D. #s:

USEPA identification No.: TX2210020739.

Figure: 30 TAC §350.77(b)

Definitions¹

Affected property - The entire area (i.e., on-site and off-site; including all environmental media) which contains releases of chemicals of concern at concentrations equal to or greater than the assessment level applicable for residential land use and groundwater classification.

Assessment level - A critical protective concentration level for a chemical of concern used for affected property assessments where the human health protective concentration level is established under a Tier 1 evaluation as described in §350.75(b) of this title (relating to Tiered Human Health Protective Concentration Level Evaluation), except for the protective concentration level for the soil-to-groundwater exposure pathway which may be established under Tier 1, 2, or 3 as described in §350.75(i)(7) of this title, and ecological protective concentration levels which are developed, when necessary, under Tier 2 and/or 3 in accordance with §350.77(c) and/or (d), respectively, of this title (relating to Ecological Risk Assessment and Development of Ecological Protective Concentration Levels).

Bedrock - The solid rock (i.e., consolidated, coherent, and relatively hard naturally formed material that cannot normally be excavated by manual methods alone) that underlies gravel, soil or other surficial material.

Chemical of concern - Any chemical that has the potential to adversely affect ecological or human receptors due to its concentration, distribution, and mode of toxicity. Depending on the program area, chemicals of concern may include the following: solid waste, industrial solid waste, municipal solid waste, and hazardous waste as defined in Texas Health and Safety Code, §361.003, as amended; hazardous constituents as listed in 40 Code of Federal Regulations Part 261, Appendix VIII, as amended; constituents on the groundwater monitoring list in 40 Code of Federal Regulations Part 264, Appendix IX, as amended; constituents as listed in 40 CFR Part 258 Appendices I and II, as amended; pollutant as defined in Texas Water Code, §26.001, as amended; hazardous substance as defined in Texas Health and Safety Code, §361.003, as amended, and the Texas Water Code §26.263, as amended; regulated substance as defined in Texas Water Code §26.342, as amended and §334.2 of this title (relating to Definitions), as amended; petroleum product as defined in Texas Water Code §26.342, as amended and §334.122(b)(12) of this title (relating to Definitions for ASTs), as amended; other substances as defined in Texas Water Code §26.039(a), as amended; and daughter products of the aforementioned constituents.

Community - An assemblage of plant and animal populations occupying the same habitat in which the various species interact via spatial and trophic relationships (e.g., a desert community or a pond community).

Complete exposure pathway - An exposure pathway where a human or ecological receptor is exposed to a chemical of concern via an exposure route (e.g., incidental soil ingestion, inhalation of volatiles and particulates, consumption of prey, etc).

De minimus - The description of an area of affected property comprised of one acre or less where the ecological risk is considered to be insignificant because of the small extent of contamination, the absence of protected species, the availability of similar unimpacted habitat nearby, and the lack of adjacent sensitive environmental areas.

Ecological protective concentration level - The concentration of a chemical of concern at the point of exposure within an exposure medium (e.g., soil, sediment, groundwater, or surface water) which is determined in accordance with §350.77(c) or (d) of this title (relating to Ecological Risk Assessment and Development of Ecological Protective Concentration Levels) to be protective for ecological receptors. These concentration levels are primarily intended to be protective for more mobile or wide-ranging ecological receptors and, where appropriate, benthic invertebrate communities within the waters in the state. These concentration levels are not intended to be directly protective of receptors with limited mobility or range (e.g., plants, soil invertebrates, and small rodents), particularly those residing within active areas of a facility, unless these receptors are threatened/endangered species or unless

¹These definitions were taken from 30 TAC §350.4 and may have both ecological and human health applications. For the purposes of this checklist, it is understood that only the ecological applications are of concern.

impacts to these receptors result in disruption of the ecosystem or other unacceptable consequences for the more mobile or wide-ranging receptors (e.g., impacts to an off-site grassland habitat eliminate rodents which causes a desirable owl population to leave the area).

Ecological risk assessment - The process that evaluates the likelihood that adverse ecological effects may occur or are occurring as a result of exposure to one or more stressors; however, as used in this context, only chemical stressors (i.e., COCs) are evaluated.

Environmental medium - A material found in the natural environment such as soil (including non-waste fill materials), groundwater, air, surface water, and sediments, or a mixture of such materials with liquids, sludges, gases, or solids, including hazardous waste which is inseparable by simple mechanical removal processes, and is made up primarily of natural environmental material.

Exclusion criteria - Those conditions at an affected property which preclude the need to establish a protective concentration level for an ecological exposure pathway because the exposure pathway between the chemical of concern and the ecological receptors is not complete or is insignificant.

Exposure medium - The environmental medium or biologic tissue in which or by which exposure to chemicals of concern by ecological or human receptors occurs.

Facility - The installation associated with the affected property where the release of chemicals of concern occurred.

Functioning cap - A low permeability layer or other approved cover meeting its design specifications to minimize water infiltration and chemical of concern migration, and prevent ecological or human receptor exposure to chemicals of concern, and whose design requirements are routinely maintained.

Landscaped area - An area of ornamental, or introduced, or commercially installed, or manicured vegetation which is routinely maintained.

Off-site property (off-site) - All environmental media which is outside of the legal boundaries of the on-site property.

On-site property (on-site) - All environmental media within the legal boundaries of a property owned or leased by a person who has filed a self-implementation notice or a response action plan for that property or who has become subject to such action through one of the agency's program areas for that property.

Physical barrier - Any structure or system, natural or manmade, that prevents exposure or prevents migration of chemicals of concern to the points of exposure.

Point of exposure - The location within an environmental medium where a receptor will be assumed to have a reasonable potential to come into contact with chemicals of concern. The point of exposure may be a discrete point, plane, or an area within or beyond some location.

Protective concentration level - The concentration of a chemical of concern which can remain within the source medium and not result in levels which exceed the applicable human health risk-based exposure limit or ecological protective concentration level at the point of exposure for that exposure pathway.

Release - Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, with the exception of:

- (A) A release that results in an exposure to a person solely within a workplace, concerning a claim that the person may assert against the person's employer;
- (B) An emission from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine;
- (C) A release of source, by-product, or special nuclear material from a nuclear incident, as those terms are defined by the Atomic Energy Act of 1954, as amended (42 U.S.C. §2011 et seq.), if the release is subject to requirements concerning financial protection established by the Nuclear Regulatory Commission under §170 of that Act;

(D) For the purposes of the environmental response law §104, as amended, or other response action, a release of source, by-product, or special nuclear material from a processing site designated under §102(a)(1) or §302(a) of the Uranium Mill Tailings Radiation Control Act of 1978 (42 U.S.C. §7912 and §7942), as amended; and

(E) The normal application of fertilizer.

Sediment - Non-suspended particulate material lying below surface waters such as bays, the ocean, rivers, streams, lakes, ponds, or other similar surface water body (including intermittent streams). Dredged sediments which have been removed from below surface water bodies and placed on land shall be considered soils.

Sensitive environmental areas - Areas that provide unique and often protected habitat for wildlife species. These areas are typically used during critical life stages such as breeding, hatching, rearing of young, and overwintering. Examples include critical habitat for threatened and endangered species, wilderness areas, parks, and wildlife refuges.

Source medium - An environmental medium containing chemicals of concern which must be removed, decontaminated and/or controlled in order to protect human health and the environment. The source medium may be the exposure medium for some exposure pathways.

Stressor - Any physical, chemical, or biological entity that can induce an adverse response; however, as used in this context, only chemical entities apply.

Subsurface soil - For human health exposure pathways, the portion of the soil zone between the base of surface soil and the top of the groundwater-bearing unit(s). For ecological exposure pathways, the portion of the soil zone between 0.5 feet and 5 feet in depth.

Surface cover - A layer of artificially placed utility material (e.g., shell, gravel).

Surface soil - For human health exposure pathways, the soil zone extending from ground surface to 15 feet in depth for residential land use and from ground surface to 5 feet in depth for commercial/industrial land use; or to the top of the uppermost groundwater-bearing unit or bedrock, whichever is less in depth. For ecological exposure pathways, the soil zone extending from ground surface to 0.5 feet in depth.

Surface water - Any water meeting the definition of surface water in the state as defined in §307.3 of this title (relating to Abbreviations and Definitions), as amended.

PART I. Affected Property Identification and Background Information

1) Provide a description of the specific area of the response action and the nature of the release. Include estimated acreage of the affected property and the facility property, and a description of the type of facility and/or operation associated with the affected property. Also describe the location of the affected property with respect to the facility property boundaries and public roadways.

Camp Stanley Storage Activity: CSSA is located in northwestern Bexar County, about 19 miles northwest of downtown San Antonio. The installation consists of approximately 4,004 acres immediately east of Ralph Fair Road, and approximately 0.5 mile east of Interstate Highway 10 (see Figure 1). CSSA has several historical waste sites, including SWMUs, AOCs, and RMUs. The present mission of CSSA is the receipt, storage, issue, and maintenance of ordnance as well as quality assurance testing and maintenance of military weapons and ammunition. Because of its mission, CSSA has been designated a restricted access facility. No changes to the CSSA mission and/or military activities are expected in the future.

SWMU I-1: SWMU I-1 is located in the southwestern portion of the Inner Cantonment Area of CSSA, approximately 1,000 feet from the western boundary and 650 feet from the southern boundary of the installation, as shown on Figure 2 of the RIR. The site covers approximately 0.223 acre. As shown on Figure 2, there is a gravel road immediately west of the site and a paved road immediately north of the site. The CSSA WWTF is located approximately 200 feet south of SWMU I-1. SWMU B-29, SWMU B-30, and AOC-50 are all located within 300 feet of the eastern edge of the site. These three sites have been closed with TCEQ approval.

SWMU I-1 consists of an inactive incinerator, located in Building 294, and the immediate area surrounding Building 294. Building 294 has two floor levels and is approximately 250 ft² in area, accounting for interior square footage of both levels. The building is constructed of red brick and rests on a concrete riser that elevates the building above the ground surface. The incinerator was operational from 1943 to the late 1960s and was reportedly used for burning classified paper documents. Later the building was used as a storage facility for electrical transformers. Although transformers were stored in the building, analytical data show the transformers to be non-PCB transformers. This determination is based on the USEPA definition of "non-PCB transformer" as cited in 40 CFR §761.3. This site was identified as a potential SWMU because the site was used for burning waste paper and for storage of electrical transformers. SWMU I-1 is not listed on CSSA's Notice of Registration. At present, there are no plans to demolish or remove Building 294.

Attach available USGS topographic maps and/or aerial or other affected property photographs to this form to depict the affected property and surrounding area. Indicate attachments:

- Topo map Aerial photo Other

Aerial photo of the site and land adjacent to the site was shown on Figure 2 and Figure 3 of the RIR.

2) Identify environmental media known or suspected to contain chemicals of concern (COCs) at the present time. Check all that apply:

<u>Known/Suspected COC Location</u>	<u>Based on sampling data?</u>	
<input type="checkbox"/> NO – Soil ≤ 5 ft below ground surface	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> NO – Soil >5 ft below ground surface	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> NO – Groundwater	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> NO – Surface Water/Sediments	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Explain (previously submitted information may be referenced):

Described in Sections 3.2.3 and 3.2.4 of the RIR.

3) Provide the information below for the nearest surface water body which has become or has the potential to become impacted from migrating COCs via surface water runoff, air deposition, groundwater seepage, etc. Exclude wastewater treatment facilities and stormwater conveyances/impoundments authorized by permit. Also exclude conveyances, decorative ponds, and those portions of process facilities which are:

- a. Not in contact with surface waters in the State or other surface waters which are ultimately in contact with surface waters in the State; and
- b. Not consistently or routinely utilized as valuable habitat for natural communities including birds, mammals, reptiles, etc.

The nearest **perennial** surface water body is **approximately 500 feet** from the affected property (**north [upgradient] of the site**) and is named **“W-Tank.”** The water body is best described as a:

- freshwater stream: _____ perennial (has water all year)
 _____ intermittent (dries up completely for at least 1 week a year)
 _____ intermittent with perennial pools
- freshwater swamp/marsh/wetland
- saltwater or brackish marsh/swamp/wetland
- ~~reservoir, lake, or~~ **pond**; approximate surface acres: **0.52 acre**
- drainage ditch
- tidal stream bay estuary
- other; specify

As shown on Figure 2, the nearest perennial surface water body is the “W-Tank,” a pond located approximately 500 feet north (upgradient) of the site. The pond is approximately 0.52 acre in size. There is a dam along the southern boundary of the pond. A small intermittent stream is below the dam. The stream only has water during and immediately after rain events. The creek bed runs to the south, less than 100 feet to the east of SWMU I-1. The creek bed is narrow, only approximately 5 feet wide.

Is the water body listed as a State classified segment in Appendix C of the current Texas Surface Water Quality Standards; §§307.1 - 307.10?

- Yes Segment # _____ Use Classification:
- No**

If the water body is not a State classified segment, identify the first downstream classified segment.

Name:

Upper Leon Creek

Segment #:

SWMU I-1 is within the unnamed tributary of Upper Leon Creek, thence to Upper Leon Creek in Segment No. 1907 of the San Antonio River Basin

Segment 1907 Upper Leon Creek – from a point 100 meters (110 yards) upstream of State Highway 16 northwest of San Antonio in Bexar County to a point 9.0 kilometers (5.6 miles) upstream of Scenic Loop Road north of Helotes in Bexar County

Use Classification:

The unclassified receiving waters have no significant aquatic life use for the unnamed tributary of Upper Leon Creek. The designated uses for Segment No. 1907 are high aquatic life use, contact

recreation, public water supply, and aquifer protection. No significant degradation of high quality receiving waters is anticipated.

As necessary, provide further description of surface waters in the vicinity of the affected property:

PART II. Exclusion Criteria and Supportive Information

Subpart A. Surface Water/Sediment Exposure

1) Regarding the affected property where a response action is being pursued under the TRRP, have COCs migrated and resulted in a release or imminent threat of release to either surface waters or to their associated sediments via surface water runoff, air deposition, groundwater seepage, etc.? Exclude wastewater treatment facilities and stormwater conveyances/impoundments authorized by permit. Also exclude conveyances, decorative ponds, and those portions of process facilities which are:

- a. Not in contact with surface waters in the State or other surface waters which are ultimately in contact with surface waters in the State; and
- b. Not consistently or routinely utilized as valuable habitat for natural communities including birds, mammals, reptiles, etc.

Yes

No

Explain:

Since no contamination was found at SWMU I-1, there is no impact to groundwater or surface water/sediment in the area.

If the answer is Yes to Subpart A above, the affected property does not meet the exclusion criteria. However, complete the remainder of Part II to determine if there is a complete and/or significant soil exposure pathway, then complete PART III - Qualitative Summary and Certification. If the answer is No, go to Subpart B.

Subpart B. Affected Property Setting

In answering "Yes" to the following question, it is understood that the affected property is not attractive to wildlife or livestock, including threatened or endangered species (i.e., the affected property does not serve as valuable habitat, foraging area, or refuge for ecological communities). (May require consultation with wildlife management agencies.)

1) Is the affected property wholly contained within contiguous land characterized by: pavement, buildings, landscaped area, functioning cap, roadways, equipment storage area, manufacturing or process area, other surface cover or structure, or otherwise disturbed ground?

Yes

No

Explain:

SWMU I-1 is a small site. The site covers approximately 0.223 acre, including Building 294 and the area immediately surrounding the building. As shown on Figure 2 of the RIR, there is a gravel road immediately west of the site and a paved road north of the site. The CSSA WWTF is located approximately 200 feet south of SWMU I-1.

Based on all of the data collected for SWMU I-1 (presented in the RIR), there are no COCs at the site. The concentrations of chemicals detected in soils at the site are below Tier 1 residential soil action levels. Also, there is no evidence of other affected or threatened environmental media (groundwater, surface water, or sediment). Since no contamination was found in the site investigations (geophysical survey, soil gas survey, subsurface sampling, surface soil sampling, transformer oil sampling, and concrete floor sampling) and only slight contamination was found in the wipe sample collected from the surface of the

incinerator stack and at the opening of the incinerator unit (likely a result of former burning of waste paper at the site from the 1940s through the 1960s), there would be no impact to groundwater or surface water/sediment in the area.

Additionally, several surveys have been conducted at CSSA for T&E species. The only T&E species that have been documented at CSSA are the black-capped vireo (*Vireo atricapillus*) [BCVI] and golden-cheeked warbler (*Dendroica chrysoparia*) [GCWA]. SWMU I-1 is not located within BCVI or GCWA habitat. Additional information can be found in the following references:

- Parsons, 2007. *Final Integrated Natural Resource Management Plan*. Prepared for Camp Stanley Storage Activity, Boerne, Texas. October 2007.
- Parsons, 2008. *Final Species and Habitat Distributions of Black-Capped Vireos and Golden-Cheeked Warblers, 2007 Breeding/Nesting Season*. Prepared for Camp Stanley Storage Activity, Boerne, Texas. March 2008.

If the answer to Subpart B above is Yes, the affected property meets the exclusion criteria, assuming the answer to Subpart A was No. Skip Subparts C and D and complete PART III - Qualitative Summary and Certification. If the answer to Subpart B above is No, go to Subpart C.

Subpart C. Soil Exposure

1) Are COCs which are in the soil of the affected property solely below the first 5 feet beneath ground surface or does the affected property have a physical barrier present to prevent exposure of receptors to COCs in surface soil?

- Yes No

Explain:

If the answer to Subpart C above is Yes, the affected property meets the exclusion criteria, assuming the answer to Subpart A was No. Skip Subpart D and complete PART III - Qualitative Summary and Certification. If the answer to Subpart C above is No, proceed to Subpart D.

Subpart D. *De Minimus* Land Area

In answering "Yes" to the question below, it is understood that all of the following conditions apply:

- The affected property is not known to serve as habitat, foraging area, or refuge to threatened/endangered or otherwise protected species. (Will likely require consultation with wildlife management agencies.)
- Similar but unimpacted habitat exists within a half-mile radius.
- The affected property is not known to be located within one-quarter mile of sensitive environmental areas (e.g., rookeries, wildlife management areas, preserves). (Will likely require consultation with wildlife management agencies.)
- There is no reason to suspect that the COCs associated with the affected property will migrate such that the affected property will become larger than one acre.

1) Using human health protective concentration levels as a basis to determine the extent of the COCs, does the affected property consist of one acre or less and does it meet all of the conditions above?

- Yes No

Explain how conditions are met/not met:

If the answer to Subpart D above is Yes, then no further ecological evaluation is needed at this affected property, assuming the answer to Subpart A was No. Complete PART III - Qualitative Summary and Certification. If the answer to Subpart D above is No, proceed to Tier 2 or 3 or comparable ERA.

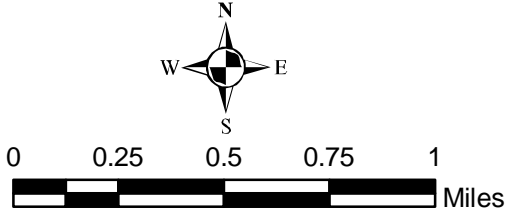
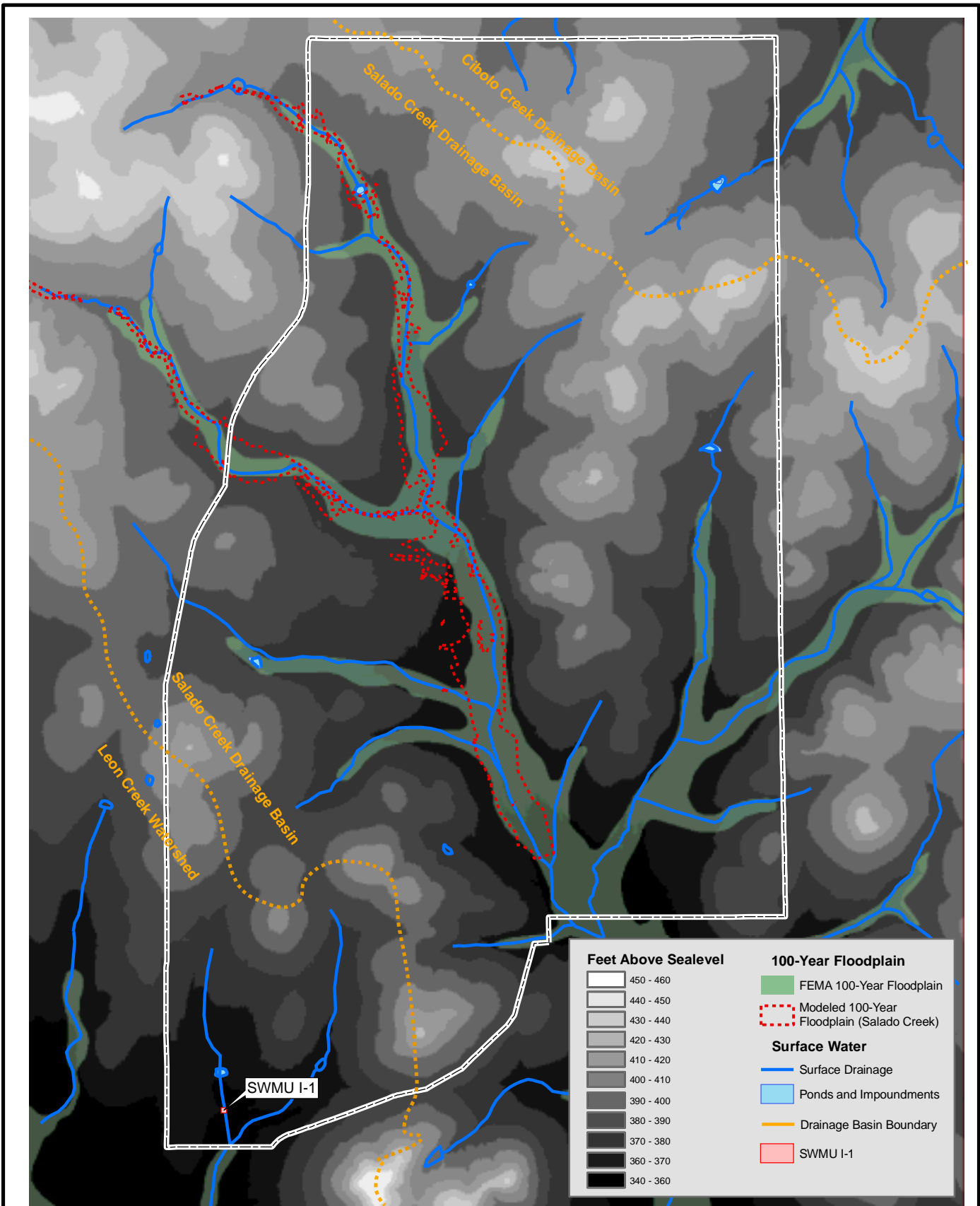


Figure E-1
 Topography, Surface Water, and Floodplains
 Camp Stanley Storage Activity
PARSONS

PART III. Qualitative Summary and Certification (Complete in all cases).

Attach a brief statement (not to exceed 1 page) summarizing the information you have provided in this form. This summary should include sufficient information to verify that the affected property meets or does not meet the exclusion criteria. The person should make the initial decision regarding the need for further ecological evaluation (i.e., Tier 2 or 3) based upon the results of this checklist. After review, TNRCC will make a final determination on the need for further assessment. **Note that the person has the continuing obligation to re-enter the ERA process if changing circumstances result in the affected property not meeting the Tier 1 exclusion criteria.**

Completed by: Lea Aurelius, P.G. (Typed/Printed Name)

Senior Scientist/Senior Risk Assessor (Title)

7/3/08 (Date)

I believe that the information submitted is true, accurate, and complete, to the best of my knowledge.

Julie Burdey (Typed/Printed Name of Person)

Project Manager (Title of Person)

Julie Burdey (Signature of Person)

7/3/08 (Date)