

FINAL

PROGRESS REPORT

May 1, 2006 – December 31, 2006

(29TH REPORT)



Camp Stanley Storage Activity

Boerne, Texas

USEPA ID No. TX2210020739

January 2007

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ACRONYMS AND ABBREVIATIONS

1,1-DCE	1,1-dichloroethene
AOC	area of concern
APPL	Agriculture & Priority Pollutants Laboratories, Inc.
<i>cis</i> -1,2-DCE	<i>cis</i> -1,2-dichloroethene
CRP	community relations plan
CSSA	Camp Stanley Storage Activity
DQO	data quality objective
GAC	granular activated carbon
I/SM	interim/stabilization measures
LTMO	long-term monitoring optimization
MCL	Maximum contaminant level
O&M	operations and maintenance
Order	§3008(h) Administrative Order on Consent
PCE	Tetrachloroethene
QAPP	Quality Assurance Program Plan
RCRA	Resource Conservation and Recovery Act
RFI	RCRA facility investigation
SVE	soil vapor extraction
STL	Severn Trent Laboratory
SWMU	solid waste management unit
TCE	trichloroethene
TCEQ	Texas Commission on Environmental Quality
TO	task order
TPDES	Texas Pollution Discharge Elimination System
<i>trans</i> -1,2-DCE	<i>trans</i> -1,2-dichloroethene
TRRP	Texas Risk Reduction Program
UIC	underground injection control
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
VC	Vinyl Chloride
VOC	volatile organic compound
WMP	waste management plan
WP	work plan

PROGRESS REPORT

MAY 1, 2006 – DECEMBER 31, 2006

(29TH PERIOD)

INTRODUCTION

This 29th Progress Report for Camp Stanley Storage Activity (CSSA), Boerne, Texas, U.S. Environmental Protection Agency (USEPA) Identification Number TX2210020739, is submitted in accordance with the Administrative Order on Consent (Order) issued to CSSA on May 5, 1999, pursuant to §3008(h) of the Safe Drinking Water Act, as amended by the Resource Conservation and Recovery Act (RCRA), and further amended by the Hazardous and Solid Waste Act of 1984, 42 United States Code §6928(h). This report addresses the project progress from May 1, 2006 through December 31, 2006. In June 2006, CSSA switched from quarterly to semi-annual progress reporting, as approved by USEPA. Subsequent progress reports will continue to be submitted on a semi-annual basis. Progress reports covering project work between January 1 and June 30 will be submitted by July 10; and progress reports covering project work between July 1 and December 31 will be submitted by January 10.

Summary of Activities this Period

Between May 1 and December 31, 2006, significant activities related to the Order included:

- Completion and Texas Commission on Environmental Quality (TCEQ) approval of RCRA Facility Investigation (RFI) Waste Management Plan (WMP);
- Excavation of solid waste management unit (SWMU) B-3 waste, installation of bioreactor, and initiation of treatability study;
- Two public meetings were held at elementary schools near CSSA in December 2006;
- Continuation of the groundwater monitoring program under the regulator-approved data quality objectives (DQO);
- Installation of additional Lower Glen Rose monitoring wells;
- Investigation of CSSA drinking water well CS-9 elevated metals concentrations detected in June 2006; and
- Award and initiation of two projects to investigate 11 SWMUs and areas of concern (AOC).

Details regarding these activities are summarized in this report.

Report Organization

This report details work completed on tasks associated with the four project phases outlined in the Order. Phase names and task names listed in **Table 1** are taken directly from the Order. Information for each active task requested in the Order is provided in this report. No

current information is provided for tasks that are not active; however, a summary of the tasks, subtasks, and their status has been presented in previous reports. Information on the on-post outfall discharge is included in **Table 2**. Details of the evaluation of the percent complete by awarded projects are included in **Table 3**. An updated project team chart with telephone numbers and addresses is included in **Table 4**.

Attachment 1 shows the locations of groundwater wells referenced in this report. A summary of the status of all identified SWMUs and AOCs at CSSA is provided in **Attachment 2**. **Attachment 3** is a summary of the physical percent complete of each order-related task being conducted at CSSA. **Attachment 4** is a summary of groundwater results. **Attachment 5** includes the status reports submitted for SWMU B-3. **Attachment 6** includes the newspaper article published in the *Leon Springs Times* covering the public meetings held in December 2006.

Table 1 §3008(h) Administrative Order on Consent Project Phases

3008(h) Order Phase and Subtasks	Phase Purpose	Phase's % of Overall Order	Subtask's % of Phase	Physical % Complete of Subtask	Subtask portion of Phase % Complete	Physical % Complete of Phase	Active During P29?
Interim Measures		30%				91%	
Interim Measures Work Plan	Mitigate a current or potential threat to human health and/or the environment.		7%	100%	7.0%		No
Interim Measures Implementation			70%	88%	57.9%		No
Reports			23%	97%	22.7%		No
RCRA Facility Investigation		30%				72%	
Preliminary Report	Characterize the environmental setting of CSSA; define the sources of contamination; define the degree and extent of contamination; identify actual or potential receptors; and assess whether any additional interim/stabilization measures may be warranted.		5%	100%	5%		No
RFI Work Plan			10%	97%	9%		Yes
Facility Investigation			40%	69%	28%		Yes
Risk Assessment			10%	99%	2%		No
Investigation Analysis			10%	84%	8%		No
Groundwater Investigation			15%	71%	0%		Yes
Treatability Studies			10%	45%	4%		Yes
Progress Reports		5%	25%	1%		Yes	
Corrective Measures Study		10%				0%	
Identify and Develop Alternatives	Identification, screening, and development of alternatives for removal, containment, treatment, and/or other remediation of the contamination.		15%	0%	0%		No
Evaluate Alternatives			60%	0%	0%		No
Reports			25%	0%	0%		No
Corrective Measures Implementation		30%				0%	
Implementation Program Plan	Design, construct, operate, maintain, and monitor the performance of corrective measure(s) selected to protect human health and the environment.		5%	0%	0%		No
Corrective Measure Design			15%	0%	0%		No
Corrective Measure Construction			70%	0%	0%		No
Reports			10%	0%	0%		No
% of All Phases Complete						43.84%	

RCRA FACILITY INVESTIGATION

The RFI is being conducted to characterize the environmental setting of CSSA, define the sources of contamination, define the degree and extent of contamination, identify actual or potential receptors, and assess whether any additional interim/stabilization measures (I/SM) may be warranted. The discussions below include only the tasks related to preparation of the RFI Work Plan (WP), Facility Investigations, and Treatability Studies. Discussion of other RFI subtasks will be included in future reports if changes or additions to previously reported activities occur. The majority of current ongoing environmental activities at CSSA are part of the RFI task. Work on each of these tasks is described in the following paragraphs. The main areas of work during this period included:

- Groundwater monitoring of on- and off-post wells;
- Groundwater monitoring of Westbay[®] wells;
- Verification and validation of analytical data;
- Preparation to investigate SWMUs and AOCs under the Texas Risk Reduction Program (TRRP);
- Soil vapor extraction (SVE) system operation and expansion;
- Initiation of SWMU B-3 removal action;
- Initiation of bioreactor/recirculation construction; and
- Initiation of treatability studies at SWMU B-3.

RFI Work Plan

The Order requires the RFI WP task to include a Project Management Plan, Data Collection Quality Assurance Plan, Health and Safety Plan, and a Community Relations Plan (CRP). As previously agreed by USEPA, because the CSSA Environmental Encyclopedia includes all information required by the Order, it will be used to fulfill this requirement. Completion of this task is funded for the planned RFI tasks. The RFI WP task makes up approximately 10 percent of the RFI phase. Estimation of percent complete is difficult due to the continuing need for plan addenda as new projects are identified. As of the end of Period 29, WPs currently under scope are 97 percent complete. The CSSA Environmental Encyclopedia will continue to be updated as WPs for the new projects are finalized.

Community Relations Plan and Public Meetings

An update to the December 2002 CRP was prepared. As part of the update, approximately 70 community members were contacted to request an interview regarding CSSA's community relations program. This led to 16 interviews with community members. The Final CRP update was issued May 23, 2006. CSSA's future community relations activities described in the CRP update included public meetings scheduled to be conducted the first week in December 2006.

CSSA provided the opportunity for interested local residents and public officials to attend two public meetings to learn about the CSSA environmental program. The meetings were held December 5, 2006 and December 7, 2006, at local elementary schools. The meetings were publicized by mailing approximately 550 postcard invitations, 18 letters to local officials and homeowners associations, issuing a press release from the Fort Sam Houston public affairs office, and publishing a notice in the *San Antonio Express-News* on December 3, 2006. Despite publication of the event, less than ten individuals who were not affiliated with an organization attended each meeting. Some of the attendees were residents in local neighborhoods or former employees of CSSA. Representatives of the following organizations/community leaders also attended: Alamo Area Council of Governments, San Antonio Metropolitan Health District, Bexar County Commissioner Lyle Larson, Fort Sam Houston, Representative Frank Corte, City of Fair Oaks, and the *Leon Springs Times*. CSSA follows the CRP and keeps the local community well-informed of issues affecting local residents. Low attendance at the public meetings suggests that community concerns about CSSA activities are low. The *Leon Springs Times* published a positive article for CSSA covering the public meetings. The article is included in **Attachment 6**.

Waste Management Plan

The Final RFI WMP was submitted to the USEPA and TCEQ on May 23, 2006. TCEQ approved the plan on August 28, 2006. No site-specific WMP addenda were prepared in the subject reporting period.

Data Quality Objectives for Groundwater Monitoring

The groundwater monitoring DQOs were revised to incorporate the recommendations of the long-term monitoring optimization (LTMO) approved by USEPA and TCEQ. The Final DQOs for the Groundwater Monitoring Program were submitted in July 2006.

Environmental Encyclopedia Updates

The CSSA website (www.stanley.army.mil) was updated with documents added to the Environmental Encyclopedia through the end of December 2006. The website includes CSSA's Administrative Record as required under the Order. The electronic encyclopedia and hard copy encyclopedia were updated with all final reports through December 2006. Updates made in Period 29 included the following:

- Period 29 USEPA Progress Report;
- Fact Sheet 26 – SWMU B-3 Cleanup;
- Hydrogeologic Conceptual Site Model for Camp Stanley Storage Activity;
- December 2005 Off-post Groundwater Monitoring Report;
- Task Order 0006 Health and Safety Plan Addendum;
- Well owner letters for March and June 2006;
- Final Community Relations Plan;

- March 2006 On-post Groundwater Monitoring Report;
- March 2006 Off-post Groundwater Monitoring Report;
- Various meeting minutes; and
- Various tables of contents, site chronologies, and indices.

Work Plans for SWMU and AOC Investigations

Parsons Work Plans

Parsons will perform additional investigations for SWMU and AOC sites scheduled for closure under the TRRP rule that have been funded under the U.S. Army Corps of Engineers (USACE) Contract No. DACA87-02-D-0005, task order (TO) No. DY01, for investigation of inner cantonment sites SWMU I-1, AOC-67, and AOC-68, and the north pasture sites SWMUs B-2, B-8, B-20/21, and B-24. Work plans are being drafted for review by CSSA and USACE.

Weston Work Plans

SWMU and AOC site investigations under the TRRP rule have been funded under USACE Contract No. DACA56-04-D-2006, TO No. DY01, for investigation by Weston Solutions, Inc. for sites SWMU B-71, AOCw63, and AOCw64. Work plans were submitted for review by CSSA and USACE on November 30, 2006.

Facility Investigations

An investigation of the facility is being conducted to:

- Characterize the environmental setting of the facility;
- Define the source(s) of contamination;
- Define the nature and extent of contamination; and
- Identify actual or potential receptors.

In some cases, multiple investigational phases may be necessary. Investigation results will be used to develop and evaluate alternatives during the Corrective Measure Study. All investigation activities are being conducted in accordance with the RFI WP discussed above.

Completion of the facility investigations for the planned RFI tasks is partially funded. **Attachment 2** indicates the sites for which investigations have been initiated with site status as well as sites that have been identified, but not yet investigated. The Facility Investigations subtask makes up approximately 40 percent of the RFI phase. As of the end of Period 29, this task is approximately 69 percent complete.

A total of 84 SWMUs, AOCs, and Range Management Units have been identified at CSSA, and investigations have been conducted at 64 of those sites. A summary of the status of each site, including whether the site is recommended for closure or if closure is approved, is

provided in **Attachment 2**. To date, Risk Reduction Standard 1 closure of 35 CSSA sites has been approved by TCEQ, and eight sites were either delisted or granted No Further Action status.

Groundwater Investigation

The Groundwater Investigation subtask makes up approximately 15 percent of the RFI phase. As of the end of Period 29, this task is approximately 71 percent complete.

On- and off-post groundwater monitoring was conducted in accordance with the regulator-approved DQOs during Period 29. Sampling frequencies for on-post wells are determined by the LTMO study completed in May 2005, as approved by TCEQ and USEPA. Based on the LTMO recommendations, on-post wells are sampled quarterly, semi-annually, or biennially (every 2 years). Off-post wells are not included in the LTMO recommendations and are sampled quarterly under the DQOs. A map of the well locations is provided in **Attachment 1** of this report.

The analyte list for each monitoring event was in accordance with the applicable DQOs. On- and off-post monitoring wells were sampled in June 2006 for the SW-846 Method 8260 volatile organic compounds (VOC) bromodichloromethane, bromoform, chloroform, dibromochloromethane, dichlorodifluoromethane, 1,1-dichloroethene (1,1-DCE), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), *trans*-1,2-dichloroethene (*trans*-1,2-DCE), methylene chloride, naphthalene, tetrachloroethene (PCE), trichloroethene (TCE), toluene, and vinyl chloride (VC). The nine CSSA metals (barium, copper, zinc, cadmium, mercury, chromium, nickel, arsenic, and lead) were also sampled in June 2006. The September 2006 sampling was conducted in accordance with the revised DQOs and included the VOCs *cis*-1,2-DCE, *trans*-1,2-DCE, 1,1-DCE, PCE, TCE, and VC. On-post samples were analyzed by Severn Trent Laboratories (STL) in Arvada, Colorado, and off-post samples were analyzed by Agriculture & Priority Pollutants Laboratories, Inc. (APPL). Parsons' chemists validated and verified the data. All detected concentrations of VOCs and metals are presented in **Attachment 4**.

June 2006 Sampling

Eleven on-post wells were scheduled for sampling in June 2006, but five wells (CS-MW8-LGR, CS-MW10-LGR, CS-MW12-LGR, CS-MW17-LGR, and CS-MWG-LGR) could not be sampled because the water level was below the dedicated low-flow pump depth. Three drinking water wells (CS-1, CSw9, and CS-10); one former drinking water well (CS-11); and one solar-powered submersible pump (CS-I) were sampled using high capacity submersible pumps. The remaining well (CS-2) was sampled using a low-flow pump. Off-post wells sampled in June 2006 included 28 private and public off-post drinking water wells (FO-17, FO-J1, HS-2, HS-3, I10-7, I10-4, JW-6, JW-7, JW-8, JW-13, JW-14, JW-27, JW-28, JW-29, JW-30, LS-2, LS-3, LS-4, LS-6, LS-5, LS-7, OFR-1, OFR-3, RFR-8, RFR-10, RFR-11, RFR-13, and RFR-14).

The maximum contaminant level (MCL) was not exceeded from any on-post monitoring wells for any analytes during the June 2006 event, except for the on-post drinking water well CS-9. Well CS-9 had detections of lead and mercury in concentrations slightly above drinking

water MCLs. Well CS-9 was taken out of service immediately upon receipt of the metals analysis results. Investigation indicated debris (pipe casing) present in the well borehole and additional reconditioning of the well is planned. PCE exceeded the MCL in off-post well RFR-10 only, from the off-post results. This well was previously fitted with a granular activated carbon (GAC) filtration system. On-post water elevations decreased an average of 9.71 feet this period due to the lack of rainfall related to the current drought conditions.

September 2006 Sampling

Sixteen on-post wells were scheduled for sampling in September 2006, but seven wells (CS-MW4-LGR, CS-MW6-LGR, CS-MW7-LGR, CS-MW11B-LGR, CS-MW18-LGR, CS-4, and CS-D) could not be sampled because the water level was below the dedicated low-flow pump depth. Well CS-9 was added to the sampling schedule due to elevated mercury and lead levels in the well during previous sampling. The remaining wells (CS-MW1-LGR, CS-MW2-LGR, CS-MW3-LGR, CS-MW5-LGR, CS-MW9-LGR, CS-MW11A-LGR, CS-MW16-LGR, and CS-MW19-LGR) were sampled using low-flow pumps. Wells CS-9 and CS-MW16-CC were sampled using submersible pumps. The Westbay-equipped wells (CS-WB01, CS-WB02, CS-WB03, and CS-WB04) were sampled using the Westbay sampling procedures.

Samples were collected from 24 off-post wells sampled in September 2006, including FO-J1, HS-1, HS-2, I10-7, I10-4, JW-7, JW-8, JW-12, JW-14, JW-27, JW-28, JW-29, JW-30, LS-3, LS-4, LS-6, LS-5, LS-7, OFR-1, OFR-3, RFR-9, RFR-10, RFR-11, and RFR-14. Eight post-GAC samples were also collected during the September 2006 event.

The MCL was exceeded for PCE, TCE, and *cis*-1,2-DCE in wells CS-MW1-LGR, CS-MW16-LGR, and CS-MW16-CC during the September 2006 event. No VOCs were detected in well CS-9. However, a metals sample was collected from well CS-9 in June 2006 after well rehabilitation was complete and lead and mercury were detected above the MCL. CSSA collected a confirmation sample September 13, 2006 and lead exceeded the MCL. A follow up sample was collected on September 28, 2006, by the TCEQ and lead again exceeded the MCL. Investigation revealed an obstruction in CS-9 at approximately 553 feet. The debris appears to be a section of 6-inch diameter steel pipe of unknown length that may be jammed against the borehole wall by fallen rock and other debris. The metal pipe and other man-made debris may be the source of lead and mercury detections. CSSA proposes to grout up the bottom of CS-9 to 2-3 feet above the top of the pipe obstruction. This would seal off the obstruction and any potentially lead-containing parts from the well and circulating waters. CSSA is currently working with the USEPA and TCEQ to plan additional rehabilitation of CS-9.

Three zones in CS-WB01, one zone in CS-WB02, seven zones in CS-WB03, and one zone in CS-WB04 had PCE above the MCL. Three zones in CS-WB01, two zones in CS-WB02, four zones in CS-WB03, and three zones in CS-WB04 had TCE above the MCL. In off-post wells, no VOCs exceeded the MCL in September 2006. On-post water levels decreased an average of 6.40 feet this period.

December 2006 Sampling

The sampling scheduled for December 2006 was completed December 15, 2006. Under the sampling frequencies of the LTMO study, no on-post wells were schedule for sampling in December 2006 and only off-post wells were sampled. Data packages will arrive from the laboratory next period and a report will be submitted. The Final On- and Off-post Quarterly Groundwater Monitoring Reports for March and June 2006 were submitted to TCEQ in Period 29. Results for the September sampling will be summarized in reports to be submitted to CSSA for review and comment during Period 30. After the December sampling event, an annual groundwater report will be submitted evaluating the 2006 groundwater data.

On-Post GAC Systems

CSSA operated and maintained the on-post GAC unit at Outfalls 002 and the permitted discharge at Outfall 004 this period. A Discharge Monitoring Report is submitted each month the system operates to comply with Texas Pollution Discharge Elimination System (TPDES) permit requirements. Outfall operations per month are included in the table below.

Table 2 On-post Outfall Operations

Month	Outfall 002	Outfall 004
May 2006	No discharge	No discharge
June 2006	No discharge	No discharge
July 2006	No discharge	No discharge
August 2006	No discharge	No discharge
September 2006	No discharge	No discharge
October 2006	224 gallons	No discharge
November 2006	1302 gallons	No discharge
December 2006	3192 gallons	No discharge

The water treated consisted of monitoring well purge water and water generated during development of wells CS-MW20-LGR, CS-MW22-LGR, CS-MW23-LGR and CS-MW24-LGR.

Off-Post GAC Systems

Based on sampling results received in 2001 and 2002 indicating VOC levels above or approaching the MCL, GAC filtration systems were installed at seven off-post wells. In accordance with the CSSA Off-Post Monitoring Program Response Plan dated June 2002, the off-post GAC wellhead treatment systems are maintained by CSSA. Monthly operations and maintenance (O&M) activities for the off-post residential GAC treatment systems were performed this period. Work included inspection and replacement, as needed, of the pre- and post-GAC filters at wells LS-6, LS-7, RFR-10, RFR-11, and OFR-3. Confirmation samples from systems installed at wells LS-2 and LS-3, RFR-11, LS-6, LS-7, OFR-3, and RFR-10 were collected in September 2006. All results for the post-GAC water samples were non-detect.

Data Validation and Verification

Laboratory results from sampling efforts and investigations are validated and verified by Parsons' chemists to ensure results are in compliance with CSSA Quality Assurance Program

Plan (QAPP) requirements. Data validation and verification continued during Period 29 under CSSA projects TO0006, TO0008, and TO0207.

Parsons conducted data validation for 37 data packages during Period 29:

- 28 related to TO0006 sampling activities; and
- Nine related to quarterly groundwater monitoring activities on both TO0008 and TO0207.

The TO0006 sampling included work performed at SWMU B-3 and the Westbay-equipped wells installed near SWMU B-3. These data packages were verified as screening-level data only. The TO0006 data packages were received from Gulf Coast Analytical Laboratories and Microbial Insights, and the TO0008 and TO0207 data packages were received from APPL and STL. Data packages were validated and verified in accordance with specific project DQOs and the CSSA QAPP.

Treatability Studies

SWMU B-3 Removal Action, Bioreactor and Treatability Testing

The Treatability Study subtask makes up approximately 10 percent of the RFI phase. As of the end of Period 29, this task is approximately 45 percent complete. As part of the SWMU B-3 treatability studies, a removal action was performed that removed all remaining wastes from five disposal trenches, and a bark mulch bioreactor treatment system was constructed in the open excavation. Clean backfill soil was also excavated from a sixth trench that was remediated in a separate removal action in 2002. The bioreactor was constructed by backfilling the excavation with a deciduous tree mulch/pea gravel mixture, and an underground water pipe system was installed to deliver untreated groundwater pumped from CS-MW-16 LGR and CS-MW-16 CC to the bioreactor to create saturated conditions within the trench.

The removal actions and bioreactor construction were started on May 1, and startup of the bioreactor is anticipated in January 2007. Bi-weekly status reports on the progress of the removal action and bioreactor construction were prepared periodically for distribution to TCEQ and USEPA. Copies of these reports are provided in **Attachment 5**.

CSSA received approval of the Underground Injection Control (UIC) authorization (5X2600431) application in July 2006. Once it was learned that the bioreactor actually included six trenches instead of the five anticipated, CSSA submitted an amended request to TCEQ to inject into all six constructed bioreactor trenches. This amendment request was submitted to TCEQ in December 2006. Groundwater sampling was continued to assess the performance of the treatability study consisting of substrate injection into the aquifer in the vicinity of CS-WB05.

On April 4 and 5, 2006, 150 gallons of a vegetable oil emulsion along with approximately 1,680 gallons of a water/lactate mixture were injected into well CS-B3-MW01 immediately northwest of the SWMU B-3 disposal area. The vegetable oil and lactate are designed to serve as organic substrates to increase the microbial activity in the formation to

increase the rates of contaminant degradation. Following injection of the substrate mixture, approximately 1,050 gallons of the water/lactate mixture were pumped into the injection well to flush the residual vegetable oil emulsion into the aquifer, and samples were collected 1 month, 2 months, 4 months, and 6 months after the injection date to evaluate performance. Results from these samples indicated a sharp reduction in the concentrations of PCE and TCE, while geochemical data show anaerobic conditions approaching methanogenesis have been created in the injection well, with some impacts observed in CS-WB05.

Quarterly UIC reports for the well injection treatability study (5X2600408) were submitted to TCEQ in September 2006 and December 2006 in compliance with the TCEQ's requirements. The December report requested that the quarterly reporting requirement be suspended since there are no current plans for any additional injections under this authorization number.

AOC-65 SVE System

CSSA continued to operate the SVE system located at AOC-65 with quarterly samples collected to assess mass removal rates in June, September, and December. The results of these samples show a continued reduction in the rate of mass removal the longer the extraction system continues to operate. A quarterly sampling event for the SVE system will be conducted during Period 30.

A Clean Air Act recordkeeping report was prepared in September 2006 to document the air emissions measured from the SVE systems operating at AOC-65 during the initial, 3-month, and 6-month sampling period.

SUMMARY OF CONTACTS

Letters summarizing results of the March 2006 and June 2006 off-post groundwater monitoring event were mailed to owners of the off-post wells in July and September 2006. Additional contacts with TCEQ or USEPA regarding Order-related activities occurred this period:

Correspondence:

- May 23, 2006 Submittal of RFI and Interim Waste Measures Management Plan;
- June 30, 2006 Submittal of CSSA Environmental Encyclopedia on DVD to TCEQ and USEPA;
- August 4, 2006 Submittal of March 2006 Groundwater Monitoring reports;
- August 18, 2006 Submittal of Final DQOs for Groundwater Monitoring Program;
- August 28, 2006 TCEQ approval of RFI WMP;
- November 16, 2006 Submittal of CSSA Environmental Encyclopedia on DVD to TCEQ and USEPA;

- September 5, 2006 Submittal of UIC Authorization 5X2600408 Quarterly Report to TCEQ for Period mid-April-July 2006;
- December 2006 Submittal of UIC Authorization 5X2600408 Quarterly Report to TCEQ for Period August-October 2006; and
- December 2006 Submittal of Amendment request for UIC Authorization 4X2600431 (increase injection trenches from five to six).

Meetings:

- September 29, 2006 Technical Interchange Meeting number four under TO0006 attended by TCEQ and USEPA to discuss SWMU B-3, site closures, groundwater monitoring, and miscellaneous items;
- November 9, 2006 Kickoff Meeting for DY01, SWMU and AOC Investigations;
- December 5, 2006 Public Meeting at Leon Springs Elementary School;
- December 7, 2006 Meeting under TO0006 attended by USEPA to discuss SWMU B-3 bioreactor monitoring; and
- December 7, 2006 Public Meeting at Fair Oaks Elementary School.

Copies of all correspondence are included in **Volume 1-7** of the **Environmental Encyclopedia**.

PROJECTED WORK FOR THE NEXT PERIOD

Fact Sheets

Fact Sheets covering the 2006 groundwater monitoring will be drafted for CSSA review.

Groundwater Monitoring

The December 2006 annual groundwater report will be prepared and submitted. Operations and maintenance at the residential GAC filtration systems (LS-6, LS-7, OFR-3, RFR-10, and RFR-11) and public water supply systems (LS-2/LS-3) will be conducted monthly during Period 30. The Westbay-equipped wells will be profiled and sampled in March 2007.

SWMU and AOC Investigations

Work plans for investigations at SWMUs and AOCs will be completed and submitted. Field work will be initiated. CSSA is also updating its Remedial Action Cost Engineering and Requirements costs estimates.

SWMU B-3 Removal Action, Bioreactor and Treatability Testing

Construction of the bioreactor at SWMU B-3 will be completed and the O&M activities will be initiated during Period 30. Monitoring requirements will be performed bi-monthly to

meet TCEQ's UIC Authorization requirements. The O&M WP will be completed in Period 30 before starting the injection operations.

Post-substrate injection monitoring of monitoring wells and Westbay wells will be performed around SWMU B-3 will be coordinated with performance monitoring planned for the bioreactor as described in the WPs associated with the Enhanced Anaerobic Bioremediation treatability study work plan.

**Table 3 Project Task Completion to Date for Open Projects Only
 (Values updated through December 30, 2006)**

Project Number	Description of Task	Relation to Order	Percent Complete	Start/End Dates
Previously completed TOs:				
Order 37	UST Investigations	NA	100%	1991/1995
Order 52	Investigation of F-14	I/SM/RFI	100%	1992/1993
Order 67	Groundwater sampling, Water Well Inventory, Hydrogeologic Report	I/SM/RFI	100%	1992/1996
Order 71	Environmental Assessment	I/M	100%	1992/1993
Order 126	B-20, F-14 Investigations, Background Soils Study	RFI	100%	1994/1996
RL17	Geophysical surveys, Well Installations Soil Sampling and Groundwater sampling	I/SM/RFI	100%	1995/2003
RL33	Site investigations, B-20 treatability studies and unexploded ordnance investigation	RFI	100%	1996/2002
Order 23	Groundwater Sampling	RFI	100%	1996/1998
RL53	SWMU and AOC Investigations	RFI	100%	1997/2003
RL83	Geophysical Surveys	RFI	100%	1999/2003
RL74	Current Conditions Report, Community Relations, Groundwater Monitoring	RFI	100%	1999/2001
DO5068	Soil Gas Surveys	RFI	100%	1999/2002
DO23	Groundwater Monitoring	RFI	100%	1998/2001
DO5084	Building 90 Investigation, Groundwater Monitoring	RFI	100%	September 2000 to 2003
TO0058	Treatability Study for AOC 65	RFI	100%	September 2001 to April 2005
TO0042	Well Installations and Groundwater Monitoring	I/SM/RFI	100%	September 2001 to March 2006
TO0017	East Pasture Removal Action	Other	100%	March 2005 to May 2006
TO0019	SWMU Closures	RFI	100%	June 2003 to November 2006
Current TOs:				
TO0005	Environmental Program Technical Support	I/SM/RFI		June 2003 to February 2007
	TO Management	I/SM/RFI	92%	
	Meetings	RFI	100%	
	Environmental Encyclopedia Updates	RFI	100%	
	LAN Support	NA	100%	

Project Number	Description of Task	Relation to Order	Percent Complete	Start/End Dates
	Quarterly Progress Reports	I/SM/RFI	100%	
	Publish Encyclopedia Website	I/SM/RFI	100%	
TO0008	Groundwater Monitoring	I/SM/RFI		May 2003 to February 2007
	TO Management	I/SM/RFI	94%	
	Meetings	I/SM/RFI	100%	
	WPs	I/SM/RFI	100%	
	On-Post Groundwater Sampling	I/SM/RFI	100%	
	Off-Post Groundwater Sampling	I/SM/RFI	100%	
	Analytical Validation, Verification, and ERPIMS	I/SM/RFI	100%	
	LAN and GIS Support	I/SM/RFI	100%	
	Effluent Re-Use Feasibility Study	NA	100%	
	Well Network Optimization Study	RFI	100%	
	Installation of Monitoring Wells	RFI	36%	
	CSM Update	RFI	3%	
TO0006	SWMU B-3 and AOC-65 Remediation	RFI		August 2004 to September 2007
	Project Management	I/SM/RFI	76%	
	Meetings	I/SM/RFI	78%	
	WPs & DQOs	RFI	100%	
	Outfall Reuse Design & Construct	I/SM/RFI	18%	
	B3 Remedial Optimization	RFI	76%	
	AST Upgrade	I/SM/RFI	18%	
	SVE Expand & O&M	RFI	27%	
	SWMU B-3 Monitoring Network	RFI	100%	
	Asphalt Removal Action	Other	100%	
	SWMU B-3 Removal Action	RFI	99%	
	Bioreactor Construction	RFI	92%	
	Bioreactor Testing & O&M	RFI	18%	
	CS-MW16-CC Pumping Test	RFI	98%	
TO0098	Miscellaneous Studies	Other		August 2004 to February 2007
	Project Management	Other	98%	
	TPDES Permit Application	Other	100%	
	Storm Water Procedures Manual	Other	100%	
	Installation Cultural and Natural Resources Management Plans	Other	99%	
	Environmental Noise Management Plan	Other	100%	
	Community Relations Plan	RFI	100%	
	Air Permit Update	Other	100%	
	GIS and LAN Support	Other	90%	
	Salado Creek Feasibility Study and Implementation	Other	95%	
	EMS Implementation and Training	Other	60%	

Project Number	Description of Task	Relation to Order	Percent Complete	Start/End Dates
TO0207	Environmental Support, Groundwater Monitoring	I/SM/RFI		August 2006 to March 2008
	Project Management	I/SM/RFI	18%	
	Meetings, teleconferences	I/SM/RFI	23%	
	Work Plans	I/SM/RFI	70%	
	On-post Groundwater Monitoring	I/SM/RFI	27%	
	Off-post Groundwater Monitoring	I/SM/RFI	26%	
	Data validation and verification	I/SM/RFI	26%	
	Public Meetings	I/SM/RFI	40%	
	DMS Development	I/SM/RFI	0%	
	Environmental Encyclopedia Updates	I/SM/RFI	12%	
	LAN Updates	I/SM/RFI	7%	
	USEPA Progress Reports	I/SM/RFI	3%	
DY01 (Parsons)	Environmental Compliance, SWMU and AOC closure Investigations	RFI		August 2006 to August 2007
	Project management	RFI	0%	
	Kickoff meeting/Data Management	RFI	0%	
	Work Plans	RFI	0%	
	Inner Cantonment Site Investigation	RFI	0%	
	North Pasture Site Investigations	RFI	0%	
	Environmental Support	RFI	0%	
	Recordkeeping	RFI	0%	
	Title 2 Services	RFI	0%	
	Project meetings	RFI	0%	
DY01 (Weston)	Affected Property Assessment Investigations	RFI	0%	September 2006 to September 2007
	Update Plans	Other	0%	
	Tank Inspections	Other	0%	
	Title 2 Services	RFI	0%	

Table 4 Project Contact Information

Name	Organization/Role	Street Address	City, State, Zip	Phone No.	Fax No.	E-mail
Beal, Christopher	CSSA/Portage Environmental, Geologist and Environmental Assistant	c/o Environmental Office, 25800 Ralph Fair Road	Boerne, TX 78015-4800	(210) 698-5208	(210) 295-7386	bealc@envirodept.net
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ATTACHMENT 1

ON-POST AND OFF-POST SAMPLED WELLS FIGURE

ATTACHMENT 2

SUMMARY OF STATUS OF EACH SWMU/AOC SITE

Attachment 2

Summary of Solid Waste Management Units and Area of Concern Status Table

Unit No.	Description	Investigation Report(s)	Recommendations	Requested Action				Closure Approved by	Closure Type
				RRS1	NFA	Delisting	TRRP		
B-1	Powder and ammo burn area (1954).	RFI/Closure Report July 2002	RRS1 Closure	X				November-02	RRS1
B-2	Small arms ammunition burning area (1954)	Draft RFI Report	Further investigation						
B-3	Landfill area (garbage disposal and burning trash); filled in 1990-91.	RFI Report March 2005	Conduct further treatment technology studies						
B-4	Classified burn area (documents and trash).	RFI Report June 2002	Removal of waste in trench and confirmation sampling						
B-5	Possible fired small arms ammo brass area. Not located.	RFI/Closure Report July 2002	RRS1 Closure	X				October-02	RRS1
B-6	Possible solid waste disposal area.	RFI/Closure Report July 2002	RRS1 Closure	X				October-02	RRS1
B-7	Possible fired small arms ammunition brass disposal area	RFI/Closure Report July 2002	RRS1 Closure	X				October-02	RRS1
B-8	Fired small arms ammo brass disposal area (piles of fire bricks, ammo shells)	RFI Report December 2003	Remediation of stockpiled and in-situ soils						
B-9	Miscellaneous solid waste (metal and weapons) disposal area.	RFI/Closure Report September 2002	RRS1 Closure	X				March-03	RRS1
B-10	Ammunition disposal area.	RFI/Closure Report May 2003	RRS1 Closure	X				January-04	RRS1
B-11	Miscellaneous solid waste disposal (ammo, scrap metal, const. debris).	RFI Closure Report June 04	RRS1 Closure	X				September-04	RRS1
B-12	Landfill, WPA trash when igloos were being built	RFI Report April-05	RRS1 Closure	X				July-05	RRS1
B-13	Trash dump area.	RFI Report June 2002	Excavation of waste and surface sampling.						
B-14	Possible fired brass area - not located.	Delisting Requested June 1997	Delisting			X			
B-15/16	Landfill (target vehicles, weapons mounts)	RFI Report October 2002	Removal of debris and sampling						
B-19	Solid waste disposal area (metals and weapons).	RFI/Closure Report June 2002	RRS1 Closure	X				September-02	RRS1
B-20/21	Former OB/OD area & ammunition disposal areas	RFI Report July 2002	Remediation of stockpiled and in-situ soils						
		Combined with B-20							
B-22	Burn area (artillery shells).	RFI/Closure Report August 2002	RRS1 Closure	X				December-02	RRS1
B-23	Disposal trenches (two green canisters)	RFI Report April 2005	RRS1 Closure	X				July-05	RRS1
B-23A	Disposal Trench (glass ampoules of liquid)	RFI Closure Report September 2004	RRS1 Closure	X				March-05	RRS1

Attachment 2

Summary of Solid Waste Management Units and Area of Concern Status Table

Unit No.	Description	Investigation Report(s)	Recommendations	Requested Action				Closure Approved by	Closure Type
				RRS1	NFA	Delisting	TRRP		
B-24	Spent ammo/rockets area	RFI Report May 2002	Remediation of stockpiled and in-situ soils						
B-25	Possible disposal trench	RFI Report April 2005	RRS1 Closure	X				July-05	RRS1
B-26	Possible disposal trench	Delisting Report August 2004	Delisting			X		November-04	Delisting
B-27	Sanitary landfill, consisting of 5-6 trenches (6 ft deep, 3 ft wide).	RFI Report July 2002	Removal of waste and confirmation sampling						
B-28	Disposal trenches (molten metal, ammo, ammo parts)	RFI Report April 2002	Remediation of stockpile soils						
B-29	Solid waste disposal area (in old quarry)	RFI Report April 2005	RRS1 closure	X					
B-30	Solid waste disposal area	RFI Report September 2004	RRS1 Closure	X				February-05	RRS1
B-31	Lead shot/sand pipe bedding	RFI/Closure Report July 2002	RRS1 Closure	X				November-02	RRS1
B-32	Lead shot/sand pipe bedding	RFI/Closure Report January 2003	RRS1 Closure	X				November-03	RRS1
B-33	Lead shot/sand pipe bedding	RFI Report September 2004	RRS1 Closure	X				November-04	RRS1
B-34	Maintenance pit floor drain and discharge point	RFI Report August 2002	Delineate contamination, disposal of soil				X		
B-71	Livestock area. Inner cantonment, SW of Well 16.	--	--						
Bldg 40	less-than 90-day accumulation container storage area	RFI/Closure Report September 2003	RRS1 Closure	X				January-04 and January-06	RRS1
Bldg 43	Inactive makeshift ammo demolition facility	RFI Report April 2005	RRS1 Closure	X				August-05	RRS1
DD	Dud ammunition disposal area	RFI Report January 2005	RRS1 Closure	X				April-05	RRS1
F-14	Hazardous waste storage area (<90-day)	RFI/Closure Report, 1995	RRS1 Closure	X				November-95	RRS1
I-1	Inactive incinerator (built in 1943), currently used for transformer storage	RFI Report February 2003	(Additional work)						
O-1	Waste liquid/sludge oxidation pond (1975)	RFI/Closure Report October 2000	RRS1 Closure	X				April-02	RRS1
Coal Bins	Coal bins (no longer in use)	Delisting Requested January 2003	Delisting			X			
AOC 35	Area immediately around Well 16. Northeast area of inner cantonment.	RFI/Closure Report October 2002	RRS1 Closure	X				February-03	RRS1

Attachment 2

Summary of Solid Waste Management Units
and Area of Concern Status Table

Unit No.	Description	Investigation Report(s)	Recommendations	Requested Action				Closure Approved by	Closure Type
				RRS1	NFA	Delisting	TRRP		
AOC 36	Area between Well 16 and B-3. Possible waste verified not present by magnetometer survey.	RFI/Closure Report April 2002	RRS1 Closure	X				August-02	RRS1
AOC 37	Livestock area. NW of Well 16 and N of Well D.	RFI/Closure Report June 2004	RRS1 Closure	X				January-05	NFA
AOC 38	Livestock area. Inner cantonment, SW of Well 16.	RFI Report September 2004	RRS1 Closure	X				February-05	RRS1
AOC 39	None. Area west of Well 16 between North Outer Rd and cantonment fence.	RFI/Closure Report April 2002	RRS1 Closure	X				September-02	RRS1
AOC 40	None. Area east of Well 16 between North Outer Rd and cantonment fence.	RFI/Closure Report May 2002	RRS1 Closure	X				August-02	RRS1
AOC 41	Gate area east of well 16. North Pasture, north of gate 6.	No Further Action Report April 2005	No Further Action		X			July-05	NFA
AOC 42	None. South of SWMUs B-28 and B-19, west of B-4.	RFI Report October 2002	Excavation and sampling.						
AOC 43	Shallow trench without mounds. Metal, UXO. Located 50 ft south of B-7.	RFI/Closure Report October 2002	RRS1 Closure	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	Delisting			X		July-05	Delisting
AOC 45	Flat area with spent and undamaged bullets. Located east of B-31, near bend in road.	--	--						
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	--	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	RRS1 Closure	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	Delisting Report			X		November-04	Delisting
AOC 49	Trench (4 x 7 ft) without surficial debris. Located SW of deer stand 41 in central East Pasture.	Delisting Report April 2005	Delisting			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	RRS1 Closure	X				April-05	RRS1
AOC 51	East pasture, east of active range, approximately 25 acres, area around B-9	--	--						
AOC 52	Area west of B-4 towards Salado Creek near trees, two trenches	--	--						
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	--	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	--	X				November-04	RRS1

Attachment 2

Summary of Solid Waste Management Units and Area of Concern Status Table

Unit No.	Description	Investigation Report(s)	Recommendations	Requested Action				Closure Approved by	Closure Type
				RRS1	NFA	Delisting	TRRP		
AOC 55	Landfill, south of Tenberg Drive, east of Salado Creek	RFI/Closure Report Feb 04	RRS1 Closure	X					
AOC 56	Landfill, at intersection of Bernard Road and East Outer Road, surface depression on south side of intersection	Closure Report June 04	RRS1 Closure	X				September-04	RRS1
AOC 57	East of Building 98 and KOA Area, cleaning/maintenance activities performed at temporary structures	--	--						
AOC 58	Suspected disposal trench within Inner Cantonment	RFI Report October 2002	Investigate anomaly						
AOC 59	Trench-type anomaly located west Test Pad in the East Pasture	--	--						
AOC 60	Trench located west of tunnel and entrance roadway in the East Pasture.	Delisting Report April 2005	Delisting			X		July-05	Delisting
AOC 61	Suspected landfill	RFI/Closure Report October 2002	RRS1 Closure	X				February-03	RRS1
AOC 62	Located west of monitoring well MW-2 and east of Salado Creek.	--	--						
AOC 63	Area consisting of 3 barrels containing rocks, south of deer stand 41 in the East Pasture.	--	--						
AOC 64	Area east of SWMU B-4; flares observed in the area	--	--						
AOC 65	A concrete pit area that housed a metal vat that contained TCE and PCE.	RFI Report August 2003	Additional investigation, remediation ongoing						
AOC 66	Area north of Well 16 in the outer cantonment.	Closure Report June 04	RRS1 Closure	X				February-05	NFA
AOC 67	Concrete pad near Building 90 housed a vat containing cleaning solvents.	RFI Report August 2002	--						
AOC 68	Area includes metal slag/debris storage area from Wheelabrator operations next to Building 90-2.	--	--						
AOC 69	Located on west side of CSSA.	--	--						
AOC 70	Building used to mix pesticides. Near Building 1.	--	--						
AOC 72	Area containing concrete, possible asbestos. Located east of Building 94, in SW CSSA.	--	--						
AOC 73	Ranch landfill with overgrown trenches. Near Well I1, in northwest corner of CSSA.	--	--						

ATTACHMENT 3

OVERALL H ORDER PERCENT COMPLETE

Attachment 3
Overall (H) Order Percent Complete

Task Name	% of Project	% of Phase	% Complete	% of Activity Complete	% of Task Complete
Interim Measures	30%				91%
Interim Measures Work Plan		7%	100%	7.0%	
Interim Measures Implementation Reports		70%	88%	61.6%	
		23%	97%	22.3%	
RCRA Facility Investigation	30%				72%
Preliminary Report		5%	100%	5%	
RFI Workplan		5%	97%	5%	
Facility Investigation		40%	69%	28%	
Risk Assessment		10%	99%	10%	
Investigation Analysis		10%	84%	8%	
Groundwater Investigation		15%	71%	11%	
Treatability Studies		10%	45%	5%	
Progress Reports		5%	25%	1%	
Corrective Measures Study	10%				0%
Identify and Develop Alternatives		15%	0%	0%	
Evaluate Alternatives		60%	0%	0%	
Reports		25%	0%	0%	
Corrective Measures Implementatio	30%				0%
Implementation Program Plan		5%	0%	0%	
Corrective Measure Design		15%	0%	0%	
Corrective Measure Construction		70%	0%	0%	
Reports		10%	0%	0%	
% of Phase Complete					48.93%

Attachment 3
Overall (H) Order Percent Complete

Task Name	% of Phase	% of Task	% Complete	% of Activity Complete	% of Activity Remaining	% of Task Complete	Comments/Status
1 Interim Measures Work Plan	7%					100.0%	
Draft IM Workplan		80%	100%	80%	0%		
Draft Final IM Workplan		15%	100%	15%	0%		
Final IM Workplan		5%	100%	5%	0%		
2 Interim Measures Implementation	70%					88.0%	
Sample 3 Off-Site Wells		1%	100%	1%	0%		
Sample 20 Off-Site Wells (6 events)		6%	100%	6%	0%		(remaining off-post sampling conducted under the RFI task)
2000 Groundwater Monitoring (4 events)		5%	100%	5%	0%		
2001 Groundwater Monitoring (4 events)		5%	100%	5%	0%		
2002 Groundwater Monitoring (4 events)		5%	100%	5%	0%		
2003 Groundwater Monitoring (4 events)		5%	100%	5%	0%		
2004 Groundwater Monitoring (4 events)		5%	100%	5%	0%		
2005 Groundwater Monitoring (4 events)		5%	100%	5%	0%		
2006 Groundwater Monitoring		5%	80%	4%	20%		
Locate and map off-site wells		1%	100%	1%	0%		
O-1 Soil Borings		3%	100%	3%	0%		
O-1 Excavation, Stabilization, Diposal		15%	100%	15%	0%		
Establish Treatment Unit		1%	0%	0%	100%		may or may not be necessary. When treatability studies results have been evaluated
Determine appropriate disposition of soil piles		7%	100%	7%	0%		Unfunded CSSA future work.
Treat/dispose of soil piles		20%	50%	10%	50%		Not included as IM in the Order.
AOC 50 Excavation and Disposal		3%	100%	3%	0%		
AOC 65 Excavation and Disposal		8%	100%	8%	0%		
3 Reports	23%					97.1%	
Quarterly Progress Report 1 (August 1999)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 2 (November 1999)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 3 (February 2000)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 4 (May 2000)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 5 (August 2000)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 6 (November 2000)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 7 (February 2001)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 8 (May 2001)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 9 (August 2001)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 10 (November 2001)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 11 (February 2002)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 12 (May 2002)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 13 (August 2002)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 14 (November 2002)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 15 (February 2003)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 16 (May 2003)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 17 (August 2003)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 18 (November 2003)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 19 (February 2004)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 20 (May 2004)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 21 (August 2004)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 22 (November 2004)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 23 (February 2005)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 24 (May 2005)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 25 (August 2005)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 26 (October 2005)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 27 (January 2006)		0.83%	100%	0.83%	0%		
Quarterly Progress Report 28 (April 2006)		0.83%	100%	0.83%	0%		
Semi-annual Progress Rpt 29 (Dec 2006)		0.83%	100%	0.83%	0%		
Semi-annual Progress Rpt 30 (July 2007)		0.83%	0%	0.00%	100%		
Semi-annual Progress Rpt 31 (Dec 2007)		0.83%	0%	0.00%	100%		
Semi-annual Progress Rpt 32 (July 2008)		0.83%	0%	0.00%	100%		Unfunded CSSA future work.
Semi-annual Progress Rpt 33 (Dec 2008)		0.83%	0%	0.00%	100%		Unfunded CSSA future work.
Draft O-1 IM Report		19%	100%	19%	0%		
Draft final O-1 IM Report		12%	100%	12%	0%		
Final O-1 IM Report		5%	100%	5%	0%		
Draft Soil Pile IM Report		20%	100%	20%	0%		
Draft Final Soil Pile IM Report		12%	100%	12%	0%		
Final Soil Pile IM Report		5%	100%	5%	0%		
% of Phase Complete						90.93%	

Attachment 3
Overall (H) Order Percent Complete

Task Name	% of Phase	% of Task	% Complete	% of Activity Complete	% of Activity Remaining	% of Task Complete	Comments/Status
Preliminary Report	5%					100.0%	
Draft DCC Report		80%	100%	80%	0%		
Draft Final DCC Report		15%	100%	15%	0%		
Final DCC Report		5%	100%	5%	0%		
RFI Workplan	5%					97.4%	
Draft Community Relations Plan		25%	100%	25%	0%		
Draft Final CRP		5%	100%	5%	0%		
Final CRP (2006)		10%	100%	10%	0%		
Draft RFI Workplans		20%	100%	20%	0%		
Draft Final RFI Workplan		5%	100%	5%	0%		
Final RFI Workplans		5%	98%	5%	2%		
Draft Closure Plan (TO 0019)		15%	100%	15%	0%		
Final Closure Plan (TO 0019)		5%	100%	5%	0%		
Draft GW Mon Plan (TO 0207)		8%	75%	6%	25%		
Final GW Mon Plan (TO 0207)		2%	75%	2%	25%		
Facility Investigation¹	40%					69.2%	
Small Areas (0-2 acres in size)							
B-3 Investigation/Report		1.22%	80%	0.976%	20%		Final report submitted, additional work required.
B-4 Investigation/Report		1.22%	80%	0.976%	20%		Final report submitted. Additional work required.
B-5 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved Oct 02.
B-6 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved Oct 02.
B-7 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved Oct 02.
B-8 Investigation/Report		1.22%	80%	0.976%	20%		Final report submitted. Additional work required.
B-9 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved Mar 03
B-10 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved Jan 04
B-11 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved Sept 04
B-12 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved July 05
B-13 Investigation/Report		1.22%	80%	0.976%	20%		Final report submitted. Additional work required.
B-15/16 Investigation/Report		1.22%	80%	0.976%	20%		Final report submitted. Additional work required.
B-19 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved Sept 02
B-23 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved July 05
B-23A Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved Mar 05
B-25 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved July 05
B-26 Investigation/Report		1.22%	100%	1.220%	0%		Delisting approved November 04
B-27 Investigation/Report		1.22%	80%	0.976%	20%		Final report submitted, additional work required
B-28 Investigation/Report		1.22%	80%	0.976%	20%		Final report submitted, additional work required
B-30 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved Feb 05
B-31 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved Nov 02
B-32 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved Nov 03
B-33 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved Nov 04
B-34 Investigation/Report		1.22%	80%	0.976%	20%		Final report and Addendum report submitted, additional work required
B-71 Investigation/Report		1.22%	0%	0.000%	100%		Not investigated
BLDG-43 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved Sept 05
Demo Dud Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved Apr 05
F-14 Investigation/Report		1.22%	100%	1.220%	0%		Closure approved Nov 95
I-1 Investigation/Report		1.22%	80%	0.976%	20%		Final RFI report submitted.
AOC 35 Investigation/Report		1.22%	100%	1.220%	0%		Additional work required.
AOC 37 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved Feb 03
AOC 39 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved Jan 05
AOC 40 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved Sept 02
AOC 43 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved Aug 02
AOC 44 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved Feb 03
AOC 45 Investigation/Report		1.22%	0%	0.000%	100%		Delisting approved July 2005.
AOC 46 Investigation/Report		1.22%	100%	1.220%	0%		RRS1 closure approved July 05

Attachment 3
Overall (H) Order Percent Complete

Task Name	% of Phase	% of Task	% Complete	% of Activity Complete	% of Activity Remaining	% of Task Complete	Comments/Status
AOC 47 Investigation/Report		1.22%	100%	1.220%	0%		Closure approved Sep 02
AOC 49 Investigation/Report		1.22%	100%	1.220%	0%		Delisting approved July 2005
AOC 50 Investigation/Report		1.22%	100%	1.220%	0%		Closure approved Apr 05
AOC 52 Investigation/Report		1.22%	0%	0.000%	100%		
AOC 53 Investigation/Report		1.22%	100%	1.220%	0%		closure approved July 2005.
AOC 54 Investigation/Report		1.22%	100%	1.220%	0%		Closure approved Nov 04
AOC 55 Investigation/Report		1.22%	99%	1.207%	1%		closure report submitted
AOC 56 Investigation/Report		1.22%	100%	1.220%	0%		Closure approved Sept 04
							Final RFI report submitted, additional work recommended.
AOC 58 Investigation/Report		1.22%	80%	0.976%	20%		
AOC 59 Investigation/Report		1.22%	0%	0.000%	100%		
AOC 60 Investigation/Report		1.22%	100%	1.220%	0%		Delisting approved July 2005.
AOC 61 Investigation/Report		1.22%	100%	1.220%	0%		Closure approved Feb 03
AOC 62 Investigation/Report		1.22%	0%	0.000%	100%		
AOC 63 Investigation/Report		1.22%	0%	0.000%	100%		
AOC 64 Investigation/Report		1.22%	0%	0.000%	100%		
AOC 68 Investigation/Report		1.22%	0%	0.000%	100%		
AOC 69 Investigation/Report		1.22%	0%	0.000%	100%		
AOC 70 Investigation/Report		1.22%	0%	0.000%	100%		
AOC 72 Investigation/Report		1.22%	0%	0.000%	100%		
AOC 73 Investigation/Report		1.22%	0%	0.000%	100%		
Medium Areas (2-10 acres in size)							
B-1 Investigation/Report		1.2%	100%	1.220%	0%		Closure approved Nov 02 Final report submitted, additional work recommended
B-2 Investigation/Report		1.2%	80%	0.976%	20%		
B-22 Investigation/Report		1.2%	100%	1.220%	0%		Closure approved Dec 02 Final report submitted, additional work recommended
B-24 Investigation/Report		1.2%	80%	0.976%	20%		Final RRS1 closure report submitted
B-29 Investigation/Report		1.2%	99%	1.207%	1%		Closure approved Aug 02
AOC 36 Investigation/Report		1.2%	100%	1.220%	0%		Closure approved July 2005.
AOC 41 Investigation/Report		1.2%	100%	1.220%	0%		Final report submitted, additional work recommended
AOC 42 Investigation/Report		1.2%	80%	0.976%	20%		
AOC 48 Investigation/Report		1.2%	100%	1.220%	0%		Delisting approved Nov 04
AOC 57 Investigation/Report		1.2%	0%	0.000%	100%		
Large Areas (>10 acres in size)							
B-20/21 Investigation/Report		1.2%	80%	0.976%	20%		Final report submitted, additional work recommended
AOC 38 Investigation/Report		1.2%	100%	1.220%	0%		Closure approved February 05
AOC 51 Investigation/Report		1.2%	0%	0.000%	100%		
AOC 66 Investigation/Report		1.2%	100%	1.220%	0%		NFA Closure approved Feb 05
RMU-1 Investigation/Report		1.2%	0%	0.000%	100%		
RMU-5 Investigation/Report		1.2%	0%	0.000%	100%		
AOC 65 Investigation/Report		1.2%	80%	0.976%	20%		Final report submitted, additional work recommended
AOC 67 Investigation/Report		1.2%	80%	0.976%	20%		Final report submitted, additional work recommended
AOC 68 Investigation/Report		1.2%	0%	0.000%	100%		
AOC 69 Investigation/Report		1.2%	0%	0.000%	100%		
AOC 70 Investigation/Report		1.2%	0%	0.000%	100%		
Coal Bins Investigation/Report		1.2%	100%	1.220%	0%		Site being de-listed as a SWMU
RMU-2 Investigation/Report		1.2%	0%	0.000%	100%		
RMU-3 Investigation/Report		1.2%	0%	0.000%	100%		
RMU-4 Investigation/Report		1.2%	0%	0.000%	100%		
Groundwater Investigation							
		15%				71%	
Well Installation				8%	20%		Well installations pending under TO 08
Groundwater Monitoring 1999		4.2%	100%	4%	0%		
Groundwater Monitoring 2000		4.2%	100%	4%	0%		
Groundwater Monitoring 2001		4.2%	100%	4%	0%		
Groundwater Monitoring 2002		4.2%	100%	4%	0%		
Groundwater Monitoring 2003		4.2%	100%	4%	0%		

Attachment 3
Overall (H) Order Percent Complete

Task Name	% of Phase	% of Task	% Complete	% of Activity Complete	% of Activity Remaining	% of Task Complete	Comments/Status
Groundwater Monitoring 2004		4.2%	100%	4%	0%		
Groundwater Monitoring 2005		4.2%	100%	4%	0%		
Groundwater Monitoring 2006		4.2%	80%	3%	20%		Fieldwork complete to Mar 06
Groundwater Monitoring 2007		4.2%	0%	0%	100%		incomplete
Groundwater Monitoring 2008		4.2%	0%	0%	100%		incomplete
Groundwater Monitoring 2009		4.2%	0%	0%	100%		incomplete
Conceptual Site Model (CSM)		20.0%	100%	20%	0%		Final submitted May 2005
CSM Update		4.0%	0%	0%	100%		
LTM0 2005 (optimization study)		10%	100%	10%	0%		Complete
LTM0 2010 (review of optimization)		10%	0%	0%	100%		incomplete
Risk Assessment	10%					99%	
Draft TAD		10%	100%	10%	0%		
Draft Final TAD		4%	100%	4%	0%		
Final TAD		1%	0%	0%	100%		Complete when analytical data is available for full evaluation.
Draft CSM		80%	100%	80%	0%		
Final CSM		5%	100%	5%	0%		
Investigation Analysis	10%					84%	
Collect Background Data		10%	100%	10%	0%		Information included in facility investigation reports; percent complete based on overall percent complete of facility investigation tasks.
Draft Investigation Analysis		85%	82%	70%	18%		
Final Investigation Analysis		5%	82%	4%	18%		Information included in facility investigation reports; percent complete based on overall percent complete of facility investigation tasks.
Treatability Studies	10%					45%	
Draft Treatability Study Report B-20		15%	100%	15%	0%		
Final Treatability Study Report B-20		5%	100%	5%	0%		
Continued O&M for B-3		10%	100%	10%	0%		
AOC-65 Treatability Studies		10%	80%	8%	20%		
Draft Treatability Study & Technology Evaluation Reports		10%	70%	7%	30%		
Final Treatability Study		25%	0%	0%	100%		
Recharge Study		25%	100%	25%	0%		
Progress Reports	5%					24.6%	
Quarter 1 (August 1999)		0.85%	100%	0.85%	0%		
Quarter 2 (November 1999)		0.85%	100%	0.85%	0%		
Quarter 3 (February 2000)		0.85%	100%	0.85%	0%		
Quarter 4 (May 2000)		0.85%	100%	0.85%	0%		
Quarter 5 (August 2000)		0.85%	100%	0.85%	0%		
Quarter 6 (November 2000)		0.85%	100%	0.85%	0%		
Quarter 7 (February 2001)		0.85%	100%	0.85%	0%		
Quarter 8 (May 2001)		0.85%	100%	0.85%	0%		
Quarter 9 (August 2001)		0.85%	100%	0.85%	0%		
Quarter 10 (November 2001)		0.85%	100%	0.85%	0%		
Quarter 11 (February 2002)		0.85%	100%	0.85%	0%		
Quarter 12 (May 2002)		0.85%	100%	0.85%	0%		
Quarter 13 (August 2002)		0.85%	100%	0.85%	0%		
Quarter 14 (November 2002)		0.85%	100%	0.85%	0%		
Quarter 15 (February 2003)		0.85%	100%	0.85%	0%		
Quarter 16 (May 2003)		0.85%	100%	0.85%	0%		
Quarter 17 (August 2003)		0.85%	100%	0.85%	0%		
Quarter 18 (November 2003)		0.85%	100%	0.85%	0%		
Quarter 19 (February 2004)		0.85%	100%	0.85%	0%		
Quarter 20 (May 2004)		0.85%	100%	0.85%	0%		
Quarter 21 (August 2004)		0.85%	100%	0.85%	0%		
Quarter 22 (November 2004)		0.85%	100%	0.85%	0%		
Quarter 23 (February 2005)		0.85%	100%	0.85%	0%		
Quarter 24 (May 2005)		0.85%	100%	0.85%	0%		

Attachment 3
Overall (H) Order Percent Complete

Task Name	% of Phase	% of Task	% Complete	% of Activity Complete	% of Activity Remaining	% of Task Complete	Comments/Status
Quarter 25 (August 2005)		0.85%	100%	0.85%	0%		
Quarter 26 (November 2005)		0.85%	100%	0.85%	0%		
Quarter 27 (February 2006)		0.85%	100%	0.85%	0%		
Quarter 28 (May 2006)		0.85%	100%	0.85%	0%		
Semi-Annual 29 (December 2006)		0.85%	100%	0.85%	0%		
Semi-Annual 30 (July 2007)		0.85%	0%	0.00%	100%		
Semi-Annual 31 (December 2007)		0.85%	0%	0.00%	100%		
Semi-Annual 32 (July 2008)		0.85%	0%	0.00%	100%		
Semi-Annual 33 (December 2008)		0.85%	0%	0.00%	100%		
Semi-Annual 34 (July 2009)		0.85%	0%	0.00%	100%		
Semi-Annual 35 (December 2009)		0.85%	0%	0.00%	100%		
Semi-Annual 36 (July 2010)		0.85%	0%	0.00%	100%		
Semi-Annual 37 (December 2010)		0.85%	0%	0.00%	100%		
(Add'l Quarters - rows hidden)							
% of Phase Complete						72.18%	
¹ Breakdown of percent complete for RFI facility investigations: Field work complete (25%), data validation (20%), boring logs (if applicable)(10%), analytical data tables (10%), figures (10%), draft report (20%), final report (5%). Note: if additional investigations are needed, then the percent complete will need to be adjusted on a site by site basis.							

Attachment 3
Overall (H) Order Percent Complete

Task Name	% of Phase	% of Task	% Complete	% of Activity Complete	% of Task Complete
Identify and Develop Alternatives	15%				0.0%
Update DCC Report		35%	0%	0%	
Establish Corrective Action Objectives		30%	0%	0%	
ID, Screen, Develop CM Alternatives		35%	0%	0%	
Evaluate Alternatives	60%				0.0%
Draft Description of CM Alternative		90%	0%	0%	
Final Description of CM Alternative		10%	0%	0%	
???				0%	
Reports	25%				0.0%
Draft CMS Report		75%	0%	0%	
Final CMS Report		5%	0%	0%	
Quarter 1 Progress Report		5%	0%	0%	
Quarter 2 Progress Report		5%	0%	0%	
Quarter 3 Progress Report		5%	0%	0%	
Quarter 4 Progress Report		5%	0%	0%	
???			0%	0%	
% of Phase Complete					0.0%

Attachment 3
Overall (H) Order Percent Complete

Task Name	% of Phase	% of Task	% Complete	% of Activity Complete	% of Task Complete
Implementation Program Plan	5%				0.0%
Draft Program Management Plan		40%	0%	0%	
Final Program Management Plan		10%	0%	0%	
Draft Update to CRP		40%	0%	0%	
Final Update to CRP		10%	0%	0%	
Corrective Measure Design	15%				0.0%
Draft CMD Report		90%	0%	0%	
Final CMD Report		10%	0%	0%	
Corrective Measure Construction	70%				0%
Draft Construction QAPP		35%	0%	0%	
Final Construction QAPP		5%	0%	0%	
Implementation of Construction QAPP		60%	0%	0%	
Reports	10%				0%
Progress Report 1		25%	0%	0%	
Progress Report 2		25%	0%	0%	
Progress Report 3		25%	0%	0%	
Progress Report 4		25%	0%	0%	
????					
% of Phase Complete					0.00%

ATTACHMENT 4

GROUNDWATER RESULTS SUMMARY

June 2006 On-Post Quarterly Groundwater Results, Detected Analytes

Well ID	Date Sampled	Bromo-dichloro-methane	Bromoform	Chloroform	cis -1,2-DCE	Dibromo-chloro-methane	Methylene chloride	PCE	Toluene	trans -1,2-DCE	TCE	Comment
CS-1	6/12/06	--	--	--	--	--	0.60F	--	--	--	--	
CS-9	6/13/06	--	--	1.1	--	--	1.1F	--	0.84F	--	--	
CS-2	6/13/06	--	--	--	--	--	--	--	--	--	--	
CS-11	6/14/06	--	--	--	--	--	0.24F	--	--	--	--	
CS-11 FD	6/14/06	--	--	--	--	--	0.23F	--	--	--	--	
CS-10	6/22/06	0.30F	0.30F	9.4	--	0.75	--	--	16	--	--	Trihalomethane hits due to disinfection after well rehabilitation.
CS-1	6/15/06	--	--	--	--	--	--	--	--	--	--	

Laboratory Detection Limits

Method Detection Limit	MDL	0.21	0.22	0.05	0.098	0.05	0.21	0.14	0.07	0.06	0.1
Reporting Limit	RL	0.8	1.2	0.4	1.2	0.5	2	1.4	1.1	0.6	1
Maximum Contaminant Level	MCL	80	--	100	70	100	5	5	1000	100	5

Well ID	Sample Date	Barium	Chromium	Copper	Nickel	Zinc	Arsenic	Cadmium	Lead	Mercury
CS-1	6/15/2006	32	--	--	--	220	0.4F	--	0.98F	--
CS-10	6/22/2006	46	--	--	--	430	0.63F	--	0.71F	0.58F
CS-11	6/14/2006	21	--	--	--	830	0.26F	--	14	--
CS-11 FD	6/14/2006	22	--	--	--	920	0.28F	0.087F	13	--
CS-9	6/13/2006	34	8.8F	28	8.0F	3400	1.1F	0.072F	18	5.9
CS-1	6/12/2006	140	--	12	--	40F	0.41F	--	2	--

Laboratory Detection Limits

Method Detection Limit	MDL	1	2.6	4.5	7.8	4.5	0.21	0.04	0.18	0.027
Reporting Limit	RL	5	10	10	10	50	20	2	2	1
Maximum Contaminant Level	MCL	2000	100	1300	--	--	10	5	15	2

Precipitation per Quarter:	Mar-06	Jun-06
WS-S	1.11	11.18
WS-N	2.26	5.63

BOLD	Value > or = MCL
BOLD	MCL > Value > or = RL
BOLD	RL > Value > MDL

Data Qualifiers:

- 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 at or below the MDL.
- M- Matrix Effect Present

"--" indicates the result was non-detect
All values are reported in µg/L

June 2006
Off-Post Groundwater Results, Detected Analytes Only

Comm- Community	Well ID	Date Sampled	Bromo- dichloro- methane	Chloroform	cis-1,2-DCE	Dichloro- difluoro- methane	Methylene Chloride	Naphthalene	TCE	PCE	Toluene	Comments
Fair Oaks	FO-17	6/19/2006	0.06M	--	0.07M	0.11M	0.51M	0.07M	--	--	--	
	FO-J1	6/20/2006	0.06M	--	0.07M	0.11M	0.51M	0.07M	--	0.08F	--	
Hidden Springs Estates	HS-2	6/21/2006	--	--	--	0.11M	--	0.07M	--	0.07F	--	
	HS-3	6/21/2006	--	--	--	0.11M	--	0.07M	--	--	--	
IH-10 Area	I10-4	6/22/2006	--	--	--	0.11M	--	0.07M	--	--	--	
	I10-7	6/20/2006	0.06M	--	0.07M	0.11M	0.51M	0.07M	--	--	--	
Jackson Woods Subdivision	JW-6	6/20/2006	0.06M	--	0.07M	0.11M	0.51M	0.07M	--	--	--	
	JW-7	6/20/2006	0.06M	--	0.07M	0.11M	0.51M	0.07M	--	0.56F	--	
	JW-8	6/22/2006	--	--	--	0.11M	--	0.07M	--	0.40F	--	
	JW-13	6/20/2006	0.06M	--	0.07M	0.11M	0.51M	0.07M	--	--	--	
	JW-13 FD	6/20/2006	0.06M	--	0.07M	0.11M	0.51M	0.07M	--	--	--	
	JW-14	6/20/2006	0.06M	--	0.07M	0.11M	0.51M	0.07M	--	--	--	
	JW-27	6/21/2006	--	--	--	0.11M	--	0.07M	--	0.07F	--	
	JW-28	6/21/2006	--	--	--	0.11M	--	0.07M	--	--	0.14F	
	JW-28 FD	6/21/2006	--	--	--	0.11M	--	0.07M	--	--	0.12F	
	JW-29	6/20/2006	0.06M	--	0.07M	0.11M	0.51M	0.07M	--	--	--	
JW-30	6/22/2006	--	--	--	0.11M	--	0.07M	--	0.22F	--		
Leon Springs Villa	LS-2	6/21/2006	--	0.10F	--	0.11M	--	0.07M	0.58F	1.71	--	
	LS-3	6/21/2006	--	--	--	0.11M	--	0.07M	0.34F	0.92F	--	
	LS-4	6/21/2006	--	--	--	0.11M	--	0.07M	--	0.09F	--	
	LS-5	6/19/2006	0.06M	--	0.07M	0.11M	0.51M	0.07M	0.09F	--	--	
	LS-6	6/19/2006	0.06M	--	--	0.11M	0.51M	0.07M	0.95F	0.95F	--	
	LS-7	6/19/2006	0.06M	--	0.07M	0.11M	0.51M	0.07M	0.21F	3.38	--	
Old Fredericksburg Road	OFR-1	6/22/2006	--	--	--	0.11M	--	0.07M	--	0.44F	--	
	OFR-1 FD	6/22/2006	--	--	--	0.11M	--	0.07M	--	0.37F	--	
	OFR-3	6/19/2006	0.06M	--	0.07M	1.54M	0.51M	0.07M	0.60F	0.57F	--	
Ralph Fair Road	RFR-8	6/22/2006	--	--	--	0.11M	--	0.07M	--	--	--	
	RFR-10	6/19/2006	0.06M	--	0.15M	0.11M	0.51M	0.07M	2.88	10.85	--	
	RFR-11	6/19/2006	0.06M	--	0.07M	0.11M	0.51M	0.07M	1.5	0.33F	--	
	RFR-13	6/22/2006	--	--	--	0.11M	--	0.07M	--	--	--	
	RFR-14	6/21/2006	--	--	--	0.11M	--	0.07M	--	0.24F	--	
Laboratory Detection Limits												
Method Detection Limit	MDL		0.06	0.06	0.07	0.11	0.51	0.07	0.05	0.06	0.06	
Reporting Limit	RL		0.8	0.3	1.2	1.0	2.0	0.4	1.0	1.4	1.1	
Max. Contaminant Level	MCL		--	--	70	--	5	--	5.0	5.0	1000	

BOLD	Value > or = MCL
BOLD	MCL > Value > or = RL
BOLD	RL > Value > MDL

This table presents detected analytical results only.
All samples were analyzed by APPL, Inc.

Abbreviations/Notes:

FD Field Duplicate
MDL Method Detection Limit
N Environmental Sample
SQL Sample Quantitation Limit
DL Dilution

Data Qualifiers:

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 at or below the MDL.
M- Matrix Effect Present

Table 3-2
September 2006 On-Post Quarterly Groundwater Results, Detected Analytes

Well ID	Date Sampled	1,1-DCE	cis -1,2-DCE	PCE	trans -1,2-DCE	TCE	Vinyl Chloride	Additional Comments
CS-MW1-LGR	9/12/06	--	18	10	0.23F	26	--	
CS-MW2-LGR	9/13/06	--	1.6	0.23F	--	0.24F	--	
CS-MW2-LGR FD	9/13/06	--	1.6	0.23F	--	0.22F	--	
CS-MW3-LGR	9/12/06	--	--	--	--	--	--	
CS-MW5-LGR	9/13/06	--	0.81F	0.54F	--	0.76F	--	
CS-MW9-LGR	9/12/06	--	--	--	--	--	--	
CS-MW11A-LGR	9/13/06	--	--	1.2F	--	--	--	
CS-MW16-LGR	9/12/06	--	68*	54	0.39F	64*	--	
CS-MW16-CC	9/12/06	0.47F	100*	--	34	7.8	0.57F	
CS-MW19-LGR	9/13/06	--	--	0.37F	--	--	--	
CS-9	9/13/06	--	--	--	--	--	--	
Laboratory Detection Limits and Maximum Contaminant Levels								
Method Detection Limit	MDL	0.074	0.098	0.14	0.056	0.10	0.078	
Reporting Limit	RL	1.2	1.2	1.4	0.60	1.0	1.1	
Maximum Contaminant Level	MCL	7	70	5	100	5	2	

Well ID	Sample Date	Barium	Chromium	Copper	Nickel	Zinc	Arsenic	Cadmium	Lead	Mercury
CS-9	9/13/06	0.036	--	0.0079F	--	1.7	0.00036F	0.00011F	0.028	0.00036F
Laboratory Detection Limits and Maximum Contaminant Levels										
Method Detection Limit	MDL	0.001	0.0026	0.0045	0.0078	0.0045	0.00021	0.00004	0.00018	0.000027
Reporting Limit	RL	0.005	0.01	0.01	0.01	0.05	0.02	0.002	0.002	0.001
Maximum Contaminant Level	MCL	2	0.1	1.3	--	--	0.01	0.005	0.015	0.002

Precipitation per Quarter:	Mar-06	Jun-06	Sep-06
WS-S	1.11	11.18	5.84
WS-N	2.26	5.63	5.86

BOLD = Above the MCL
BOLD = Above the RL
BOLD = Above the MDL (F flagged)
 * = dilution run was performed. Values are in µg/L

Data Qualifiers:
 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 at or below the MDL.
 M- Matrix Effect Present

"--" indicates the result was non-detect
 All values are reported in µg/L

Table 2-2
September 2006 Off-Post Groundwater Results, Detected Analytes Only

Subdivision	Well ID	Date Sampled	1,1-DCE	cis -1,2-DCE	PCE	trans -1,2-DCE	TCE	Vinyl Chloride	Comments
Fair Oaks	FO-J1	9/19/06	--	--	0.36F	--	--	--	
Hidden Springs Estates	HS-1	9/19/06	--	--	--	--	--	--	
	HS-2	9/19/06	--	--	--	--	--	--	
IH-10 Area	I10-4	9/19/06	--	--	0.62F	--	0.29F	--	
	I10-7	9/19/06	--	--	--	--	--	--	
Jackson Woods Subdivision	JW-7	9/18/06	--	--	--	--	--	--	
	JW-8	9/19/06	--	--	0.43F	--	--	--	
	JW-12	9/19/06	--	--	--	--	--	--	
	JW-14	9/19/06	--	--	--	--	--	--	
	JW-27	9/19/06	--	--	--	--	--	--	
	JW-28	9/19/06	--	--	--	--	--	--	
	JW-29	9/19/06	--	--	--	--	--	--	
Leon Springs Villas	JW-30	9/19/06	--	--	--	--	--	--	
	LS-3	9/19/06	--	--	0.99J	--	0.54J	--	
	LS-2/LS-3 A1	9/19/06	--	--	--	--	--	--	
	LS-2/LS-3 A2	9/19/06	--	--	--	--	--	--	
	LS-4	9/19/06	--	--	--	--	--	--	
	LS-5	9/18/06	--	--	--	--	--	--	
	LS-6	9/18/06	--	--	--	--	1.8	--	
	LS-6 A2	9/18/06	--	--	--	--	--	--	
Old Fredericksburg Road	LS-7	9/18/06	--	--	2.98	--	--	--	
	LS-7 A2	9/18/06	--	--	--	--	--	--	
	OFR-1	9/19/06	--	--	0.28F	--	--	--	
	OFR-1 FD	9/19/06	--	--	0.28F	--	--	--	
Ralph Fair Road	OFR-3	9/18/06	--	--	2.41	--	2	--	
	OFR-3 A2	9/18/06	--	--	--	--	--	--	
Ralph Fair Road	RFR-9	9/19/06	--	--	--	--	--	--	
	RFR-9 FD	9/19/06	--	--	--	--	--	--	
	RFR-10	9/18/06	--	0.33F	1.86	5.23	--	--	
	RFR-10 FD	9/18/06	--	0.36F	1.83	5.4	--	--	
	RFR-10 A2	9/18/06	--	--	--	--	--	--	
	RFR-10 B2	9/18/06	--	--	--	--	--	--	
	RFR-11	9/18/06	--	--	--	--	1.47	--	
	RFR-11 A2	9/18/06	--	--	--	--	--	--	
	RFR-14	9/19/06	--	--	--	--	--	--	
Laboratory Detection Limits									
	Method Detection Limit	MDL	0.120	0.070	0.06	0.080	0.05	0.080	
	Reporting Limit	RL	1.2	1.2	1.4	0.60	1.0	1.1	
	Max. Detection Limit	MCL	7	70	5	100	5	2	

BOLD	= Above the MCL
BOLD	= Above the RL
BOLD	= Above the MDL (F flagged)

This table presents detected analytical results only.
All samples were analyzed by APPL, Inc.

Abbreviations/Notes:
FD Field Duplicate
MDL Method Detection Limit
N Environmental Sample
SQL Sample Quantitation Limit
DL Dilution

Data Qualifiers:
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 at or below the MDL.

ATTACHMENT 5

SWMU B-3 STATUS REPORTS

MEMORANDUM

May 12, 2006

To: Brian Vanderglas
From: Ken Rice
Subject: CSSA B-3 Removal Action – Weekly status report

The period for this weekly status report is from May 1, 2006 through May 12, 2006 for removal actions at SWMU B-3. The status is listed below and includes current conditions as well as anticipated schedule. Additionally, photos are included too document site conditions.

- Site personnel include:
 - USA Environment – Rene Jones, Kevin Murphy, Brian Theis
 - Parsons – Darrel Davis, Ronald Mulvey, Kyle Caskey, Ken Rice
- Week 1 (5/1/06 – 5/5/06) site conditions were dry and hot with ~ 1000 cubic yards (cy) excavated, stockpiled and sampled;
- Week 2 (5/8/06 – 5/12/06) site conditions were wet (rain during the weekend) and overcast at beginning of week and breezy, sunny by end of week. See site daily logs for additional details of daily activities;
- Approximately 1,600 cubic yards (CY) of waste/soil media excavated and approximately 1,200 cy sampled during week 2;
- Current analytical results for the first 900 CY indicated waste material meet Class 2 Non-hazardous criteria;
- UXO scrap materials were found during the first week of excavation, no additional items were found during the week ending 5/12/2006. Items and description of waste/debris include:
 - 4 crushed drums with no liquids, plastic bags, weathered asphalt, strapping, metal debris, and general mission support trash.
 - UXO – 1 - 3” stokes mortar (fused)
 - UXO scrap - 4-stoke mortars, 2-90 mm casings, 2-3.5 rocket boom, 3-100lb practice bombs, 1-57mm core armor piercing round.
- Currently excavating at a rate of 325 CY/day operating at 4 days/wk;
- Anticipate completing excavating/removal efforts by end of August 2006 assuming 20,000 CY of material at 4 days/wk and 500 CY/day; and
- The initial waste transport effort is scheduled for the last week in May 2006.

Photos of activities are provided below and include descriptions.



B-3 Landfill Sidewall of Trench 1



B-3 Removal Action



UXO scrap located to date



B-3 Trench 1 looking north



Trench 1 showing infiltration



Trench 1 corroded aluminum

MEMORANDUM

May 19, 2006

To: Brian Vanderglas
From: Ken Rice
Subject: CSSA B-3 Removal Action – Weekly status report

The period for this weekly status report is from May 15, 2006 through May 19, 2006 for removal actions at SWMU B-3. The status is listed below and includes current conditions as well as anticipated schedule. Additionally, photos are included too document site conditions.

- Site personnel include:
 - USA Environment – Rene Jones, Kevin Murphy, Brian Theis
 - Parsons – Glen Chambers, Ronald Mulvey, Kyle Caskey, Ken Rice
- Site conditions were dry and hot with ~ 4,200 cubic yards (cy) excavated, stockpiled and sampled all from trench 1 to date. Trench 2 removal was initiated, however no samples were collected for trench 2 removed soils/waste;
- Approximately 2,000 cubic yards (CY) of waste/soil media excavated and approximately 2,000 cy sampled during week 3;
- Current analytical results for the first 2,200 CY indicated waste material meets Class 2 Non-hazardous criteria, with the exception of pile 8 which met RCRA hazardous criteria for PCE/TCE. Currently in discussions with regulators to identify options for managing pile #8 and include evaporation, replacement of waste, and/or disposal. Option 1 – ex-situ SVE, is acceptable to regulators as long as emissions meet PBR B-3 SVE emissions limitations.
- Several 100 lb practice bombs (munitions debris) were removed (see photo). Additional items found during the week ending 5/19/2006 include:
 - plastic bags,
 - creosol poles,
 - strapping, metal debris, and
 - general mission support trash.
- Currently excavating at a rate of 500 CY/day operating at 4 days/wk;
- Anticipate completing excavating/removal efforts by end of August 2006 assuming 20,000 CY of material at 4 days/wk and 500 CY/day; and
- The initial waste transport effort is scheduled for the next week, May 22, 2006.
- WM approval number for NH soils is CG-44005 and is approved for the initial 1,000 CY, data package and amendment profile for an additional 1,000 CY was sent to WM 5/19/06. Anticipate sending additional profile amendment package for an additional 2,000 CY early next week (5/22/06) for a total of 4,000 CY profiled for shipment to WM- Coval Gardens facility.

PARSONS

Photos of conditions/activities are provided below and include descriptions.



B-3 Trench 1 Pile 8



B-3 Trench 1



Munitions debris located W/E 5-19-06



New Trachoe rake



Trench 2 looking north



Trench 1 water infiltration

DAILY FIELD REPORT

JOB NAME	CSSA TO-006 _____	DATE	5/15/06 _____
PROJECT	B-3 Removal Actions _____	REPORT NO.	1 _____
JOB NO.	744223.09000 _____	SHEET	1 _____ OF 1 _____
LOCATION	CSSA, Boerne, TX _____	WEATHER	Clear, mild, wind from south
CLIENT	_____	TEMP	68oF _____ AT 0700 _____
AM/PM			

WORK IN PROGRESS OR COMPLETE (INCLUDING SUBCONTRACTORS):

Excavating Trench 1 at SWMU B-3

CONTRACTOR EQUIPMENT	QUANTITY	CONTRACTOR WORK FORCE	QUANTITY
<u>Trachoe</u>	<u>1</u>	<u>Supervisor - USA</u>	<u>1</u>
<u>Loader</u>	<u>1</u>	<u>Operator - USA</u>	<u>1</u>
<u>Water Truck</u>	<u>1</u>	<u>Technician USA</u>	<u>1</u>
<u>Skid loader</u>	<u>1</u>	<u>EOD - Parsons</u>	<u>2</u>
		<u>Site Supervisor - Parsons</u>	<u>1</u>
		<u>Site Health & Safety Observer - Parsons</u>	<u>1</u>

VERBAL DISCUSSIONS/INSTRUCTIONS

Dig

REQUEST FOR PROJECT ACTION

Dig faster

VISITORS

none

ACCIDENTS REPORTED TODAY 0 _____

ACCIDENTS TO DATE 0 _____

REPRESENTATIVE

Ken Rice _____

PARSONS I&T

CLIENT REPRESENTATIVE

DAILY FIELD REPORT

JOB NAME	CSSA TO-006 _____	DATE	5/16/06 _____
PROJECT	B-3 Removal Actions _____	REPORT NO.	1 _____
JOB NO.	744223.09000 _____	SHEET	1 _____ OF 1 _____
LOCATION	CSSA, Boerne, TX _____	WEATHER	Clear, mild, wind from south
CLIENT	CSSA _____	TEMP	68oF _____ AT 0700 _____
AM/PM			

WORK IN PROGRESS OR COMPLETE (INCLUDING SUBCONTRACTORS):

Excavating Trench 1 at SWMU B-3

CONTRACTOR EQUIPMENT	QUANTITY	CONTRACTOR WORK FORCE	QUANTITY
<u>Trachoe</u>	<u>1</u>	<u>Supervisor - USA</u>	<u>1</u>
<u>Loader</u>	<u>1</u>	<u>Operator - USA</u>	<u>1</u>
<u>Water Truck</u>	<u>1</u>	<u>Technician USA</u>	<u>1</u>
<u>Skid loader</u>	<u>1</u>	<u>EOD - Parsons</u>	<u>2</u>
		<u>Site Supervisor - Parsons</u>	<u>1</u>
		<u>Site Health & Safety Observer - Parsons</u>	<u>1</u>

VERBAL DISCUSSIONS/INSTRUCTIONS

Dig

REQUEST FOR PROJECT ACTION

Dig faster

VISITORS

none

ACCIDENTS REPORTED TODAY 0 _____
 ACCIDENTS TO DATE 0 _____
 REPRESENTATIVE

Ken Rice _____
 PARSONS I&T

 CLIENT REPRESENTATIVE

DAILY FIELD REPORT

JOB NAME	CSSA TO-006 _____	DATE	5/17/06 _____
PROJECT	B-3 Removal Actions _____	REPORT NO.	1 _____
JOB NO.	744223.09000 _____	SHEET	1 _____ OF 1 _____
LOCATION	CSSA, Boerne, TX _____	WEATHER	Clear, mild, wind from south
CLIENT	CSSA _____	TEMP	68oF _____ AT 0700 _____
AM/PM			

WORK IN PROGRESS OR COMPLETE (INCLUDING SUBCONTRACTORS):

Excavating Trench 1 at SWMU B-3

CONTRACTOR EQUIPMENT	QUANTITY	CONTRACTOR WORK FORCE	QUANTITY
<u>Trachoe</u>	<u>2</u>	<u>Supervisor - USA</u>	<u>1</u>
<u>Loader</u>	<u>1</u>	<u>Operator - USA</u>	<u>1</u>
<u>Water Truck</u>	<u>1</u>	<u>Technician USA</u>	<u>1</u>
<u>Skid loader</u>	<u>1</u>	<u>EOD - Parsons</u>	<u>2</u>
		<u>Site Supervisor - Parsons</u>	<u>1</u>
		<u>Site Health & Safety Observer - Parsons</u>	<u>1</u>

VERBAL DISCUSSIONS/INSTRUCTIONS

Dig

REQUEST FOR PROJECT ACTION

Dig faster

VISITORS

none

ACCIDENTS REPORTED TODAY 0 _____
 ACCIDENTS TO DATE 0 _____
 REPRESENTATIVE

Ken Rice _____
 PARSONS I&T

 CLIENT REPRESENTATIVE

DAILY FIELD REPORT

JOB NAME	CSSA TO-006 _____	DATE	5/18/06 _____
PROJECT	B-3 Removal Actions _____	REPORT NO.	1 _____
JOB NO.	744223.09000 _____	SHEET	1 _____ OF 1 _____
LOCATION	CSSA, Boerne, TX _____	WEATHER	Clear, mild, wind from south
CLIENT	CSSA _____	TEMP	68oF _____ AT 0700 _____
AM/PM			

WORK IN PROGRESS OR COMPLETE (INCLUDING SUBCONTRACTORS):

Excavating Trench 1 at SWMU B-3

CONTRACTOR EQUIPMENT	QUANTITY	CONTRACTOR WORK FORCE	QUANTITY
<u>Trachoe</u>	<u>2</u>	<u>Supervisor - USA</u>	<u>1</u>
<u>Loader</u>	<u>1</u>	<u>Operator - USA</u>	<u>1</u>
<u>Water Truck</u>	<u>1</u>	<u>Technician USA</u>	<u>1</u>
<u>Skid loader</u>	<u>1</u>	<u>EOD - Parsons</u>	<u>2</u>
		<u>Site Supervisor- Parsons</u>	<u>1</u>
		<u>Site Health & Safety Observer - Parsons</u>	<u>1</u>

VERBAL DISCUSSIONS/INSTRUCTIONS

Dig

REQUEST FOR PROJECT ACTION

Dig faster

VISITORS

none

ACCIDENTS REPORTED TODAY 0 _____
 ACCIDENTS TO DATE 0 _____
 REPRESENTATIVE

Ken Rice _____
 PARSONS I&T

 CLIENT REPRESENTATIVE

CSSA B-3 REMOVAL ACTION

WEEKLY STATUS REPORT

MAY 26, 2006

The period for this weekly status report is from May 22, 2006 through May 26, 2006 for removal actions at SWMU B-3. The status is listed below and includes current conditions as well as anticipated schedule. Photos have also been attached for reference.

- Site personnel include:
 - USA Environment – Rene Jones, Kevin Murphy, Brian Theis
 - Parsons – Glen Chambers, Ronald Mulvey, Kyle Caskey, Ken Rice
- **Executive Summary.** Site conditions were dry and hot. To date, approximately 5,400 cubic yards (CY) of soil/waste has been excavated from two trenches, and stockpiled in 200 CY soil mounds (27 soil piles). All piles have been sampled and thus far only one pile (stockpile #8) requires special handling, analysis of piles 22-27 is pending.
- During the week of 22 May, approximately 4,000 CY of waste/soil media was transported to Waste Management - Covell Gardens facility (WMI) and approximately 1,200 CY of waste soil media from trench 2 was sampled (piles 22-27).
- Following is an overall summary of how the soils have been managed:
 - **Trench 1.** Approximately 4,200 CY have been sampled. All trench 1 soils meeting Class 2 non-hazardous criteria were disposed of at WMI.
 - Analytical results for Stockpile #8, of approximately 200 CY, showed levels of PCE/TCE above the RCRA hazardous criteria. Currently waiting on analytical to complete an emissions estimate for compliance with 30 TAC 106.533.
 - CSSA expects to receive the analytical results for total PCE/TCE analysis on soil pile B3-T1-WC08 early next week.
 - All soils from Trench 1 have been removed.
 - **Trench 2.** Approximately 1,200 CY have been excavated thus far and 6 samples samples have been collected.
- Several 100 lb practice bombs (munitions debris) were removed. Additional items found during the week ending 5/26/2006 include:
 - plastic bags,
 - canvas, strapping and parachute material
 - metal debris, and
 - general mission support trash.

Photos of conditions/activities are provided below and include descriptions.



B-3 Trench 1 material loaded into trucks



B-3 Trench 2



Nylon parachute material and metal debris



Material dated Sept 1963



Metal Debris



Waste loading operations

CSSA B-3 REMOVAL ACTION

WEEKLY STATUS REPORT

JUNE 5, 2006

The period for this weekly status report is from May 29, 2006 through June 26, 2006 for removal actions at SWMU B-3. The status is listed below and includes current conditions as well as anticipated schedule. Photos have also been attached for reference.

Site personnel include:

- USA Environment – Rene Jones, Kevin Murphy, Brian Theis
- Parsons – Glen Chambers, Ronald Mulvey, Kyle Caskey, Ken Rice

Executive Summary. Site conditions overcast and wet. To date, approximately 7,400 cubic yards (CY) of soil/waste has been excavated from two trenches, and stockpiled in 200 CY soil mounds (total of 37 soil piles). All piles have been sampled and thus far only one pile (stockpile #8) requires special handling, analysis of trench 2 piles, 7-16 is pending.

During the week ending 2 June, approximately 2,000 CY of waste/soil media was from trench 2 was excavated, inspected, and sampled.

Following is an overall summary of how the soils have been managed:

- ***Trench 1.*** Approximately 4,200 CY have been sampled. All trench 1 soils/waste material meeting Class 2 non-hazardous criteria were disposed of at WMI.
- Analytical results for Stockpile #8, approximately 200 CY, showed levels of PCE/TCE above the RCRA hazardous criteria. However, analytical results from re-sampling of Stockpile #8 indicated non-detect for PCE and TCE.
- CSSA expects to notify the TCEQ of the intent to remediate soils by evaporation early next week. Stockpile #8 will undergo treatment when notification has been made.
- All soils from Trench 1 have been removed.
- ***Trench 2.*** Approximately 3,200 CY have been excavated, inspected and 16 samples have been collected (identified as Trench 2, waste characterization samples 1-16).
- 12-100 lb practice bombs (munitions debris made of concrete with a spotting charge) were removed. Other munitions debris include a smoke grenade, slap flare, 9-day/night flares and an air burst simulator. Additional items found during the week ending 6/2/2006 include:
 - Asbestos siding tiles,
 - metal tank and crushed drums (label indicate drums contained soap),
 - metal debris (banding, etc.), and
 - general mission support trash.

Trench 2 removal actions including profiling activities are expected to be completed next week. Anticipate transport and disposal actions to start week of June 12 for disposal of trench 2 material.

Photos of conditions/activities are provided below and include descriptions.



Metal Tank



B-3 Trench 2 (left), Trench 1 (right)



Metal debris



Visibly un-affected soil at B-3



Trench strata (cover soils intended for re-use at B-3)



Hazardous Stockpile

CSSA B-3 REMOVAL ACTION

WEEKLY STATUS REPORT

JUNE 12, 2006

The period for this weekly status report is from June 5, 2006 through June 9, 2006 for removal actions at SWMU B-3. The status is listed below and includes current conditions as well as anticipated schedule. Photos have also been attached for reference.

Site personnel include:

- USA Environment – Rene Jones, Marlin Fuller, Brian Theis
- Parsons – Glen Chambers, Ronald Mulvey, Kyle Caskey, Ken Rice

Executive Summary. Site conditions were sunny, hot and dry. To date, approximately 10,800 cubic yards (CY) of soil/waste has been excavated from three trenches, and stockpiled in 200 CY soil mounds (total of 54 soil piles). All piles have been sampled and thus far, trench 1 stockpile #8 requires treatment, trench 2 stockpiles #8, #9 and #16 met Class 1 Non-hazardous (NH) levels for total petroleum hydrocarbons (TPH). Trench 2 stockpile #15 contains asbestos debris. Analysis of the remaining trench 2 piles, 17-21 is pending as well as Trench 3 stockpiles 1-7. Trench 3 stockpiles 8-12 will be sampled next week.

During the week ending 9 June, approximately 2,200 CY of waste/soil media from trench 2 was excavated, inspected, and sampled which completes trench 2 removal action. Approximately 2,400 CY of waste/soil media was excavated from trench 3.

Following is an overall summary of how the soils have been managed:

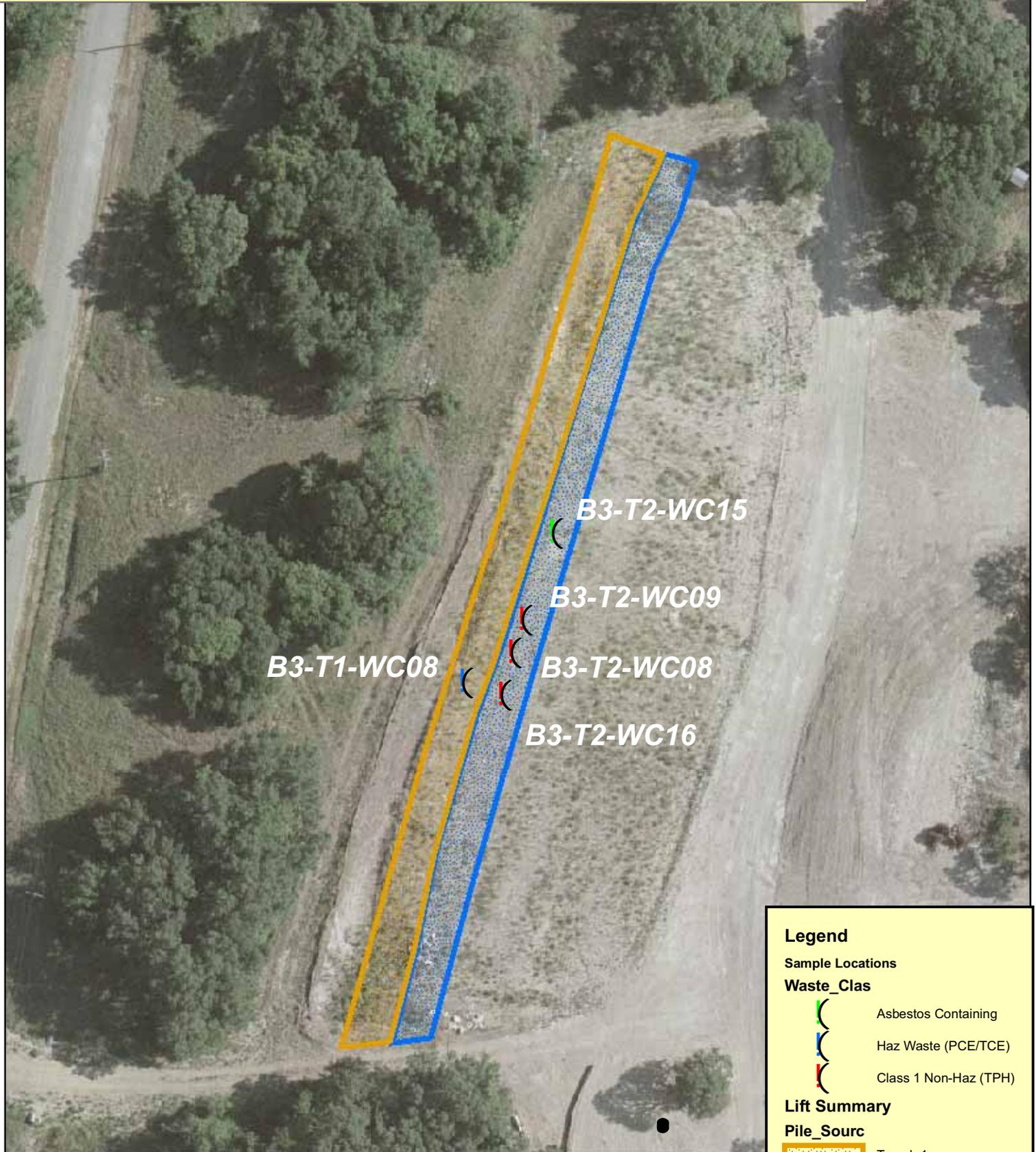
- **Trench 1.** All soils from Trench 1 (4,200 CY) have been removed. All trench 1 soils/waste material meeting Class 2 non-hazardous criteria were disposed of at WMI Covel Gardens facility.
- Analytical waste characterization results for Stockpile #8, approximately 200 CY, showed levels of PCE/TCE above the RCRA hazardous criteria. Stockpile #8 will undergo treatment when notification has been made to the TCEQ for the permit by rule (PBR) modification.
- **Trench 2.** Approximately 4,200 CY have been excavated, inspected and 21 samples have been collected (identified as Trench 2, waste characterization samples 1-21). Class 1 NH stockpiles were consolidated for profiling to Covel Gardens. The asbestos containing materials were segregated, labeled with warning signs, covered with plastic and also undergoing profiling to Covel Gardens.
- Additionally, soils which are visibly unaffected (i.e., little to no trash) were stockpiled separately in the anticipation for re-use within the SWMU B-3 bioreactor construction area. Telecons on 5 June obtained regulatory coordination on this concept from Greg Lyssey and Abbi Power. Photos will be taken to document that the topsoils are visibly unaffected.

- **Trench 3.** Approximately 2,400 CY have been excavated, inspected and 7 samples waste characterization samples collected. Trench 3 materials consist of mostly soil with ash mixed in the matrix and little metal debris. Additional items found during the week ending 6/5/2006 include:
 - 2-100 lb practice bombs (munitions debris [i.e., inert] made of concrete with a potential spotting charge) were removed. Other munitions debris include a slap flare, 2-day/night flares and a 105 mm casing, and
 - Soils mixed with ash from burned ammo boxes.

Anticipate transport and disposal actions to start week of June 12 for trench 2 and 3 soil/waste material. Current estimated completion of the removal action is mid-July 2006. Additionally, a location map of hazardous, asbestos containing and Class 1 NH soils generated from SWMU B-3 removal actions is included in the following figure.

SWMU B-3

June 7, 2006 - Excavation Summary



Legend

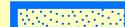
Sample Locations

Waste_Clas

-  Asbestos Containing
-  Haz Waste (PCE/TCE)
-  Class 1 Non-Haz (TPH)

Lift Summary

Pile_Sourc

-  Trench 1
-  Trench 2

80 40 0 80 Feet



CSSA B-3 REMOVAL ACTION

WEEKLY STATUS REPORT

JUNE 21, 2006

The period for this weekly status report is from June 12, 2006 through June 16, 2006 for removal actions at SWMU B-3. The status is listed below and includes current conditions as well as anticipated schedule. Photos have also been attached for reference.

Site personnel include:

- USA Environment – Rene Jones, Kevin Murphy, Brian Theis, Fred Duenes
- Parsons – Glen Chambers, Ronald Mulvey, Kyle Caskey, Ken Rice

Executive Summary. Site conditions were sunny, hot and dry. To date, approximately 12,000 cubic yards (CY) of soil/waste has been excavated from four trenches, and stockpiled in 200 CY soil mounds (total of 60 soil piles). The stockpiles have been sampled and numbered as follow:

- Trench 1 - Samples B3-T1-WC01 - WC21
- Trench 2 - Samples B3-T2-WC01 - WC21
- Trench 3 - Samples B3-T3-WC01 - WC12
- Trench 4 - Samples B3-T4-WC01 - WC06

Additionally, soils which are visibly unaffected (i.e., little to no trash) were stockpiled separately in the anticipation for re-use within the SWMU B-3 bioreactor construction area (see photos below).

Following is an overall summary of how the soils have been managed:

- **Trench 1.** All soils from Trench 1 (4,200 CY) have been removed. All trench 1 soils/waste material meeting Class 2 non-hazardous criteria were disposed of at WMI Covel Gardens facility (4,000 CY).
 - Analytical waste characterization results for Stockpile #8, approximately 200 CY, showed levels of PCE/TCE above the RCRA hazardous criteria. Stockpile #8 will undergo treatment as notification has been made to the TCEQ for the permit by rule (PBR) modification.
- **Trench 2.** All soils from Trench 2 (4,200 CY) have been removed. All Trench 2 soils/waste material meeting non-hazardous criteria were disposed of at WMI Covel Gardens facility (4,200 CY).
 - Approximately 500 CY of Class 1 NH stockpiles were profiled to Covel Gardens and disposed under CG-44202 (stockpiles #8, #9 and #16).
 - Approximately 40 CY of asbestos containing materials were segregated, labeled with warning signs, covered with plastic and also profiled to Covel Gardens under CG-44005 C-1 (stockpile #15).
- **Trench 3.** All soils from Trench 3 (~2,400 CY) have been removed and sampled. CSSA has received analytical results for 1,400 CY, corresponding to Stockpiles #1 - #7 and were disposed of as Class 2 NH soil/waste at Covel Gardens. Results for the remaining trench 5 stockpiles (#8 - #12) are expected early next week.
 - Trench 3 materials consist mostly of soil with ash mixed in the matrix and little metal debris.

- **Trench 4.** Approximately 1,200 CY have been excavated, inspected and 6 waste characterization samples collected (Stockpile #1 - #6). Trench 4 materials consist mostly of soil with ash mixed in the matrix, small amounts of what appears to be dried paint and little metal debris.
- Additional items found during the week ending 6/16/2006 include:
 - Munitions debris including several 75 mm -105 mm casing, and several additional 100 lb concrete practice bombs;
 - Soils mixed with ash;
 - Small amounts of what appears to be dried paint; and
 - General mission support trash.

Completion of trench 4 excavation, inspection and sampling are expected for next week. Excavation of other potential trenches is also expected to be initiated next week. Additionally, expect to treat trench 1 stockpile #8 on SWMU B-3 and re-sample in 50 CY lots for waste characterization. Current estimated completion of the removal action is mid-July 2006.

Our next transportation efforts are currently scheduled for July 5 through July 10, 2006. Photos of conditions/activities are provided below and include descriptions.



Trench 4 waste matrix (dried paint?)



B-3 Trench 4 (left), Trench 3 (right)



Visibly un-affected soil at B-3



Visibly un-affected soil at B-3

CSSA B-3 REMOVAL ACTION

WEEKLY STATUS REPORT

JUNE 28, 2006

The period for this weekly status report is from June 19, 2006 through June 23, 2006 for removal actions at SWMU B-3. The status is listed below and includes current conditions as well as anticipated schedule. Photos have also been attached for reference.

Site personnel include:

- USA Environment – Rene Jones, Kevin Murphy, Brian Theis, Fred Duenes
- Parsons – Glen Chambers, Ronald Mulvey, Kyle Caskey, Ken Rice

Executive Summary. Site conditions were overcast, hot and high humidity. To date, approximately 15,000 cubic yards (CY) of soil/waste has been excavated from five trenches, and stockpiled in 200 CY soil mounds (total of 75 soil piles).

The stockpiles have been sampled and numbered as follow with a summary of results:

- Trench 1- Samples B3- T1-WC01 – WC21
 - Stockpile #8 exceeded RCRA TCLP hazardous levels for PCE/TCE and treatment was initiated.
- Trench 2 – Samples B3-T2-WC01 – WC21
 - Stockpiles 8, 9, and 16 exceeded non hazardous levels for total petroleum hydrocarbons (TPH) and were disposed of as Class 1 non-hazardous waste.
 - Stockpile 15 was disposed of as Asbestos Containing Material.
- Trench 3 – Samples B3- T3-WC01 – WC12
 - Stockpiles 10 and 11 exceeded RCRA TCLP hazardous levels for benzene and requires treatment.
- Trench 4 – Samples B3- T4-WC01 – WC12
 - All waste/soil media material met Class 2 non-hazardous criteria.
- Trench 5 – Samples B3- T5-WC01 – WC06 (pending results)

Following is an overall summary of how the soils have been managed:

- ***Trench 1.*** All soils from Trench 1 (4,200 CY) have been removed. All trench 1 soils/waste material meeting Class 2 non-hazardous criteria were disposed of at WMI Covel Gardens facility.
 - Analytical waste characterization results for Stockpile #8, approximately 200 CY, showed levels of PCE/TCE above the RCRA hazardous criteria. Stockpile #8 treatment was initiated and results of treatment efforts are pending.
- ***Trench 2.*** Approximately 4,200 CY have been excavated, inspected and sampled. Approximately 500 CY of Class 1 NH stockpiles were transported and disposed of at Covell Gardens under CG-44202. The asbestos containing materials were segregated, labeled with warning signs, covered with plastic and also disposed of at Covell Gardens under CG-44005 C-1.

- Additionally, soils which are visibly unaffected (i.e., little to no trash) were stockpiled separately in the anticipation for re-use within the SWMU B-3 bioreactor construction area.
- **Trench 3.** Approximately 2,400 CY have been excavated, inspected and sampled. Trench 3 excavation, inspection and waste classification efforts are complete. Trench 3 materials consist of mostly soil with ash mixed in the matrix and little metal debris. Results of analyses for waste characterization samples collected on trench 3 stockpiles #10 and #11 met hazardous criteria for benzene and will undergo treatment similar to trench 1 stockpile #8.
 - CSSA contacted Ms. Abigail Power (TCEQ representative) and briefed her on the proposed course of action for stockpile #10, and #11. Mr. Greg Lyssy (US EPA representative) was unavailable for briefing. Ms. Power requested that CSSA submit emission calculations to TCEQ prior to soil treatment for benzene. A modification of the B-3 PBR for evaporation treatment to include emissions estimated from treatment of the benzene from affected trench 3 stockpiles will be submitted to the TCEQ. Currently the affected soils (trench 3 stockpiles #10 and #11) are covered with plastic to prevent contaminant releases to the environment until PBR modification to add benzene has been completed.
- **Trench 4.** Approximately 2,400 CY have been excavated, inspected and sampled. Trench 4 materials consisted of mostly soil with ash mixed in the matrix, small amounts of what appears to be dried paint and little metal debris. All waste characterization sample analyses results from trench 4 indicate material met class 2 non-hazardous criteria
- **Trench 5.** Approximately 1,800 CY have been excavated, inspected and 6 waste characterization samples collected during week ending 23 June 2006. Trench 5 materials consist of mostly soil with what appears to be weathered asphalt mixed in the matrix and little metal debris (see photos below). Additional items found during the week ending 6/23/2006 include:
 - 26-100 lb practice bombs (munitions debris [i.e., inert] made of concrete with a potential spotting charge) were removed. Other munitions debris include several 40mm, 75mm and 105 mm casing, and
 - Soils mixed with weathered asphalt.

Anticipated Schedule for Next Week

- Completion of trench 5 excavation, inspection and sampling efforts are expected for next week.
- Conduct further investigation to determine whether there are any other additional potential trenches at the site.
- Prepare benzene emission calculations and submit to TCEQ.

Current estimated completion of the removal action is mid-July 2006. No weekly report will be produced next week due to the shortened holiday week. Our next transportation efforts are currently scheduled for July 5 through July 11, 2006. Photos of conditions/activities are provided below and include descriptions.



Weathered Asphalt



B-3 Trench 4 stockpiles (Trench 3 stockpiles #10 & #11 covered in plastic)



Weathered Asphalt



Trench 5



Visibly un-affected soils



B3 Trenches 3 and 4

CSSA B-3 REMOVAL ACTION

WEEKLY STATUS REPORT

JULY 12, 2006

The period for this weekly status report is from June 26, 2006 through July 7, 2006 for removal actions at SWMU B-3. The status is listed below and includes current conditions as well as anticipated schedule. Photos have also been attached for reference.

Site personnel include:

- USA Environment – Rene Jones, Dennis “Red” Mahoney, Brian Theis, Fred Duenes
- Parsons – Glen Chambers, Ronald Mulvey, Eric Tennyson, Ken Rice

Executive Summary. Site conditions were overcast, hot and high humidity. To date, approximately 15,200 cubic yards (CY) of soil/waste has been excavated from five trenches, and stockpiled in 200 CY soil mounds (total of 76 soil piles). The excavation of contaminated soil/waste is complete.

The stockpiles have been sampled and numbered as follow with a summary of results:

- Trench 1- Samples B3- T1-WC01 – WC21
 - Stockpile #8 exceeded RCRA TCLP hazardous levels for PCE/TCE and treatment was initiated.
- Trench 2 – Samples B3-T2-WC01 – WC21
 - Stockpiles 8, 9, and 16 exceeded non hazardous levels for total petroleum hydrocarbons (TPH) and were disposed of as Class 1 non-hazardous waste.
 - Stockpile 15 was disposed of as Asbestos Containing Material.
- Trench 3 – Samples B3- T3-WC01 – WC12
 - Stockpiles 10 and 11 exceeded RCRA TCLP hazardous levels for benzene and requires treatment.
- Trench 4 – Samples B3- T4-WC01 – WC12
 - All waste/soil media material met Class 2 non-hazardous criteria.
- Trench 5 – Samples B3- T5-WC01 – WC10
 - Stockpile 2 exceeded RCRA TCLP hazardous levels for lead and requires treatment with PIMS.
 - Stockpile 9 exceeded Class 1 Nonhazardous criteria for lead.

Following is an overall summary of how the soils have been managed:

- ***Trench 1.*** All soils from Trench 1 (4,200 CY) have been removed. All trench 1 soils/waste material meeting Class 2 non-hazardous criteria were disposed of at WMI Covel Gardens facility.
 - Analytical waste characterization results for Stockpile #8, approximately 200 CY, showed levels of PCE/TCE above the RCRA hazardous criteria. Stockpile #8 treatment was completed within the boundaries of the B-3 Site, with resulting analytical indicating material now meeting Class 2 NH criteria (non-detect).

- **Trench 2.** Approximately 4,200 CY have been excavated, inspected and sampled. Approximately 500 CY of Class 1 NH stockpiles were transported and disposed of at Covell Gardens under CG-44202. The asbestos containing materials were disposed of at Covell Gardens under CG-44005 C-1.
 - Soils which are visibly unaffected (i.e., little to no trash) were stockpiled separately in the anticipation for re-use within the SWMU B-3 bioreactor construction area.
- **Trench 3.** Approximately 2,400 CY have been excavated, inspected and sampled. Trench 3 excavation, inspection and waste classification efforts are complete. Trench 3 materials consist of mostly soil with ash mixed in the matrix and little metal debris. Results of analyses for waste characterization samples collected on trench 3 stockpiles #10 and #11 met hazardous criteria for benzene and will undergo treatment similar to trench 1 stockpile #8.
 - A modification of the B-3 PBR for evaporation treatment to include emissions estimated from treatment of the benzene from affected trench 3 stockpiles will be submitted to the TCEQ. Currently the affected soils (trench 3 stockpiles #10 and #11) are covered with plastic to prevent contaminant releases to the environment until PBR modification to add benzene has been completed.
- **Trench 4.** Approximately 2,400 CY have been excavated, inspected and sampled. Trench 4 materials consisted of mostly soil with ash mixed in the matrix, small amounts of what appears to be dried paint and little metal debris. All waste characterization sample analyses results from trench 4 indicate material met class 2 non-hazardous criteria
- **Trench 5.** Approximately 2,000 CY have been excavated, inspected and sampled. Trench 5 materials consist of mostly soil with what appears to be weathered asphalt mixed in the matrix and little metal debris. Analytical results indicated that Stockpile #2 contained lead greater than RCRA hazardous criteria and Stockpile #9 contained lead at Class 1 NH criteria.
 - Hazardous lead contaminated soils are expected to be treated with Phosphate Induced Metal Stabilization (PIMS) material within the B-3 Site.
 - Stockpile # 9 will be disposed of as Class 1.

Anticipated Schedule for Next Week

- Completion of the transportation and disposal of Class 2 and Class 1 NH soil/waste material.
- Treat lead containing soils.
- Prepare benzene emission calculations and submit to TCEQ.

Current estimated completion of the removal action is mid-July 2006. Transportation efforts, including the bioreactor material (gravel and tree mulch), will continue through July 14, 2006. Photos of conditions/activities are provided below and include descriptions.



Limestone bedding planes



Trench 4 and Trench 5 looking north (test trenches go east through the road)



Test Trench 1



Test Trench 3



Gravel for Bioreactor



1/4" Gravel

CSSA B-3 REMOVAL ACTION

BI-WEEKLY STATUS REPORT

JULY 26, 2006

The period for this bi-weekly status report is from July 10, 2006 through July 21, 2006 for removal actions and bioreactor construction at SWMU B-3. The status is listed below and includes current conditions as well as anticipated schedule. Photos have also been attached for reference.

Site personnel include:

- USA Environment – Rene Jones, Dennis “Red” Mahoney, Fred Duenes
- Parsons – Glen Chambers, Ronald Mulvey, John Hall, Ken Rice, Kyle Caskey

Executive Summary. Site conditions were sunny, hot and high humidity. All excavations and removal actions have been finalized with approximately 15,200 cubic yards (CY) – 76 soil piles sampled for waste characterization. The following soil piles remain at SWMU B-3 to be managed:

- Trench 3- Stockpiles 10 and 11 exceeded RCRA TCLP hazardous levels for benzene and were treated within SWMU B-3. The emission calculations for an amendment to the Permit By Rule (PBR) for the soil treatment was submitted to TCEQ. The treated stockpiled contaminated soil, pending receipt of analytical results, will be disposed of at an authorized off-post landfill.
- Trench 5 - Stockpile 2 exceeded RCRA TCLP hazardous levels for lead and was treated with PIMS. Stockpile 9 exceeded Class 1 Nonhazardous criteria for lead and will be disposed as Class 1 NH waste. Treated stockpile 2 lead contaminated soil, pending receipt of analytical results, will be disposed of at an authorized off-post landfill.
- Trench 6 – No waste/contaminated soils remain in trench due to previous removal efforts. Visual confirmation was made by cross trenching trench 6 located on the eastern side of SWMU B-3.

CSSA commenced the construction of the bioreactor at B-3.

Following is an overall summary of construction of the bio-reactor:

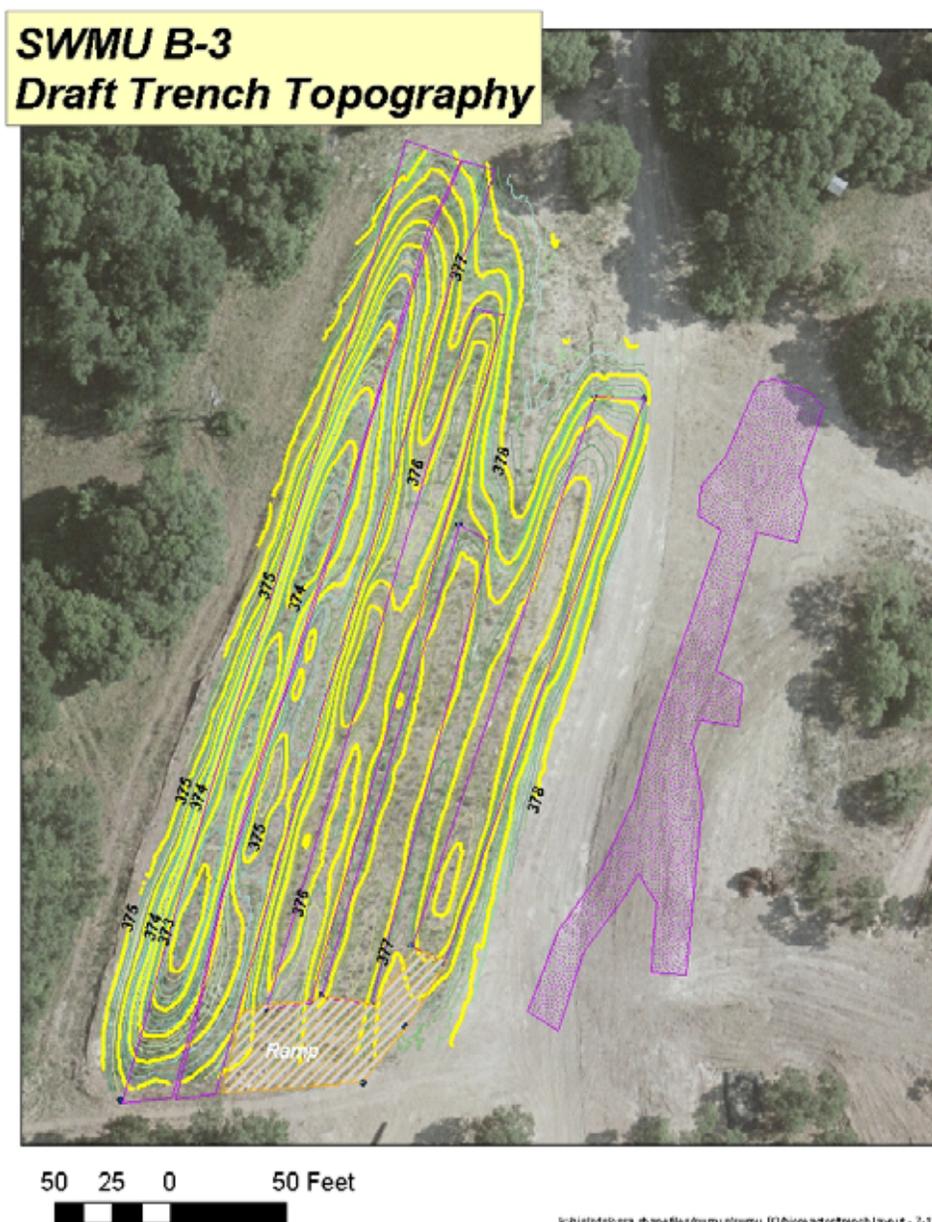
Delivered gravel and tree mulch were mixed within SWMU B-3 area to create the bioreactor material. Two 5 foot sections of 6 inch well screen monitoring sumps were located at the low points within trench 5 and bioreactor material backfilled within the trench.

- Approximately 3,200 CY of gravel has been delivered on-site and stockpiled at the former SWMU B-10 area.
- Approximately 1,200 CY of tree mulch has been delivered on-site and stockpile near the gravel stockpile.
- Approximately 1,000 CY of bioreactor material was placed into trench 5.

Anticipated Schedule for Next Week

- Continue bioreactor construction with the mixing and placement of tree mulch and gravel. Trench 1 through 3 will have food grade vegetable oil sprayed into the bottom and sidewall. TCEQ has been notified of our intent to add vegetable oil to the trenches.
- Transport remaining treated waste material generated from B-3 removal actions to Covell Gardens.

The remaining waste materials at B-3 will be disposed of upon completion of treatment efforts for contaminated stockpiles. Transportation efforts, including the bioreactor material (gravel and tree mulch), will continue through July and August, 2006. Photos of conditions/activities are provided below and include descriptions. Additionally, a draft topography of the resulting excavation at SWMU B-3 is included.





Mixed Bioreactor material



Trench 1 and Trench 2 looking north



Trench 6 investigation (PIMS mixing in soils from trench 5 in foreground)



Trench 6 investigation (Benzene contaminated soils under plastic)



Bioreactor Monitoring Sump (Trench 5)



1/4" Gravel and Tree mulch mixing

CSSA B-3 REMOVAL ACTION

BI-WEEKLY STATUS REPORT

AUGUST 10, 2006

The period for this bi-weekly status report is from July 24, 2006 through August 4, 2006 for removal actions and bioreactor construction at SWMU B-3. The status is listed below and includes current conditions as well as anticipated schedule. Photos have also been attached for reference.

Site personnel include:

- USA Environment – Rene Jones, Darrell Billiot, Brian Theis
- Parsons – Samantha Elliot, Ken Rice, Kyle Caskey

Executive Summary. Site conditions were sunny, hot and high humidity. All excavations and removal actions have been finalized and all soils have been properly disposed of at WMI's Covell Garden facility. Following is a summary of the final actions taken for the remaining stockpiles before disposal:

- Trench 3- Stockpiles 10 and 11 exceeded RCRA TCLP hazardous levels for benzene, and were successfully treated to Class 2 Non-hazardous criteria.
- Trench 5 - Stockpile 2 exceeded RCRA TCLP hazardous levels for lead and was successfully treated to Class 2 Non-hazardous criteria. Stockpile 9 exceeded Class 1 Non-hazardous criteria for lead and was disposed of as Class 1 NH waste.

Bioreactor construction was continued during this reporting and the Underground Injection Control (UIC) permit for the bioreactor was received from the TCEQ.

Following is an overall summary of construction of the bio-reactor:

Delivered gravel and tree mulch were mixed within SWMU B-3 area to create the bioreactor material. Ten 5 foot sections of 6 inch well screen monitoring sumps were located at the low points within trench 1 through 5 and bioreactor material backfilled within the trench.

- Approximately 660 gallons of food grade vegetable oil was sprayed into trenches 1 through 3.
- Approximately 4,200 CY of gravel has been delivered on-site and stockpiled at the former SWMU B-10 area.
- Approximately 3,100 CY of tree mulch has been delivered on-site and stockpile near the gravel stockpile.
- Approximately 4,100 CY of bioreactor material (mixture of gravel and mulch) was placed into trenches 1 through 5.

Anticipated Schedule for Next Week

- Excavation of trench 6 (clean filled) will be completed to apply bioreactor material.
- Continue bioreactor construction with the mixing and placement of tree mulch and gravel (bioreactor material).

Transportation efforts of the bioreactor material (gravel and tree mulch), will continue through August 11, 2006. The water irrigation system installation within the trenches will be initiated.

Photos of conditions/activities are provided below and include descriptions.



Trench 1 and Trench 2 looking north (Vegoil within the trenches)



Trench 1 and Trench 2 looking north (4 sumps installed)



Vegetable Oil applied to Trench 1



Bioreactor Monitoring Sump (Trench 5)



Trench 6 excavation



Vegetable Oil applied to Trench 1 (220 gallon tote tanks in trench 2)

CSSA B-3 BIOREACTOR CONSTRUCTION

BI-WEEKLY STATUS REPORT

AUGUST 22, 2006

The period for this bi-weekly status report is from August 7, 2006 through August 18, 2006 for the bioreactor construction at SWMU B-3. The status is listed below and includes current conditions as well as anticipated schedule. Photos have also been attached for reference.

Site personnel include:

- USA Environment – Rene Jones, Darren Billiot, Brian Theis
- Parsons – Samantha Elliot, Ken Rice, Kyle Caskey
- **Executive Summary.** Site conditions were sunny, hot with high humidity. All excavations and removal actions have been finalized and all soils have been properly disposed of at WMI's Covell Garden facility. Bioreactor construction was continued during this status period.

Following is an overall summary of construction of the bioreactor:

Delivered gravel and tree mulch were mixed within SWMU B-3 area to create the bioreactor material. Five foot sections of 6 inch well screen monitoring sumps were located at the low points within trenches 1 through 6 and bioreactor material backfilled within the trench.

- Approximately 660 gallons of food grade vegetable oil was sprayed into trenches 1 through 3. An additional 220 gallons of food grade vegetable oil was sprayed into trench 6.
- Approximately 5,000 CY of gravel has been delivered on-site and stockpiled at the former SWMU B-10 area.
- Approximately 5,000 CY of tree mulch has been delivered on-site and stockpiled near the gravel stockpile.
- Approximately 9,200 CY of bioreactor material (mixture of gravel and mulch) was placed into trenches 1 through 6.

Anticipated Schedule for Next Two Week Period

- Complete bioreactor material placement within trenches.
- Install site security measures (cable fencing) surrounding SWMU B-3.
- Continue the installation of the planned irrigation system for the bioreactor.

Transportation efforts of the bioreactor material (gravel and tree mulch) are complete.

Photos of conditions/activities are provided below and include descriptions.



Trench 1 and Trench 2 looking south



SWMU B-3 looking northeast



Vegetable Oil applied to Trench 6



Bioreactor Monitoring Sumps (Trench 6)



Trench 6 excavation looking south



Vegetable Oil applied to Trench 6 (220 gallon tote tanks)

CSSA B-3 BIOREACTOR CONSTRUCTION

BI-WEEKLY STATUS REPORT

SEPTEMBER 12, 2006

The period for this bi-weekly status report is from August 21, 2006 through September 1, 2006 for the bioreactor construction at SWMU B-3. The status is listed below and includes current conditions as well as anticipated schedule. Photos have also been attached for reference.

Site personnel include:

- USA Environment – Rene Jones, Darren Billiot, Brian Theis
- Parsons – Ken Rice
- **Executive Summary.** Site conditions were sunny, hot with high humidity. All excavations and removal actions have been finalized and all contaminated soils have been properly disposed of at WMI's Covell Garden facility. Bioreactor construction was continued during this status period.

Following is an overall summary of construction of the bioreactor:

Delivered gravel and tree mulch were mixed within SWMU B-3 area to create the bioreactor material. Bioreactor material placement was completed with approximately 10,000 cubic yards of material placed into trenches 1 through 6. Irrigation system installation was continued during this status period.

The planned irrigation system will deliver recovered groundwater from CS-MW16CC and CS-MW16LGR to each trench of the bioreactor. The water is expected to become organic rich from the degrading mulch which will create a reducing (anaerobic) condition in the groundwater bearing zone underneath SWMU B-3. The resulting anaerobic conditions are favorable for attenuating chlorinated solvents through natural processes.

Anticipated Schedule for Next Two Week Period

- Complete bioreactor irrigation system installation within trenches.
- Install site security measures (cable fencing) surrounding SWMU B-3.
- Testing of the irrigation system for the bioreactor.

Photos of conditions/activities are provided below and include descriptions.



Trench 3 irrigation piping



Spray nozzle (typical)

CSSA B-3 BIOREACTOR CONSTRUCTION

BI-WEEKLY STATUS REPORT

SEPTEMBER 27, 2006

The period for this bi-weekly status report is from September 11, 2006 through September 22, 2006 for the bioreactor construction at SWMU B-3. The status is listed below and includes current conditions as well as anticipated schedule. Photos have also been attached for reference.

Site personnel include:

- USA Environment – Rene Jones, Darren Billiot, Brian Theis
- Parsons – Ken Rice
- **Executive Summary.** Site conditions were partly cloudy, hot with high humidity and scattered showers. All excavations and removal actions have been finalized. Bioreactor construction was continued during this status period.

Following is an overall summary of construction of the bioreactor:

Irrigation system installation was continued during this status period and all trenches now have piping and spray nozzles installed for delivery of water. The planned irrigation system is expected to deliver groundwater from CS-MW16CC and CS-MW16LGR to each trench of the bioreactor in accordance with CSSA's Class V Aquifer Remediation Injection Wells (TCEQ Authorization No. 5X2600431). The groundwater will be transferred to a 5,000 gallon tank on SWMU B-3 which will be pumped to the trench(s) as necessary to facilitate the treatment of the contaminated groundwater through natural attenuation.

The design of the irrigation system is complete and a schematic is attached for reference. The operations and control of the irrigation system will allow continuous operations of the irrigation system while protecting equipment (pumps) and ensuring that injected groundwater remains in the bioreactor. The irrigation system is expected to be capable of delivering approximately 120 gallons per minute of groundwater to the bioreactor. The only remaining task to complete with the irrigation system is the installation of the groundwater delivery pump, the associated controls, and commissioning of the system.

Anticipated Schedule for Next Period

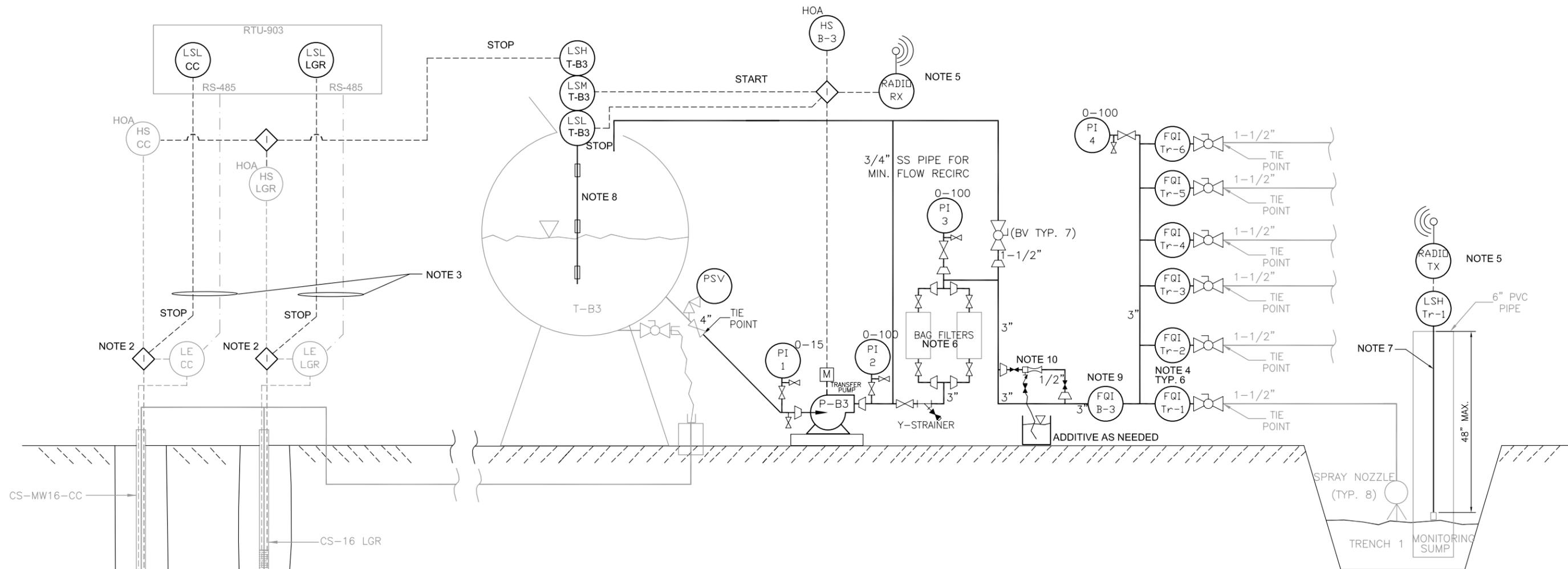
- Complete bioreactor irrigation system and associated controls for delivery of groundwater to the bioreactor trenches and site security measures.



SWMU B-3 Irrigation Tank



SWMU B-3 site security



NOTES:

1. USE PVC FOR NEW PIPE AND PAINT FOR UV RESISTANCE
2. ADD 12 VDC INTERPOSING RELAYS TO PUMP CONTROLS FOR LSL STOP COMMAND.
3. INSTALL 16 GA. TSP CABLES IN SAME CONDUIT WITH RS-485 CABLE FOR LSL STOP COMMAND SIGNAL
4. PROVIDE 6 SEAMETRICS (OR EQUAL) MODEL# FT415M/IP81Y-60-1.5" TOTALIZING FLOW INDICATORS.
5. PROVIDE PHOENIX CONTACT MOD# MCR-RAD TRANSMITTER AND RECEIVER IN APPROPRIATE ENCLOSURES.
6. RELOCATE EXISTING BAG FILTERS.
7. PROVIDE SINGLE POINT FLOAT LEVEL SWITCH MAGNETROL T20-DB2A-AAQ OR EQUAL.
8. PROVIDE MULTIPOINT DISPLACER TYPE FLOAT LEVEL SWITCH MAGNETROL C10 SERIES OR EQUAL.
9. PROVIDE 1 SEAMETRICS (OR EQUAL) MODEL# FT415M/IP81Y-60-3" TOTALIZING FLOW INDICATOR.
10. RELOCATE EXISTING EDUCTOR FOR AMENDMENT ADDITION AS NEEDED.
11. LABEL TANK WITH STENCIL OR PLACARD "CS-16 NON-POTABLE WATER"
12. PROVIDE PUMP P-B3 WITH A CAPACITY OF 120 GPM @ 200 FT. IN A HORIZONTAL END-SUCTION CENTRIFUGAL, CLOSE-COUPLED CONFIGURATION WITH A SOLID 316SS SHAFT (NO SLEEVES), A SINGLE CARTRIDGE STYLE MECHANICAL SEAL WITH SILICON CARBIDE-TUNGSTEN CARBIDE FACES AND VITON O-RINGS (CHESTERTON 155 OR EQUAL) AND EQUIPPED WITH AN ALL 316SS SPIRALTRAC THROAT BUSHING VERSION N, INSTALLATION TYPE A. PRE-PIPE SEAL FOR FLUSH PLAN 12. SUPPLY A 460 V, 60 HZ, 3-PHASE NON-OVERLOADING CONTINUOUS DUTY, TEFC TYPE MOTOR WITH A 1.15 SF AND CLASS F INSULATION. PERMANENTLY LUBRICATED BEARINGS WITH L-10 LIFE=100,000 HOURS

————— EXISTING
 ————— NEW

PRELIMINARY DRAFT

REV.	DESCRIPTION	BY:	DATE:
A	ISSUED FOR CSSA REVIEW AND APPROVAL	HCD	9/2006

REVISIONS

SCALES SHOWN ON THIS DRAWING ARE APPLICABLE ONLY TO B SIZE DRAWING

**CAMP STANLEY STORAGE ACTIVITY
 FACILITY UPGRADES**

Contract No. FA-8903-04-D-8675 Task Order No. 006

CONTRACTOR :
PARSONS Job No. 744223 WBS 10000

Drawing Title :
**CSSA SWMU B3
 BIOREACTOR PUMPING SYSTEM
 PROCESS DIAGRAM**

Designed : RH	Drawn : HCD	Rev: A
Checked : KL	Approved : KRR	
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ATTACHMENT 6
DECEMBER 29, 2006 *LEON SPRINGS TIMES* ARTICLE

Camp Stanley officials and groundwater

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By Joni Simon - Contributing Writer

Camp Stanley has a vast and interesting history. In 1927, the first Academy Award for Best Picture went to the movie "Wings," filmed in 1926 at the location. Another motion picture, "The Rough Riders," was filmed there the same year. Prehistoric campsites have been documented on the grounds.

During World War I, troops trained for the front huddled in trenches there.

Camp Stanley also has a history of contamination, something officials say is under control. They gathered at Leon Springs and Fair Oaks Ranch elementary schools in December to reassure the public that their drinking water was safe. According to the Environmental Protection Agency drinking water standards, concentrations below 5.0 ppb for PCE and TCE are considered safe. Literature handed out at the event indicated water levels are well within that range.

Camp Stanley Storage Activity officials say they'll continue to sample both on and off-post groundwater on a quarterly basis. CSSA coordinates this groundwater monitoring program with regulatory agencies and potentially affected parties including, in this area, EPA, Fair Oaks Ranch, Fair Oaks Ranch Water and Utilities as well as Bexar Metropolitan.

The meetings were just routine, according to Camp Stanley Environment Advisor Jim Cannizzo and attended by less than 10 homeowners. CSSA officials and their consultants explained to residents what happened and how CSSA has cleaned up the mess made more than a generation ago.

"Contamination was caused by a metal degreasing chemical, the chlorinated solvent PCE, commonly used by the military in the past," geologist Scott Pearson said. "CSSA has replaced most of the chlorinated solvent with more environmentally friendly citrus cleaners, so that's no longer an issue."

PCE breaks down into other chemicals, including TCE and dichlorethene. Pearson says CSSA takes a proactive approach in ensuring the drinking water is safe with periodic monitoring of the 55 wells located mostly to the south and southwest of the camp in the Leon Springs area.

Bacteria, which often gets a bad rap, is a good thing in this situation, according to Pearson. Bioremediation is a natural process in which naturally occurring or inserted micro-organisms, such as fungi, decompose or metabolize organic contaminants found in the soil and/or groundwater, converting them into harmless end-products.

"The goal is to enhance the natural processes by which naturally occurring microbes break down PCE and TCE," Pearson said. "We plan to monitor the cleanup action to improve the effectiveness of groundwater treatment."

The last landfill found to be TCE contaminated, was mined.

"The soil was shipped far away from here," Cannizzo said. "Approximately 16,000 cubic yards of waste material has been removed to an off-post landfill. Most of it didn't test that high."

Camp Stanley officials completed that removal action in 2006.

The meetings in December were the third in a series of open houses held in 2001 and 2002 to describe "the extensive efforts at Camp Stanley to ensure local drinking water is safe and to describe current environmental management activities," according to Cannizzo.

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