

**FINAL**

**PROGRESS REPORT**

**January 1, 2008 – June 30, 2008**

**(32<sup>nd</sup> REPORT)**



Camp Stanley Storage Activity  
Boerne, Texas

USEPA ID No. TX2210020739

**July 2008**

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## ACRONYMS AND ABBREVIATIONS

°C	Degrees Celsius
1,1-DCE	1,1-dichloroethene
AOC	area of concern
AL	Action level
APAR	affected property assessment report
APPL	Agriculture & Priority Pollutants Laboratories, Inc.
<i>cis</i> -1,2-DCE	<i>cis</i> -1,2-dichloroethene
CAH	Chlorinated aliphatic hydrocarbons
COC	Chemical of concern
CSSA	Camp Stanley Storage Activity
DQO	data quality objective
GAC	granular activated carbon
gpm	gallons per minute
H&A	Hankins and Anderson
HCSM	hydrogeologic conceptual site model
I/SM	interim/stabilization measures
LTMO	long-term monitoring optimization
MCL	Maximum contaminant level
µg/l	micrograms per liter
O&M	operations and maintenance
Order	§3008(h) Administrative Order on Consent
PCL	Protective Concentration Limits
PCE	Tetrachloroethene
QAPP	Quality Assurance Program Plan
RCRA	Resource Conservation and Recovery Act
RFI	RCRA facility investigation
RIR	Release Investigation Report
SCL	Secondary Contaminant Levels
SVE	Soil vapor extraction
SVOC	Semi-volatile organic compounds
SWMU	solid waste management unit
TCE	Trichloroethene
TCEQ	Texas Commission on Environmental Quality
TO	task order
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
WP	work plan

## **PROGRESS REPORT JANUARY 1, 2008 – JUNE 30, 2008 (32<sup>nd</sup> PERIOD)**

### **INTRODUCTION**

This 32<sup>nd</sup> 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 January 1, 2008 through June 30, 2008. 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 submitted to cover January 1 through June 30 will be submitted by July 10; and progress reports submitted to cover July 1 through December 31 will be submitted by January 10.

### **Summary of Activities this Period**

Between January 1 and June 30, 2008, significant activities related to the Order included:

- Continuation of solid waste management unit (SWMU) B-3 bioreactor treatability studies;
- Continuation of Area of Concern (AOC)-65 Soil Vapor Extraction (SVE) operations and maintenance (O&M) of the SVE system treatability study;
- Continuation of the groundwater monitoring program under the regulator-approved data quality objectives (DQO);
- Continuation of investigations of SWMUs and AOCs including SWMU B-71, AOC-63, AOC-64 (Weston) and SWMU I-1, SWMU B-2, SWMU B-8, SWMU B-20/21, SWMU B-24, AOC-67, AOC-68, AOC-69, and AOC-73 (Parsons);
- Closure/delisting of three additional sites: SWMU B-29, Coal Bins, B-14, AOC-55;
- Continued maintenance of on-post and off-post granular activated carbon (GAC) systems and on-post permitted outfalls; and
- Continuation of administrative record maintenance.

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 tasks active from January 1 through June 30, 2008 is provided in this

report. No current information is provided for tasks that are not active; however, a summary of all tasks, subtasks, and their status has been presented in previous reports. Details of the evaluation of the percent complete by awarded projects are included in **Table 2**. An updated project team contact information chart with telephone numbers and addresses is included in **Table 3**.

**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 and a financial summary of funded projects. **Attachment 4** is a summary of groundwater results for sampling events conducted this period.

**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 P32?
<b>Interim Measures</b>		30%				98%	
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%	97%	67%		No
Reports			23%	100%	23%		No
<b>RCRA Facility Investigation</b>		30%				73%	
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			5%	100%	5%		Yes
Facility Investigation			40%	75%	28%		Yes
Risk Assessment			10%	89%	9%		No
Investigation Analysis			10%	84%	8%		No
Groundwater Investigation			15%	76%	11%		Yes
Treatability Studies			10%	46%	5%		Yes
Progress Reports		5%	27%	1%		Yes	
<b>Corrective Measures Study</b>		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
<b>Corrective Measures</b>		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						48%	

## RCRA FACILITY INVESTIGATION

The RCRA Facility Investigation (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 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<sup>®</sup>-equipped wells;
- Verification and validation of analytical data;
- SVE system O&M at AOC-65;
- Continuation of bioreactor operation at SWMU B-3;
- Investigations of SWMU B-71, AOC-63, AOC-64 (Weston) and SWMU I-1, SWMU B-2, SWMU B-8, SWMU B-20/21, SWMU B-24, AOC-67, AOC-68, AOC-69, and AOC-73 (Parsons); and
- TCEQ approval of delisting the Coal Bins AOC and B-14, and closure of SWMU B-29.

### 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. As previously agreed by USEPA, because the CSSA Environmental Encyclopedia includes all information required by the Order, it is used to fulfill this requirement. The RFI WP task makes up approximately 5 percent of the RFI phase. Estimation of percent complete is difficult due to the continuing need for plan addenda as new projects are identified and awarded. As of the end of Period 32, WPs currently under scope are 100 percent complete. The CSSA Environmental Encyclopedia will continue to be updated as WPs for any new projects are finalized. During Period 32, the Ecological Risk Assessment Work Plan for the North Pasture was completed, and the work plan for upcoming work at SWMU B-71 and AOC-64 was initiated.

### Environmental Encyclopedia Updates

The CSSA website ([www.stanley.army.mil](http://www.stanley.army.mil)) was updated with documents added to the Environmental Encyclopedia through the end of June 2008. 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 June 2008. Updates made in Period 32 included the following:

- Period 31 USEPA Progress Report;

- Fact Sheet No. 27;
- Final September 2007 On-Post Groundwater Monitoring Report;
- Final September 2007 Off-post Groundwater Monitoring Report
- Final June 2007 On-post Groundwater Monitoring Report;
- Final June 2007 Off-post Groundwater Monitoring Report;
- Final March 2007 On-post Groundwater Monitoring Report;
- Final March 2007 Off-post Groundwater Monitoring Report;
- Final DY02 Health and Safety Plan, May 2008;
- Final Ecological Risk Assessment Work Plan for North Pasture;
- Various correspondence to and from CSSA;
- Various meeting minutes; and
- Various tables of contents, site chronologies, and indices.

In an effort to improve the usability of the Environmental Encyclopedia, CSSA developed the online, interactive CSSA Environmental Summary (Site Management Plan). This summary operates along side the encyclopedia and gives a brief overview of past efforts, current status and planned actions. This summary includes active links to the encyclopedia and other appropriate web sources and will be periodically updated as work progresses. The CSSA Environmental Summary is available through password-protected access on the Environmental Encyclopedia home web page ([www.stanley.army.mil](http://www.stanley.army.mil)).

## 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 Measures 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 32, this task is approximately 75 percent complete.

A total of 84 SWMUs, AOCs, and Range Management Units have been identified at CSSA, and investigations have been conducted at 69 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 36 CSSA sites has been approved by Texas Commission on Environmental Quality (TCEQ), and ten sites were either delisted or granted No Further Action status.

## **SWMU and AOC Investigations**

The Facility Investigation subtask makes up approximately 40 percent of the RFI phase. As of the end of Period 32, this task is approximately 75 percent complete.

### **SWMU B-71, AOC-63, and AOC-64**

Site investigations at SWMU B-71, AOC-63, and AOC-64 are funded under United States Army Corps of Engineers (USACE) Contract No. DACA56-04-D-2006, task order (TO) No. DY01-Weston. Initial soil sampling/analyses at this site identified low levels of benzene. An Affected Property Assessment Report (APAR) for AOC-63 is being prepared. The APAR documents chemical of concern (COC) delineation activities and site-specific protective concentration level (PCL) development. Based on the assessment, no threat to human health or the environment is presented by COC concentrations at AOC-63 and no further investigation or corrective action is recommended for the site. The final APAR is planned for submittal in July 2008. Interim removal actions will be conducted at AOC-64 and SWMU B-71 in the next period to address munitions debris and affected soil.

### **SWMU I-1**

A Release Investigation Report (RIR) is being prepared to request no further action status from TCEQ. The RIR will be submitted to TCEQ and USEPA in Period 33.

### **AOC-67 and AOC-68**

Excavation activities were conducted at AOC-67 and AOC-68 on December 4, 2007. Approximately 50 cubic yards of soil and wheelabrator waste from each site was placed into three rolloff containers near the sites. Waste characterization and confirmation samples were collected on December 6, 2007. Waste characterization samples indicated the material met Class 2 Non-hazardous criteria and the investigation derived waste was disposed of off-post at Waste Management's Covel Gardens landfill facility.

After soil removal, nine confirmation samples were collected at AOC-67 and submitted to Agriculture & Priority Pollutants Laboratories, Inc. (APPL) for lead analysis and six samples were collected at AOC-68 and submitted for volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), and metals analysis on December 6, 2007. Results indicated that there remains some impacted soil material on the western side of AOC-68 and the bottom ditch area of AOC-67 and AOC-68. An additional sampling event was conducted on April 10, 2008 to determine the vertical extent of COCs in bottom samples at AOC-67/68. Results of analysis indicate that additional removal action on the western side of AOC-68 is necessary.

### **AOC-69**

Ten soil samples were collected from AOC-69 and analyzed for VOCs, explosives, and CSSA metals. The surface of the site was also inspected for evidence of munitions debris, and none was found. Soil samples indicated concentrations above background/Tier 1 residential PCLs for lead at three locations. Additional soil samples were collected to delineate the extent of contamination. Due to the small amount of soil present at the site, it is anticipated that a small interim removal action will be conducted.

### **AOC-73**

Work at SWMU B-73 included removal of debris, trash, and soil. On March 3, 2008, after removal was complete, ten samples were collected and submitted to APPL for the nine CSSA-analyzed metals, SVOCs, and VOC analysis. Additionally, one waste characterization sample was collected and submitted for toxicity characteristic leaching procedure metal analysis and total petroleum hydrocarbons from approximately 120 cubic yards of trash and soil media for disposal. Results of analysis indicated that no contaminants exist in the remaining soil media at AOC-73. Waste and soil media identified for disposal met Class 2 non-hazardous criteria and were removed to Waste Management's Covel Gardens landfill facility. An RIR will be prepared for AOC-73 during Period 33.

### **SWMU B-2, B-8, B-20/21 & B-24**

Removal actions were initiated at SWMU B-2 and SWMU B-8 to remove impacted soil media previously identified above Texas Risk Reduction Program (TRRP) Residential PCLs. Additionally, investigation of an eastern area of SWMU B-24 for a suspected disposal trench was accomplished during March 3, 2008 through March 7, 2008. Approximately 60 cubic yards of soil media from SWMU B-2 were removed and disposed of as Class 2 non-hazardous media at Covel Gardens landfill facility. Confirmation samples from SWMU B-2 were collected March 5, 2008. Results of analysis indicate that no remaining soil media are above TRRP residential PCLs.

Approximately 2,500 cubic yards of barium, copper, lead, and zinc impacted soil media were excavated from SWMU B-8 during March 10 through March 14, 2008. Approximately 1,000 cubic yards of impacted media within SWMU B-8 met RCRA hazardous criteria for lead of which 200 cubic yards also exceeded hazardous criteria for barium.

Approximately 600 cubic yards were stabilized with phosphate-induced metal stabilization material resulting in a Class 1 non-hazardous media. A letter of intent to move the non-hazardous lead impacted media to CSSA's active firing range berm was sent to the TCEQ on April 24, 2008. TCEQ acknowledged the intent for movement of the impacted media by letter dated May 9, 2008. Removal of approximately 2,100 cubic yards of non-hazardous lead impacted media was initiated May 12, 2008 and was completed on May 22, 2008. Approximately 400 cubic yards of lead and barium impacted soil media remain at SWMU B-8 for future treatment and placement on the east pasture firing range berm. Confirmatory samples from the removal area at SWMU B-8 were collected on June 23, 2008 and analyzed for metals. Results will be used in the completion of a combined APAR for the North Pasture SWMUs.

Investigation of the eastern area of SWMU B-24 for an additional trench was conducted during the week of March 3 through March 7, 2008. Investigation included screening for potential unexploded ordnance (UXO) followed by excavation of the suspected area. Results of the investigation concluded that the area has no visible waste and is not a disposal trench. Fourteen samples for CSSA nine metals, SVOC, and VOCs were collected in the SWMU B-24 area (including the suspected eastern trench area) to define the lateral extent of the unit and identify any areas exceeding TRRP residential PCLs on June 25, 2008. Results of these analyses will be reviewed to determine if additional removal actions are warranted. An APAR will be submitted summarizing the investigation results.

To define the lateral extent and identify any areas exceeding TRRP residential PCLs, eleven samples from SWMU B-20/21 were collected on June 23, 2008 and analyzed for the nine CSSA metals. Results of these analyses will be reviewed and a determination made if additional removal actions are warranted. A draft APAR is scheduled for completion during Period 33.

## Groundwater Investigation

The groundwater investigation subtask makes up approximately 15 percent of the RFI phase. As of the end of Period 32, this task is approximately 81 percent complete.

On- and off-post groundwater monitoring was conducted in accordance with the regulator-approved DQOs during Period 32. Sampling frequencies for on-post wells are determined by the long term monitoring optimization (LTMO) study completed in May 2005, as approved by TCEQ and USEPA. Based on the LTMO recommendations, on-post wells are sampled either quarterly, semi-annually, or biennially (every two years). Off-post wells are not included in the LTMO recommendations and are sampled quarterly under the DQOs and the CSSA Off-Post Monitoring and Response Plan. 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 WPs and DQOs. On- and off-post monitoring wells and Westbay-equipped wells were sampled for the SW-846 Method 8260B VOCs 1,1-dichloroethene (1,1-DCE), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), *trans*-1,2-dichloroethene, tetrachloroethene (PCE), trichloroethene (TCE), and vinyl chloride (VC). On-post monitoring wells were sampled for the SW-846 Method 6010/6020 metals lead, cadmium and nickel. Additional samples were collected off-post from the wells with GAC filtration systems. Samples were analyzed by either Test America in Arvada, Colorado, or APPL in Fresno, California. Parsons' chemists validated and verified the data in accordance with the CSSA Quality Assurance Program Plan (QAPP). All detected concentrations of VOCs and metals are presented in **Attachment 4**.

## December 2007 Sampling

Laboratory results for the December 2007 event were not included with the Period 31 Progress Report submitted in January 2008 because they were not yet available. The results are included in **Attachment 4**. The action level (AL) or applicable maximum contaminant level (MCL) was exceeded in on-post wells CS-9, CS-11, and CS-MW25-LGR for the analytes lead and/or chromium. No on-post monitoring wells exceeded the MCL for VOCs in December

2007. The MCL was exceeded in off-post well RFR-10 for PCE and TCE; however, this well has been equipped with a GAC filtration system since 2001.

### **March 2008 Sampling**

Twenty-two on-post monitoring wells and the LGR zones of the four southern Westbay-equipped wells were sampled in March 2008. Off-post wells sampled in March 2008 included 29 private and public off-post drinking water wells with six post-GAC samples. Three off-post wells could not be sampled (JW-12, I10-5, and JW-26). JW-12 and I10-5 could not be sampled due to the inability to contact the well owners to confirm property access. The well owner of JW-26 has declined to participate in the groundwater program because they are selling their house in the future.

In March 2008 well CS-MW22-LGR had detections of lead at a concentration of 40 µg/L which exceeded the drinking water AL of 15 micrograms per liter (µg/L). No other on-post well had concentrations of lead above the AL or MCL in March 2008.

VOC MCLs were exceeded in on-post monitoring wells CS-D, CS-MW1-LGR, CS-MW16-LGR, and CS-MW16-CC for the analytes PCE, TCE, and/or *cis*-1,2-DCE. Westbay-equipped wells CS-WB01, CS-WB02, CS-WB03, and CS-WB04 had exceedances of either PCE and/or TCE in various intervals. No MCL exceedances were reported in any of the off-post wells. Post-GAC samples were collected in March 2008 and all samples were non detect for VOCs indicating the GAC units are functioning properly. On January 25, 2008 routine six month maintenance was performed on the GAC treatment systems installed at LS-6, LS-7, OFR-3, RFR-10, and RFR-11. The carbon canisters were exchanged and the ultraviolet lights were replaced.

### **June 2008 Sampling**

Ten on-post wells were sampled in June 2008. Off-post wells sampled in June 2008 included 28 private and public off-post drinking water wells. Sampling was conducted between June 2 and June 26<sup>st</sup>, 2008. Laboratory results will be received in July 2008 and summarized in the next progress report.

### **On-Post GAC Systems**

CSSA operated and maintained the permitted on-post GAC unit at Outfall 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 permit requirements. No discharge occurred at either outfall this period.

### **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 and the Groundwater Monitoring DQOs, the off-post GAC filtration systems are maintained by CSSA

and sampled every six months. Monthly O&M activities for the off-post residential GAC filtration 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-6, LS-7, OFR-3, RFR-10 and RFR-11 were collected in March 2008. Carbon canister exchange was completed in January 2008 for the off-post GAC systems. 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 QAPP requirements. Data validation and verification continued during Period 32 under CSSA projects TO 0008, DY01-Parsons, DY02-Parsons and Hankins & Anderson (H&A) Parsons. Parsons chemists conducted data validation for 57 data packages during Period 32 including:

- Four related to TO0008 sampling activities;
- Four related to DY01-Parsons sampling activities;
- Forty related to DY02-Parsons sampling activities;
- Six related to quarterly groundwater monitoring activities on DY02-Parsons; and
- Three related to environmental program activities on H&A-Parsons.

TO0008 data packages included sampling events for the six newly installed LGR monitoring wells. DY01-Parsons data packages included sampling events for the SWMU and AOC investigations conducted. DY02-Parsons data packages covered sampling conducted for the bioreactor treatability study and quarterly groundwater monitoring. H&A-Parsons sampling conducted included waste characterization and miscellaneous sampling required for the environmental program. Data packages were validated and verified in accordance with specific project DQOs and the CSSA QAPP.

### **Well Installations and Conceptual Site Model Update**

As a result of data gaps identified in the Long-Term Monitoring Optimization (LTMO) study, six LGR monitoring wells were installed to further delineate plume extent and groundwater flow direction in spring 2007. Well locations are shown in Attachment 1. A draft report detailing the well installations was submitted December 2007. Comments have been received, and a final report is being prepared. Several rounds of groundwater sampling events have been accomplished at the new wells (CS-MW20-LGR through CS-MW25-LGR) since the installation, and the results are being incorporated into the basewide hydrogeologic conceptual site model (HCSM). The HCSM report is being updated to incorporate the data from the new monitoring wells, and update all site data through the December 2007 groundwater monitoring event.

PCE detections above the MCL occurred in the new LGR monitoring well CS-MW20-LGR at concentrations ranging from 1.6 µg/L to 1.8 µg/L. No PCE has been detected in the remaining five new wells. However, detections of inorganics above the appropriate comparison

criteria have occurred within two wells, CS-MW22-LGR and CS-MW25-LGR. Repeatable concentrations of lead above the action level of 0.015 mg/L have been reported in both wells, with the highest concentration being 0.091 mg/L (CS-MW25-LGR). In addition, zinc has been reported at CS-MW22-LGR at a concentration of 8.0 mg/L, which also exceeds the federal MCL (5.0 mg/L). Both of these wells are physically located near potential inorganic sources that have been documented by prior investigations such as Demo Dud near CS-MW22-LGR and SWMU B-8 near CS-MW25-LGR.

The HCSM update will also include data from extreme drought conditions (2006) to above-normal precipitation (2007). Of hydraulic interest, there has always been a groundwater “mounding” effect that has been measured at CS-MW4-LGR along Salado Creek in the central portion of the facility. Between March 2005 and December 2006, the aquifer had declined by more than 225 feet. By mid-2006 the persistent groundwater mounding effect along Salado Creek had dissipated, and for the first time since 2001, the groundwater surface was not dominated by the effect around Salado Creek. In 2007, central Texas received an abnormally high amount of rain from which the aquifer rebounded by more than 200 feet by September 2007. By March of that year the mounding effect reoccurred and the groundwater surface returned to its normal flow pattern.

Part of the intent of the new wells was to investigate the occurrence of this groundwater mound by placing wells at select locations around and near Salado Creek. Wells CS-MW20-LGR, CS-MW21-LGR, and CS-MW22-LGR have helped define the extent of mounding to the south. While the feature is still a predominant characteristic, it is somewhat diminished from prior years. The HCSM report will recommend tracer studies for future work to help quantify flow direction and velocity within the aquifer.

## **Treatability Studies**

The Treatability Study subtask makes up approximately 10 percent of the RFI phase. As of the end of Period 32, this task is approximately 46 percent complete.

### **SWMU B-3 Bioreactor Treatability Study**

SWMU B-3 Bioreactor Performance Status Reports were submitted to CSSA, TCEQ and USEPA on a monthly basis during Period 32. Approximately 6,500,000 gallons of groundwater extracted from CS-MW16-LGR and CS-MW16-CC have been injected into bioreactor trench 1 since the start of injection. Monthly Underground Injection Control (UIC) reports for the period, in accordance with CSSA’s Class V Aquifer Remediation Injection Well Permit, TCEQ Authorization No. 5X2600431; WWC12002216 were submitted to the TCEQ during period 32 on January 10, 2008, February 21, 2008, April 4, 2008, April 21, 2008, May 9, 2008 and June 10, 2008.

Groundwater samples were collected from sumps, wells, and/or Westbay-equipped wells after the discharge of the bioreactor delivery pump and prior to injection of the groundwater into SWMU B-3 trench 1. Sampling frequency was based on permit requirements and water availability. In general, injected groundwater samples are collected twice monthly and monitoring samples from the Westbay-equipped monitoring wells and injection trench sumps are

collected monthly. All samples were analyzed for permit parameters - VOCs and total dissolved solids as well as performance parameters by APPL, DHL Laboratory, and Microseeps Laboratory. Field data collected included injection volumes, injection pressures and the pH of recovered groundwater for TCEQ permit compliance. Analytical data collected for performance parameters include;

- Dissolved Organic Carbon
- Methane, Ethane, Ethene
- Hydrogen
- Temperature, pH, specific conductivity
- Oxidation Reduction Potential
- Dissolved Oxygen
- Total organic carbon
- Carbon Dioxide
- Hydrogen Sulfide
- Alkalinity
- Nitrogen, Nitrate + Nitrite
- Additional ions including Sulfate, Chloride, Ferrous Iron, Manganese
- Dehalococcoides populations, and
- Isotopic ratio analyses.

During period 32 (January through June 2008), rainfall has been minimal at the bioreactor site. The bioreactor is kept at saturated conditions by continually supplying supplemental water. Provisions are being made to supply supplemental water to the bioreactor as drought conditions are expected to continue. Trench 1 was bioaugmented with DHC in February 2008.

Monitoring results indicate that a significant amount of VOC components remain in the SWMU B-3 formation including *cis*-1,2-DCE (a product of reductive dechlorination of highly chlorinated species such as PCE and TCE), and minor amounts of fuel components such as toluene. Results also indicate that reductive dechlorination is on-going at the site. Degradation products, vinyl chloride and ethene, were present within the bioreactor and ethene was detected in Westbay-equipped well CS-WB05 and B3-MW01 during the period monitoring events. Ethene represents one of the final degradation products of attenuated chlorinated solvents. Other observations include:

- Water quality field measurements from the bioreactor sumps generally indicate that dissolved oxygen remains low (< 0.5 mg/L), oxidation reduction potential averages less than -180 millivolts, pH is approximately 6.5, temperatures ranges from 25 degrees Celsius (°C) to 34°C, and specific conductivity ranges from 0.69 to 3.52 millisiemens per centimeter. This data indicates the water within the bioreactor supports reductive dechlorination of chlorinated aliphatic hydrocarbons (CAH) by *Dehalococcoides* bacterium.
- The dissolved hydrogen concentrations within the bioreactor sump samples were in the range consistent with reductive dechlorination of CAHs by *Dehalococcoides* bacteria.

- Saturated conditions are being maintained within bioreactor Trench 1 with an average water thickness for the quarter of approximately 6.6 feet.
- Isotopic ratio sample results for Carbon indicate that there apparently remains an untreated source (enrichment of C<sub>12</sub>/C<sub>13</sub> ratio) of TCE near CS-WB08 and Trench 6.

### **AOC-65 SVE System**

Rehabilitation and expansion of the AOC-65 SVE system was completed in Period 31. The permit-by-rule (PBR) for the SVE systems was submitted to the TCEQ on January 08, 2008 and the system re-started in April 2008. Initial monitoring of the AOC-65 SVE system was accomplished April 14, 2008. Monitoring results indicate no exceedances of PBR limits occurred for the SVE system. The system is expected to operate periodically in Period 33, while blower shut-down problem is investigated and remedied. The SVE Operation and Monitoring/Maintenance Plan has been drafted and is currently under review.

### **SUMMARY OF CONTACTS**

Letters summarizing results of the December 2007 and March 2008 off-post groundwater monitoring event were mailed to owners of the off-post wells in period 32. Additional contacts with TCEQ or USEPA regarding Order-related activities occurred this period:

#### **Correspondence:**

- January 08, 2008 Submitted Permit By Rule Application for AOC-65 Soil Vapor Extraction Pilot Study;
- January 10, 2008 Submittal of UIC Authorization 5X2600431 Monthly Report to TCEQ for Period November 2007;
- February 21, 2008 Submittal of UIC Authorization 5X2600431 Monthly Report to TCEQ for Period December 2007;
- February 28, 2008 TCEQ approval of RRS1 Closure of SWMU B-29;
- February 28, 2008 TCEQ approval of delisting Coal Bins and B-14;
- April 4, 2008 Submittal of UIC Authorization 5X2600431 Quarterly Report to TCEQ for Period November 2007 through January 2008;
- April 21, 2008 Submittal of UIC Authorization 5X2600431 Monthly Report to TCEQ for Period February 2008;
- April 24, 2008 Letter requesting movement of non-hazardous lead impacted soils from SWMU B-8 to East Pasture Firing Range;
- April 24, 2008 Letter requesting reduction of data collection and reporting requirements for the Pilot Study Class V Aquifer Remediation Injection Wells at CSSA;

- May 9, 2008 Submittal of UIC Authorization 5X2600431 Monthly Report to TCEQ for Period March 2008; and
- June 10, 2008 Submittal of UIC Authorization 5X2600431 Quarterly Report to TCEQ for Period January through April 2008.
- February 2008 Add TCEQ letters approving B-14 Coal Bin and B-29 closure/delisting.

### **Meetings:**

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

## **PROJECTED WORK FOR THE NEXT PERIOD**

### **Fact Sheets**

Fact Sheets covering the 2007 groundwater monitoring were distributed to the CSSA mailing list. The CSSA mailing list was updated to include current addresses as residents moved into and out of the area.

### **Groundwater Monitoring**

Continued sampling of on and off-post monitoring and water supply wells will continue in September and December 2008. The 2007 annual groundwater monitoring report will be submitted next period. The O&M at the residential GAC filtration systems (LS-6, LS-7, OFR-3, RFR-10, and RFR-11) will be conducted every three weeks during Period 32.

### **AOC-65 SVE System Operations**

AOC-65 SVE system O&M will continue in Period 33. The system includes four blowers operating continuously, and O&M of those systems will be performed in accordance with the Updated O&M Manual for SVE Systems at CSSA. Monitoring is expected to occur twice monthly, monthly, and semi-annually.

### **SWMU and AOC Investigations**

Investigations, interim removal actions, and/or reporting will be continued for SWMUs B-2, B-8, B-20/21, B-24, I-1, B-71, AOC-63, AOC-64, AOC-67, AOC-68, AOC-69, and AOC-73. Reports summarizing investigation results will be submitted. An ecological risk assessment will be completed after all investigations of units in North Pasture are completed.

### **SWMU B-3 Bioreactor Treatability Study Monitoring**

Monitoring of the bioreactor at SWMU B-3 will be continued during Period 33. Monitoring requirements will be performed to meet TCEQ's UIC authorization requirements. Performance monitoring data will be collected in accordance with the updated Bioreactor O&M Manual.

## **MEETINGS**

A status meeting will be held with TCEQ and USEPA on July 10, 2008.

**Table 2, Project Task Completion to Date for Open Projects Only  
 (Values updated through June 30, 2007)**

Project Number	Description of Task	Relation to Order	Percent Complete	Start/End Dates
<b>Previously completed TOs:</b>				
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%	2000 to 2003
TO0058	Treatability Study for AOC-65	RFI	100%	2001 to 2005
TO0042	Well Installations and Groundwater Monitoring	I/SM/RFI	100%	2001 to 2006
TO0017	East Pasture Removal Action	Other	100%	2005 to 2006
TO0019	SWMU Closures	RFI	100%	2003 to 2006
TO0005	Environmental Program Technical Support	I/SM/RFI	100%	2003 to 2007
TO0098	Miscellaneous Studies	Other	100%	2004 to 2007
<b>Current TOs:</b>				
<b>TO0008</b>	<b>Groundwater Monitoring</b>	<b>I/SM/RFI</b>		<b>May 2003 to August 2008</b>
	TO Management	I/SM/RFI	90%	
	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%	

Project Number	Description of Task	Relation to Order	Percent Complete	Start/End Dates
	Installation of Monitoring Wells	RFI	91%	
	CSM Update	RFI	24%	
<b>TO0006</b>	<b>SWMU B-3 and AOC-65 Remediation</b>	<b>RFI</b>		<b>August 2004 to May 2008</b>
	Project Management	I/SM/RFI	100%	
	Meetings	I/SM/RFI	100%	
	WPs & DQOs	RFI	100%	
	Outfall Reuse Design & Construct	I/SM/RFI	99%	
	B3 Remedial Optimization	RFI	99%	
	AST Upgrade	I/SM/RFI	30%	
	SVE Expand & O&M	RFI	99%	
	SWMU B-3 Monitoring Network	RFI	100%	
	Asphalt Removal Action	Other	100%	
	SWMU B-3 Removal Action	RFI	100%	
	Bioreactor Construction	RFI	100%	
	Bioreactor Testing & O&M	RFI	100%	
	CS-MW16-CC Pumping Test	RFI	100%	
<b>TO0207</b>	<b>Environmental Support, Groundwater Monitoring</b>	<b>I/SM/RFI</b>		<b>August 2006 to October 2008</b>
	Project Management	I/SM/RFI	95%	
	Meetings, teleconferences	I/SM/RFI	50%	
	Work Plans	I/SM/RFI	100%	
	On-post Groundwater Monitoring	I/SM/RFI	99%	
	Off-post Groundwater Monitoring	I/SM/RFI	99%	
	Data validation and verification	I/SM/RFI	100%	
	Public Meetings	I/SM/RFI	100%	
	DMS Development	I/SM/RFI	65%	
	Environmental Encyclopedia Updates	I/SM/RFI	97%	
	LAN Updates	I/SM/RFI	97%	
	USEPA Progress Reports	I/SM/RFI	100%	
<b>DY01 (Parsons)</b>	<b>Environmental Compliance, SWMU and AOC closure Investigations</b>	<b>RFI</b>		<b>August 2006 to December 2008</b>
	Project management	RFI	58%	
	Kickoff meeting/Data Management	RFI	100%	
	Work Plans	RFI	100%	
	Inner Cantonment Site Investigation	RFI	65%	
	North Pasture Site Investigations	RFI	25%	
	Environmental Support	RFI	11%	
	Recordkeeping	RFI	5%	
	Title 2 Services	RFI	82%	
	Project meetings	RFI	15%	
	Bioaugmentation Injection	RFI	100%	
	Bird Survey	Other	100%	
	Hazardous Waste Management Plan	Other	20%	
	EMS Documentation	Other	0%	

Project Number	Description of Task	Relation to Order	Percent Complete	Start/End Dates
	Ecological Risk Assessment	RFI	80%	
<b>DY01 (Weston)</b>	<b>Affected Property Assessment Investigations</b>	<b>RFI</b>	<b>0%</b>	<b>September 2006 to September 2007</b>
	Update SPCC Plans	Other	100%	
	Tank Inspections	Other	100%	
	Title 2 Services	RFI	15%	
	AOC-63 APAR	RFI	95%	
	AOC-64 APAR	RFI	60%	
	SWMU B-71 APAR	RFI	60%	
<b>DY02 (Parsons)</b>	<b>Environmental Compliance, SWMU and AOC closure Investigations</b>	<b>RFI</b>		<b>August 2007 to December 2008</b>
	Groundwater Monitoring	I/SM/RFI	45%	
	Water Supply Well	Other	22%	
	SWMU B-3 Bioreactor O&M	RFI	60%	
	SVE Treatability Study	RFI	20%	
	Project Management	RFI	43%	
<b>DY02 (Weston)</b>	<b>Removal Action</b>	<b>RFI</b>		<b>August 2007 to December 2008</b>
	Plan Preparation and Mobilization	RFI	66%	
	AOC-64 Interim Removal Action	RFI	0%	
	Interim Removal Action Reporting	RFI	0%	
<b>H&amp;A (Parsons)</b>	<b>Administrative Support and Environmental Services</b>			<b>March 2008 to February 2009</b>
	Administrative Record, LAN & GIS and USEPA Progress Reports	RFI	25%	
	Miscellaneous Sampling	Other/RFI	14%	
	Project Management	RFI	1%	

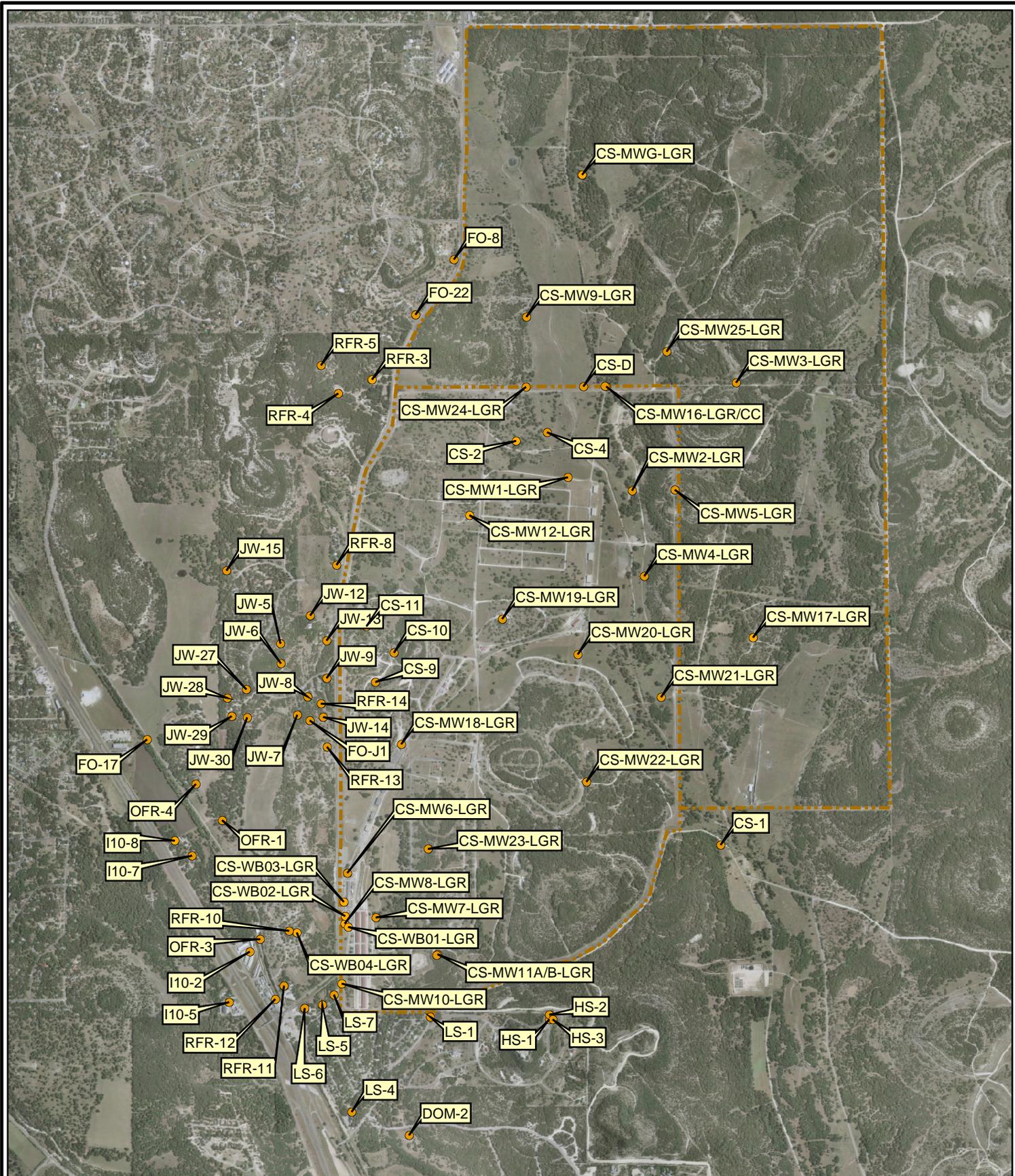
**Table 3, Project Team Contact Information**

<b>Name</b>	<b>Organization/Role</b>	<b>Street Address</b>	<b>City, State, Zip</b>	<b>Phone No.</b>	<b>Fax No.</b>	<b>E-mail</b>
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Rayos, Sonny	TCEQ, Project Mgr	P.O. Box 13087,	Austin, TX	(512) 239-2371		Srayos@tceq.state.tx.us

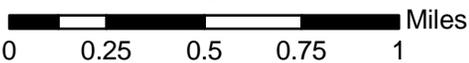
Name	Organization/Role	Street Address	City, State, Zip	Phone No.	Fax No.	E-mail
		MC-127	78711-3087			
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# **ATTACHMENT 1**

## **ON-POST AND OFF-POST SAMPLED WELLS FIGURE**



Aerial Photo Date: 2003



- Sampled Wells
- CSSA Boundary

### Attachment 1

Wells Sampled December 2007,  
March and June 2008  
Camp Stanley Storage Activity

Parsons

## **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	NA	X				November-02	RRS1
B-2	Small arms ammunition burning area (1954) - North Pasture		Currently under investigation						
B-3	Landfill area (garbage disposal and burning trash); filled in 1990-91.	RFI Report March 2005	Continue bioreactor treatability study						
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	NA	X				October-02	RRS1
B-6	Possible solid waste disposal area.	RFI/Closure Report July 2002	NA	X				October-02	RRS1
B-7	Possible fired small arms ammunition brass disposal area	RFI/Closure Report July 2002	NA	X				October-02	RRS1
B-8	Fired small arms ammo brass disposal area (piles of fire bricks, ammo shells) - North Pasture	RFI Report December 2003	Currently under investigation						
B-9	Miscellaneous solid waste (metal and weapons) disposal area.	RFI/Closure Report September 2002	NA	X				March-03	RRS1
B-10	Ammunition disposal area.	RFI/Closure Report May 2003	NA	X				January-04	RRS1
B-11	Miscellaneous solid waste disposal (ammo, scrap metal, const. debris).	RFI Closure Report June 04	NA	X				September-04	RRS1
B-12	Landfill, WPA trash when igloos were being built	RFI Report April-05	NA	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 Request November 2007	NA			X		February-08	Delisting
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	NA	X				September-02	RRS1
B-20/21	Former OB/OD area & ammunition disposal areas - North Pasture	RFI Report July 2002 Combined with B-20	Currently under investigation						
B-22	Burn area (artillery shells).	RFI/Closure Report August 2002	NA	X				December-02	RRS1
B-23	Disposal trenches (two green canisters)	RFI Report April 2005	NA	X				July-05	RRS1
B-23A	Disposal Trench (glass ampoules of liquid)	RFI Closure Report September 2004	NA	X				March-05	RRS1

**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 - North Pasture	RFI Report May 2002	Currently under investigation						
B-25	Possible disposal trench	RFI Report April 2005	NA	X				July-05	RRS1
B-26	Possible disposal trench	Delisting Report August 2004	NA			X		November-04	Delisting
B-27	Sanitary landfill, consisting of 5-6 trenches (6 ft deep, 3 ft wide).	RFI Report July 2002	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	NA	X				February-08	RRS1
B-30	Solid waste disposal area	RFI Report September 2004	NA	X				February-05	RRS1
B-31	Lead shot/sand pipe bedding	RFI/Closure Report July 2002	NA	X				November-02	RRS1
B-32	Lead shot/sand pipe bedding	RFI/Closure Report January 2003	NA	X				November-03	RRS1
B-33	Lead shot/sand pipe bedding	RFI Report September 2004	NA	X				November-04	RRS1
B-34	Maintenance pit floor drain and discharge point	RFI Report August 2002	Delineate contamination, disposal of soil				X		
B-71	Livestock area. Inner cantonment, SW of Well 16.	--	Investigated 2007 (Weston)						
Bldg 40	less-than 90-day accumulation container storage area	RFI/Closure Report September 2003	NA	X				January-04 and January-06	RRS1
Bldg 43	Inactive makeshift ammo demolition facility	RFI Report April 2005	NA	X				August-05	RRS1
DD	Dud ammunition disposal area	RFI Report January 2005	NA	X				April-05	RRS1
F-14	Hazardous waste storage area (<90-day)	RFI/Closure Report, 1995	NA	X				November-95	RRS1
I-1	Inactive incinerator (built in 1943), currently used for transformer storage	RFI Report February 2003	Investigated 2007/2008 (Parsons)						
O-1	Waste liquid/sludge oxidation pond (1975)	RFI/Closure Report October 2000	NA	X				April-02	RRS1
Coal Bins	Coal bins (no longer in use)	Delisting Requested January 2003	NA			X		February-08	Delisting
AOC 35	Area immediately around Well 16. Northeast area of inner cantonment.	RFI/Closure Report October 2002	NA	X				February-03	RRS1
AOC 36	Area between Well 16 and B-3. Possible waste verified not present by magnetometer survey.	RFI/Closure Report April 2002	NA	X				August-02	RRS1

**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 37	Livestock area. NW of Well 16 and N of Well D.	RFI/Closure Report June 2004	NA	X				January-05	NFA
AOC 38	Livestock area. Inner cantonment, SW of Well 16.	RFI Report September 2004	NA	X				February-05	RRS1
AOC 39	None. Area west of Well 16 between North Outer Rd and cantonment fence.	RFI/Closure Report April 2002	NA	X				September-02	RRS1
AOC 40	None. Area east of Well 16 between North Outer Rd and cantonment fence.	RFI/Closure Report May 2002	NA	X				August-02	RRS1
AOC 41	Gate area east of well 16. North Pasture, north of gate 6.	No Further Action Report April 2005	NA		X			July-05	NFA
AOC 42	None. South of SWMUs B-28 and B-19, west of B-4.	RFI Report October 2002	Excavation and sampling.						
AOC 43	Shallow trench without mounds. Metal, UXO. Located 50 ft south of B-7.	RFI/Closure Report October 2002	NA	X				February-03	RRS1
AOC 44	Fox holes and trenches south of B-9 along west slope of hill. UXO includes Stokes mortars and 20-lb bombs.	Delisting Report April 2005	NA			X		July-05	Delisting
AOC 45	Flat area with spent and undamaged bullets. Located east of B-31, near bend in road.	--	--						
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	NA	X				September-02	RRS1
AOC 48	Three N-S trending mounds and a construction debris pile. Located north of B-15/16.	Delisting Report August 2004	NA			X		November-04	Delisting
AOC 49	Trench (4 x 7 ft) without surficial debris. Located SW of deer stand 41 in central East Pasture.	Delisting Report April 2005	NA			X		July-05	Delisting
AOC 50	Area with orange discolored material (most likely nickel penetrate) at ground surface. South of B-30 along gravel road.	RFI/Closure Report January 2005	NA	X				April-05	RRS1
AOC 51	East pasture, east of active range, approximately 25 acres, area around B-9	--	--						
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	NA	X				July-05	RRS1
AOC 54	Area near gutting pit, east of Welding Shop Building, right side of road batteries were stored in the area	Closure Report July 2004	NA	X				November-04	RRS1
AOC 55	Landfill, south of Tenberg Drive, east of Salado Creek	RFI/Closure Report Feb 04	RRS1 Closure	X					

**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 56	Landfill, at intersection of Bernard Road and East Outer Road, surface depression on south side of intersection	Closure Report June 04	NA	X				September-04	RRS1
AOC 57	East of Building 98 and KOA Area, cleaning/maintenance activities performed at temporary structures	--	--						
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	NA			X		July-05	Delisting
AOC 61	Suspected landfill	RFI/Closure Report October 2002	NA	X				February-03	RRS1
AOC 62	Located west of monitoring well MW-2 and east of Salado Creek.	--	--						
AOC 63	Area consisting of 3 barrels containing rocks, south of deer stand 41 in the East Pasture.	--	Currently under investigation						
AOC 64	Area east of SWMU B-4; flares observed in the area	--	Currently under investigation						
AOC 65	A concrete pit area that housed a metal vat that contained TCE and PCE.	RFI Report August 2003	Additional investigation, SVE remediation ongoing						
AOC 66	Area north of Well 16 in the outer cantonment.	Closure Report June 04	NA	X				February-05	NFA
AOC 67	Concrete pad near Building 90 housed a vat containing cleaning solvents.	RFI Report August 2002	Currently under investigation						
AOC 68	Area includes metal slag/debris storage area from Wheelabrator operations next to Building 90-2.	--	Currently under investigation						
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 11, in northwest corner of CSSA.	--	Currently under investigation						

**ATTACHMENT 3**  
**OVERALL H ORDER PERCENT COMPLETE**  
**AND FINANCIAL SUMMARY**

**Attachment 3**  
**Overall (H) Order Percent Complete**

<b>Task Name</b>	<b>% of Project</b>	<b>% of Phase</b>	<b>% Complete</b>	<b>% of Activity Complete</b>	<b>% of Task Complete</b>
<b>Interim Measures</b>	30%				98%
Interim Measures Work Plan		7%	100%	7.0%	
Interim Measures Implementation Reports		70%	97%	67.7%	
		23%	100%	22.9%	
<b>RCRA Facility Investigation</b>	30%				75%
Preliminary Report		5%	100%	5%	
RFI Workplan		5%	100%	5%	
Facility Investigation		40%	75%	30%	
Risk Assessment		10%	89%	9%	
Investigation Analysis		10%	84%	8%	
Groundwater Investigation		15%	81%	12%	
Treatability Studies		10%	46%	5%	
Progress Reports		5%	27%	1%	
<b>Corrective Measures Study</b>	10%				0%
Identify and Develop Alternatives		15%	0%	0%	
Evaluate Alternatives		60%	0%	0%	
Reports		25%	0%	0%	
<b>Corrective Measures Implementatio</b>	30%				0%
Implementation Program Plan		5%	0%	0%	
Corrective Measure Design		15%	0%	0%	
Corrective Measure Construction		70%	0%	0%	
Reports		10%	0%	0%	
<b>% of Phase Complete</b>					<b>51.88%</b>

**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
<b>1 Interim Measures Work Plan</b>	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%		
<b>2 Interim Measures Implementation</b>	70%					96.7%	
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)		4%	100%	4%	0%		
2001 Groundwater Monitoring (4 events)		4%	100%	4%	0%		
2002 Groundwater Monitoring (4 events)		4%	100%	4%	0%		
2003 Groundwater Monitoring (4 events)		4%	100%	4%	0%		
2004 Groundwater Monitoring (4 events)		4%	100%	4%	0%		
2005 Groundwater Monitoring (4 events)		4%	100%	4%	0%		
2006 Groundwater Monitoring		4%	100%	4%	0%		
2007 Groundwater Monitoring		4%	100%	4%	0%		
2008 Groundwater Monitoring		4%	50%	2%	50%		
Locate and map off-site wells		1%	100%	1%	0%		
O-1 Soil Borings		3%	100%	3%	0%		
O-1 Excavation, Stabilization, Diposal		12%	100%	12%	0%		
Establish Treatment Unit		1%	0%	0%	100%		may or may not be necessary. After treatability studies.
Determine appropriate disposition of soil piles		5%	100%	5%	0%		Unfunded CSSA future work.
Treat/discard of soil piles		20%	100%	20%	0%		Unfunded CSSA future work.
AOC 50 Excavation and Disposal		3%	100%	3%	0%		Not included as IM in the Order.
AOC 65 Excavation and Disposal		8%	100%	8%	0%		
<b>3 Reports</b>	23%					99.6%	
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%	100%	0.83%	0%		
Semi-annual Progress Rpt 31 (Dec 2007)		0.83%	100%	0.83%	0%		
Semi-annual Progress Rpt 32 (July 2008)		0.83%	100%	0.83%	0%		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%		
<b>% of Phase Complete</b>						<b>97.62%</b>	

**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
<b>Preliminary Report</b>	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%		
<b>RFI Workplan</b>	5%					100.0%	
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%	100%	5%	0%		
Final Work Plans (DY01)		10%	100%	10%	0%		
Draft Work Plans (DY02)		10%	100%	10%	0%		
Final Work Plans (DY02)		10%	100%	10%	0%		
<b>Facility Investigation<sup>1</sup></b>	40%					74.9%	
<b>Small Areas (0-2 acres in size)</b>							
B-3 Investigation/Report		1.24%	50%	0.620%	50%		Final report submitted, additional work required.
B-4 Investigation/Report		1.24%	80%	0.992%	20%		Final report submitted. Additional work required.
B-5 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved Oct 02.
B-6 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved Oct 02.
B-7 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved Oct 02.
B-8 Investigation/Report		1.24%	80%	0.992%	20%		Add'l Investigation to be performed (DY01)
B-9 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved Mar 03
B-10 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved Jan 04
B-11 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved Sept 04
B-12 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved July 05
B-13 Investigation/Report		1.24%	80%	0.992%	20%		Final report submitted. Additional work required.
B-15/16 Investigation/Report		1.24%	80%	0.992%	20%		Final report submitted. Additional work required.
B-19 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved Sept 02
B-23 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved July 05
B-23A Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved Mar 05
B-25 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved July 05
B-26 Investigation/Report		1.24%	100%	1.240%	0%		Delisting approved November 04
B-27 Investigation/Report		1.24%	80%	0.992%	20%		Final report submitted, additional work required
B-28 Investigation/Report		1.24%	80%	0.992%	20%		Final report submitted, additional work required
B-30 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved Feb 05
B-31 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved Nov 02
B-32 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved Nov 03
B-33 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved Nov 04
B-34 Investigation/Report		1.24%	80%	0.992%	20%		Final report and Addendum report submitted, additional work required
B-71 Investigation/Report		1.24%	80%	0.992%	20%		Not investigated
BLDG-43 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved Sept 05
Demo Dud Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved Apr 05
F-14 Investigation/Report		1.24%	100%	1.240%	0%		Closure approved Nov 95
I-1 Investigation/Report		1.24%	90%	1.116%	10%		Add'l Investigation to be performed (DY01)
AOC 35 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved Feb 03
AOC 37 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved Jan 05
AOC 39 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved Sept 02
AOC 40 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved Aug 02
AOC 43 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved Feb 03
AOC 44 Investigation/Report		1.24%	100%	1.240%	0%		Delisting approved July 2005.
AOC 45 Investigation/Report		1.24%	0%	0.000%	100%		
AOC 46 Investigation/Report		1.24%	100%	1.240%	0%		RRS1 closure approved July 05
AOC 47 Investigation/Report		1.24%	100%	1.240%	0%		Closure approved Sep 02

**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 49 Investigation/Report		1.24%	100%	1.240%	0%		Delisting approved July 2005
AOC 50 Investigation/Report		1.24%	100%	1.240%	0%		Closure approved Apr 05
AOC 52 Investigation/Report		1.24%	0%	0.000%	100%		
AOC 53 Investigation/Report		1.24%	100%	1.240%	0%		closure approved July 2005.
AOC 54 Investigation/Report		1.24%	100%	1.240%	0%		Closure approved Nov 04
AOC 55 Investigation/Report		1.24%	99%	1.228%	1%		closure report submitted
AOC 56 Investigation/Report		1.24%	100%	1.240%	0%		Closure approved Sept 04
AOC 58 Investigation/Report		1.24%	80%	0.992%	20%		Final RFI report submitted, additional work recommended.
AOC 59 Investigation/Report		1.24%	0%	0.000%	100%		
AOC 60 Investigation/Report		1.24%	100%	1.240%	0%		Delisting approved July 2005.
AOC 61 Investigation/Report		1.24%	100%	1.240%	0%		Closure approved Feb 03
AOC 62 Investigation/Report		1.24%	0%	0.000%	100%		
AOC 63 Investigation/Report		1.24%	80%	0.992%	20%		
AOC 64 Investigation/Report		1.24%	80%	0.992%	20%		
AOC 67 Investigation/Report		1.24%	80%	0.992%	20%		Add'l investigation to be performed (DY01)
AOC 68 Investigation/Report		1.24%	80%	0.992%	20%		Add'l investigation to be performed (DY01)
AOC 69 Investigation/Report		1.24%	0%	0.000%	100%		
AOC 70 Investigation/Report		1.24%	0%	0.000%	100%		
AOC 72 Investigation/Report		1.24%	0%	0.000%	100%		
AOC 73 Investigation/Report		1.24%	80%	0.992%	20%		Add'l investigation to be performed (DY01)
<b>Medium Areas (2-10 acres in size)</b>							
B-1 Investigation/Report		1.2%	100%	1.220%	0%		Closure approved Nov 02
B-2 Investigation/Report		1.2%	80%	0.976%	20%		Add'l Investigation to be performed (DY01)
B-22 Investigation/Report		1.2%	100%	1.220%	0%		Closure approved Dec 02
B-24 Investigation/Report		1.2%	80%	0.976%	20%		Final report submitted, additional work recommended
B-29 Investigation/Report		1.2%	99%	1.207%	1%		Final RRS1 closure report submitted
AOC 36 Investigation/Report		1.2%	100%	1.220%	0%		Closure approved Aug 02
AOC 41 Investigation/Report		1.2%	100%	1.220%	0%		Closure approved July 2005.
AOC 42 Investigation/Report		1.2%	80%	0.976%	20%		Final report submitted, additional work recommended
AOC 48 Investigation/Report		1.2%	100%	1.220%	0%		Delisting approved Nov 04
AOC 57 Investigation/Report		1.2%	0%	0.000%	100%		
<b>Large Areas (&gt;10 acres in size)</b>							
B-20/21 Investigation/Report		1.2%	80%	0.976%	20%		Add'l investigation to be performed (DY01)
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 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%		
<b>Groundwater Investigation</b>	15%					81%	
Well Installation		10%	80%	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**

<b>Task Name</b>	<b>% of Phase</b>	<b>% of Task</b>	<b>% Complete</b>	<b>% of Activity Complete</b>	<b>% of Activity Remaining</b>	<b>% of Task Complete</b>	<b>Comments/Status</b>
Groundwater Monitoring 2004		4.2%	100%	4%	0%		
Groundwater Monitoring 2005		4.2%	100%	4%	0%		
Groundwater Monitoring 2006		4.2%	100%	4%	0%		
Groundwater Monitoring 2007		4.2%	100%	4%	0%		
Groundwater Monitoring 2008		4.2%	50%	2%	50%		incomplete
Groundwater Monitoring 2009		4.2%	0%	0%	100%		incomplete
Conceptual Site Model (CSM)		20.0%	100%	20%	0%		
CSM Update		4.0%	80%	3%	20%		
LTMO 2005 (optimization study)		10%	100%	10%	0%		Complete
LTMO 2010 (review of optimization)		10%	0%	0%	100%		incomplete
<b>Risk Assessment</b>	<b>10%</b>					<b>89%</b>	
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		70%	100%	70%	0%		
Update to CSM		10%	50%	5%	50%		
Final CSM		5%	0%	0%	100%		
<b>Investigation Analysis</b>	<b>10%</b>					<b>84%</b>	
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.
<b>Treatability Studies</b>	<b>10%</b>					<b>46%</b>	
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%	90%	9%	10%		
Draft Treatability Study & Technology Evaluation Reports		10%	70%	7%	30%		
Final Treatability Study		25%	0%	0%	100%		
Recharge Study		25%	100%	25%	0%		
<b>Progress Reports</b>	<b>5%</b>					<b>27.1%</b>	
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%		

**Attachment 3**  
**Overall (H) Order Percent Complete**

<b>Task Name</b>	<b>% of Phase</b>	<b>% of Task</b>	<b>% Complete</b>	<b>% of Activity Complete</b>	<b>% of Activity Remaining</b>	<b>% of Task Complete</b>	<b>Comments/Status</b>
Quarter 24 (May 2005)		0.85%	100%	0.85%	0%		
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%	100%	0.85%	0%		
Semi-Annual 31 (December 2007)		0.85%	100%	0.85%	0%		
Semi-Annual 32 (July 2008)		0.85%	100%	0.85%	0%		
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%		
<b>(Add'l Quarters - rows hidden)</b>							
% of Phase Complete						75.33%	
<sup>1</sup> 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**

<b>Task Name</b>	<b>% of Phase</b>	<b>% of Task</b>	<b>% Complete</b>	<b>% of Activity Complete</b>	<b>% of Task Complete</b>
<b>Identify and Develop Alternatives</b>	15%				0.0%
Update DCC Report		35%	0%	0%	
Establish Corrective Action Objectives		30%	0%	0%	
ID, Screen, Develop CM Alternatives		35%	0%	0%	
<b>Evaluate Alternatives</b>	60%				0.0%
Draft Description of CM Alternative		90%	0%	0%	
Final Description of CM Alternative		10%	0%	0%	
???				0%	
<b>Reports</b>	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%	
<b>% of Phase Complete</b>					<b>0.0%</b>

**Attachment 3**  
**Overall (H) Order Percent Complete**

<b>Task Name</b>	<b>% of Phase</b>	<b>% of Task</b>	<b>% Complete</b>	<b>% of Activity Complete</b>	<b>% of Task Complete</b>
<b>Implementation Program Plan</b>	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%	
<b>Corrective Measure Design</b>	15%				0.0%
Draft CMD Report		90%	0%	0%	
Final CMD Report		10%	0%	0%	
<b>Corrective Measure Construction</b>	70%				0%
Draft Construction QAPP		35%	0%	0%	
Final Construction QAPP		5%	0%	0%	
Implementation of Construction QAPP		60%	0%	0%	
<b>Reports</b>	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%	
????					
<b>% of Phase Complete</b>					<b>0.00%</b>

Attachment 3  
Financial Summary

Project	Description of Task/WBS	Budget		Total Spent	Total Remaining
		(WBS & Total)			
TO0008	TO Management	\$	109,426.00		
	Meetings	\$	36,753.00		
	WPs	\$	26,515.00		
	On-Post Groundwater Sampling	\$	557,493.00		
	Off-Post Groundwater Sampling	\$	286,309.00		
	Validation, Verification, and ERPIMS	\$	87,301.00		
	LAN and GIS Support	\$	35,714.00		
	Effluent Re Use Feasibility Study	\$	8,342.00		
	Well Network Optimization Study	\$	31,950.00		
	Installation of Monitoring Wells	\$	349,919.00		
CSM Update	\$	78,004.00			
		\$	1,607,726.00	\$	1,600,184.00
TO0006	Project Management	\$	195,336.00		
	Meetings	\$	59,198.00		
	WPs & DQOs	\$	60,348.00		
	Outfall Reuse Design & Construct	\$	137,994.00		
	B3 Remedial Optimization	\$	180,802.00		
	AST Upgrade	\$	331,486.00		
	SVE Expand & O&M	\$	259,824.00		
	SWMU B-3 Monitoring Network	\$	437,410.00		
	Asphalt Removal Action	\$	55,274.00		
	B-3 Removal Action	\$	918,866.00		
	Bioreactor Design Report/Injection Well	\$	596,887.00		
	Bioreactor O&M	\$	262,675.00		
	Well CS-16 Pumping Study	\$	66,358.00		
		\$	3,562,458.00	\$	3,311,219.00
TO0207	TO Management	\$	44,979.97		
	Meetings	\$	25,046.74		
	Work Plans	\$	21,395.34		
	On-Post Groundwater Monitoring	\$	114,801.13		
	Off-Post Groundwater Monitoring	\$	105,766.59		
	Data Validation/Verification	\$	29,493.49		
	Public Meetings	\$	33,847.92		
	DMS Development	\$	150,831.26		
	Encyclopedia Updates	\$	92,557.12		
	LAN Support	\$	52,572.92		
USEPA Progress Reports	\$	27,933.71			
		\$	699,226.19	\$	622,118.82

Attachment 3  
Financial Summary

Project	Description of Task/WBS	Budget		
		(WBS & Total)	Total Spent	Total Remaining
DY01 (Parsons)	Project management	\$ 68,912.00		
	Kickoff meeting/Data Management	\$ 12,568.00		
	Work Plans	\$ 21,628.00		
	Inner Cantonment Site Investigation	\$ 279,265.00		
	North Pasture Site Investigations	\$ 272,382.00		
	Environmental Support	\$ 24,705.00		
	Recordkeeping	\$ 33,767.00		
	Title 2 Services	\$ 53,908.00		
	Project meetings	\$ 13,567.00		
	Bioaugmentation Injection	\$ 34,665.00		
	Bird Survey	\$ 24,775.00		
	Hazardous Waste Management Plan	\$ 46,954.00		
	EMS Documentation	\$ 55,882.00		
Ecological Risk Assessment	\$ 52,206.00			
		\$ 995,184.00	\$ 482,303.00	\$ 512,881.00
DY02 (Parsons)	Groundwater Monitoring	\$ 312,236.00		
	Water Supply Well	\$ 211,923.00		
	Bioreactor O&M	\$ 360,718.00		
	SVE Treatability Study/O&M	\$ 87,085.00		
	Project Meetings/Management	\$ 85,533.00		
		\$ 1,057,495.00	\$ 482,303.00	\$ 575,192.00
DY01 (Weston)	Update SPCC Plan	\$ 44,000.00		
	Tank Inspections	\$ 40,000.00		
	Title 2 Services	\$ 44,000.00		
	AOC-63 APAR	\$ 42,000.00		
	AOC-64 APAR	\$ 47,000.00		
	SWMU B-71 APAR	\$ 50,000.00		
		\$ 267,000.00	\$ 188,000.00	\$ 79,000.00
DY02 (Weston)	Plan Preparation and Mobilization	\$ 32,000.00		
	AOC-64 Interim Removal Action	\$ 485,000.00		
	Interim Removal Action Reporting	\$ 20,000.00		
		\$ 537,000.00	\$ 20,000.00	\$ 517,000.00
Parsons, H&A	Administrative Record, LAN & GIS and	\$ 209,383.00		
	USEPA Progress Reports			
	Miscellaneous Sampling	\$ 231,669.00		
	Project Management	\$ 47,844.00		
		\$ 488,896.00	\$ 482,303.00	\$ 6,593.00
	<b>Totals</b>	<b>\$ 9,214,985.19</b>	<b>\$ 7,188,430.82</b>	<b>\$ 2,026,554.37</b>

# **ATTACHMENT 4**

## **GROUNDWATER RESULTS SUMMARY**

December 2007 Results

Well ID	Date Sampled	VOCs						Metals								
		1,1-DCE	cis-1,2-DCE	PCE	trans-1,2-DCE	TCE	Vinyl Chloride	On-post LTMO req'd metals			On-post New Installation Metals - 4 events to Mar 08					
								Cadmium	Lead	Nickel	Arsenic	Barium	Chromium	Copper	Zinc	Mercury
<b>On-post Wells</b>																
CS-1	12/13/07	--	--	--	--	0.24F	--	--	0.0017F	--	NS	NS	NS	NS	NS	NS
CS-2	12/13/07	--	--	0.32F	--	--	--	--	0.0002F	--	NS	NS	NS	NS	NS	NS
CS-9	12/13/07	--	--	--	--	--	--	--	0.0362	0.022	NS	NS	NS	NS	NS	NS
CS-10	12/13/07	--	--	--	--	--	--	--	0.0049	0.004F	NS	NS	NS	NS	NS	NS
CS-11	12/13/07	--	--	--	--	--	--	--	0.0359	--	NS	NS	NS	NS	NS	NS
CS-MWG-LGR	12/11/07	--	--	--	--	--	--	--	--	--	0.00023F	0.022	--	--	0.018F	--
CS-MW8-LGR	12/12/07	--	--	1.41	--	--	--	--	--	--	NS	NS	NS	NS	NS	NS
CS-MW9-LGR	12/13/07	--	--	--	--	--	--	--	0.00038F	0.021	0.0017F	0.034	0.034	--	0.012F	--
CS-MW10-LGR	12/13/07	--	--	1.84	--	0.52F	--	--	0.0004F	0.006F	NS	NS	NS	NS	NS	NS
CS-MW12-LGR	12/13/07	--	--	--	--	--	--	--	0.0005F	0.035	NS	NS	NS	NS	NS	NS
CS-MW12-LGR FD	12/13/07	--	--	--	--	--	--	--	0.0005F	0.034	NS	NS	NS	NS	NS	NS
CS-MW17-LGR	12/11/07	--	--	0.33F	--	--	--	--	--	0.004F	NS	NS	NS	NS	NS	NS
CS-MW20-LGR	12/12/07	--	--	1.8	--	--	--	--	0.00021F	--	0.00035F	0.14	--	--	0.013F	--
CS-MW21-LGR	12/12/07	--	--	--	--	--	--	--	0.00021F	--	0.00054F	0.083	--	--	0.18	--
CS-MW22-LGR	12/13/07	--	--	--	--	--	--	0.000056F	0.011	0.013	0.0024F	0.06	0.0027F	--	2	--
CS-MW22-LGR FD	12/13/07	--	--	--	--	--	--	0.000047F	0.011	0.013	0.0023F	0.063	0.0028F	--	2.1	--
CS-MW23-LGR	12/12/07	--	--	--	--	--	--	--	--	--	0.00069F	0.047	--	--	0.16	--
CS-MW24-LGR	12/12/07	--	--	--	--	--	--	--	0.00018F	--	0.00045F	0.031	--	--	0.089	--
CS-MW25-LGR	12/11/07	0.074M	--	--	--	--	--	0.00015F	0.023	0.078	0.0039F	0.045	0.22	0.03	1.5	--
<b>Off-post Wells</b>																
FO-J1	12/4/07	--	--	0.14F	--	--	--	NS - No sampling for metals off-post								
HS-1	12/6/07	--	--	0.18F	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
HS-1 FD	12/6/07	--	--	0.18F	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
HS-2	12/6/07	--	--	0.08F	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
I10-7	12/4/07	--	--	--	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
I10-8	12/4/07	--	--	--	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
JW-5	12/5/07	--	--	--	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
JW-7	12/11/07	--	--	0.32F	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
JW-8	12/6/07	--	--	0.14F	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
JW-12	12/4/07	--	--	--	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
JW-12 FD	12/4/07	--	--	--	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
JW-14	12/5/07	--	--	--	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
JW-29	12/5/07	--	--	--	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
JW-29 FD	12/5/07	--	--	--	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
JW-30	12/5/07	--	--	--	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
LS-5	12/3/07	--	--	0.12F	--	0.39F	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
LS-6	12/3/07	--	--	1.56	--	0.13F	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
LS-7	12/3/07	--	--	2.07	--	0.43F	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
OFR-1	12/4/07	--	--	0.29F	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
OFR-3	12/3/07	--	--	2.92	--	1.94	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
RFR-3	12/5/07	--	--	--	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
RFR-10	12/3/07	--	0.38F	10.04	--	5.39	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
RFR-11	12/3/07	--	--	1.31F	--	1.17	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
RFR-14	12/5/07	--	--	0.18F	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
<b>Trip Blanks:</b>																
TB-1	12/3/07	--	--	--	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
TB-1	12/5/07	--	--	--	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
TB-1	12/11/07	--	--	--	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
TB-1	12/13/07	--	--	--	--	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
	MDL	0.074	0.098	0.14	0.056	0.10	0.078	0.0004	0.0018	0.0078	0.00021	0.001	0.0026	0.0045	0.0045	0.000027
	RL	1.2	1.2	1.4	0.60	1.0	1.1	0.002	0.002	0.01	0.02	0.005	0.01	0.01	0.05	0.001
	MCL/AL	7	70	5	100	5	2	0.005	0.015	--	0.01	2	0.1	1.3	5	0.002
	--	= Below the MDL (U flagged)														
	<b>BOLD</b>	= Above the MDL (F flagged)														
	<b>BOLD</b>	= Above the RL														
	<b>BOLD</b>	= Above the MCL														
VOCs concentrations are in µg/L. Metals concentrations are in mg/L.																

**Attachment 4**  
**Quarterly On-Post Groundwater Monitoring Analytical Results**  
**March 2008**

Well ID	Sample Date	VOC's						Metals								
		1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	TCE	Vinyl chloride	Arsenic (Ar)	Barium (Ba)	Cadmium (Cd)	Chromium (Cr)	Copper (Cu)	Mercury (Hg)	Lead (Pb)	Nickel (Ni)	Zinc (Zn)
CS-4	3/12/2008	0.12U	<b>0.25F</b>	0.08U	<b>1.36F</b>	<b>1.61</b>	0.08U	NA	NA	0.5U	NA	NA	NA	<b>2.8F</b>	1.0U	NA
CS-D	3/11/2008	0.12U	<b>137.48</b>	<b>0.94</b>	<b>131.9</b>	<b>157.89</b>	0.08U	NA	NA	0.5U	NA	NA	NA	1.9U	<b>3F</b>	NA
CS-MW1-LGR	3/11/2008	0.12U	<b>14.59</b>	<b>0.18F</b>	<b>8.03</b>	<b>17</b>	0.08U	NA	NA	0.5U	NA	NA	NA	1.9U	<b>32</b>	NA
CS-MW1-LGR FD	3/11/2008	0.12U	<b>14.56</b>	<b>0.14F</b>	<b>8.71</b>	<b>18.39</b>	0.08U	NA	NA	0.5U	NA	NA	NA	1.9U	<b>24</b>	NA
CS-MW2-LGR	3/11/2008	0.12U	<b>1.55</b>	0.08U	0.06U	<b>0.06F</b>	0.08U	NA	NA	0.5U	NA	NA	NA	1.9U	<b>3F</b>	NA
CS-MW3-LGR	3/11/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U	NA	NA	0.5U	NA	NA	NA	1.9U	<b>5F</b>	NA
CS-MW4-LGR	3/12/2008	0.12U	<b>0.14F</b>	0.08U	0.06U	0.05U	0.08U	NA	NA	0.5U	NA	NA	NA	1.9U	1.0U	NA
CS-MW5-LGR	3/11/2008	0.12U	<b>1.14F</b>	0.08U	<b>0.66F</b>	<b>0.86F</b>	0.08U	NA	NA	0.5U	NA	NA	NA	1.9U	<b>7F</b>	NA
CS-MW6-LGR	3/12/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U	NA	NA	0.5U	NA	NA	NA	1.9U	<b>20</b>	NA
CS-MW7-LGR	3/12/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U	NA	NA	0.5U	NA	NA	NA	1.9U	1.0U	NA
CS-MW11A-LGR	3/12/2008	0.12U	0.07U	0.08U	<b>0.53F</b>	0.05U	0.08U	NA	NA	0.5U	NA	NA	NA	1.9U	<b>2F</b>	NA
CS-MW11B-LGR	3/12/2008	0.12U	0.07U	0.08U	<b>1.24F</b>	0.05U	0.08U	NA	NA	0.5U	NA	NA	NA	<b>2.1F</b>	<b>13</b>	NA
CS-MW16-LGR	3/11/2008	0.12U	<b>117.14</b>	<b>0.28F</b>	<b>125.51</b>	<b>127.92</b>	0.08U	NA	NA	0.5U	NA	NA	NA	1.9U	1.0U	NA
CS-MW16-CC	3/11/2008	<b>0.46F</b>	<b>78.17</b>	<b>3.17</b>	<b>12.13</b>	<b>64.97</b>	<b>0.33F</b>	NA	NA	0.5U	NA	NA	NA	1.9U	<b>4F</b>	NA
CS-MW18-LGR	3/12/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U	NA	NA	0.5U	NA	NA	NA	<b>2.2F</b>	<b>7F</b>	NA
CS-MW19-LGR	3/12/2008	0.12U	0.07U	0.08U	<b>0.39F</b>	0.05U	0.08U	NA	NA	0.5U	NA	NA	NA	1.9U	<b>53</b>	NA
CS-MW9-LGR	3/17/2008	0.074U	0.098U	0.056U	0.14U	0.1U	0.078U	<b>0.4F</b>	<b>29</b>	0.04U	<b>2.6F</b>	4.5U	<b>0.058F</b>	0.18U	<b>9.3F</b>	<b>11.0F</b>
CS-MW20-LGR	3/13/2008	0.074U	0.098U	0.056U	<b>1.6</b>	0.1U	0.078U	<b>0.78F</b>	<b>140</b>	<b>0.21F</b>	2.6U	4.5U	0.027U	<b>0.19F</b>	7.8U	<b>8.0F</b>
CS-MW21-LGR	3/13/2008	0.074U	0.098U	0.056U	0.14U	0.1U	0.078U	<b>0.62F</b>	<b>85</b>	0.04U	2.6U	4.5U	0.027U	<b>0.81F</b>	7.8U	<b>150</b>
CS-MW22-LGR	3/13/2008	0.074U	0.098U	0.056U	0.14U	0.1U	0.078U	<b>3.8F</b>	<b>79</b>	<b>0.067F</b>	<b>17.0</b>	<b>13.0</b>	<b>0.13F</b>	<b>40</b>	<b>22</b>	<b>4900</b>
CS-MW22-LGR FD	3/13/2008	0.074U	0.098U	0.056U	0.14U	0.1U	0.078U	<b>3.6F</b>	<b>77</b>	<b>0.08F</b>	<b>16.0</b>	<b>12.0</b>	<b>0.12F</b>	<b>38</b>	<b>22</b>	<b>4700</b>
CS-MW23-LGR	3/13/2008	0.074U	0.098U	0.056U	0.14U	0.1U	0.078U	<b>0.8F</b>	<b>46</b>	0.04U	2.6U	4.5U	0.027U	<b>0.23F</b>	7.8U	<b>100</b>
CS-MW24-LGR	3/17/2008	0.074U	0.098U	0.056U	0.14U	0.1U	0.078U	<b>0.39F</b>	<b>30</b>	0.04U	2.6U	4.5U	<b>0.06F</b>	0.18U	7.8U	<b>74</b>
CS-MW25-LGR	3/17/2008	0.074U	0.098U	0.056U	0.14U	0.1U	0.078U	<b>1.0F</b>	<b>32</b>	<b>0.043F</b>	<b>38</b>	4.5U	<b>0.06F</b>	<b>2.6</b>	<b>14</b>	<b>240</b>

<b>BOLD</b>	= Above the MDL (F flagged)
<b>BOLD</b>	= Above the RL
<b>BOLD</b>	= Above the MCL

**Data Qualifiers:**  
F- The analyte was positively identified but the associated numerical value is below the RL.  
U - The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.

All values are reported in µg/L  
\* = dilution run was performed.  
All samples analyzed by APPL Labs. and TestAmerica.

NA = no analysis run for this analyte.  
FD = field duplicate

**Attachment 4**  
**March 2008 Off-Post Groundwater Analytical Results**

Well ID	Sample Date	1,1-DCE	<i>cis</i> -1,2-DCE	<i>trans</i> -1,2-DCE	PCE	TCE	Vinyl Chloride
DOM-2	3/6/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
FO-22	3/3/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
FO-8	3/3/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
FO-J1	3/3/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
FO-J1 FD	3/3/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
HS-1	3/6/2008	0.12U	0.07U	0.08U	<b>0.2F</b>	0.05U	0.08U
HS-2	3/6/2008	0.12U	0.07U	0.08U	<b>0.17F</b>	0.05U	0.08U
I10-2	3/4/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
I10-7	3/4/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
JW-14	3/6/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
JW-15	3/4/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
JW-27	3/6/2008	0.12U	0.07U	0.08U	<b>0.12F</b>	0.05U	0.08U
JW-27 FD	3/6/2008	0.12U	0.07U	0.08U	<b>0.07F</b>	0.05U	0.08U
JW-29	3/4/2008	0.12U	0.07U	0.08U	<b>0.1F</b>	0.05U	0.08U
JW-30	3/4/2008	0.12U	0.07U	0.08U	<b>0.16F</b>	0.05U	0.08U
JW-5	3/5/2008	0.12U	0.07U	0.08U	<b>0.11F</b>	0.05U	0.08U
JW-7	3/6/2008	0.12U	0.07U	0.08U	<b>0.26F</b>	0.05U	0.08U
JW-8	3/6/2008	0.12U	0.07U	0.08U	<b>0.29F</b>	0.05U	0.08U
JW-9	3/6/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
JW-9 FD	3/6/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
LS-5	3/3/2008	0.12U	0.07U	0.08U	0.06U	<b>0.85F</b>	0.08U
LS-6	3/3/2008	0.12U	0.07U	0.08U	<b>1.27F</b>	0.05U	0.08U
LS-6-A2	3/3/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
LS-7	3/3/2008	0.12U	0.07U	0.08U	<b>2.05</b>	<b>0.43F</b>	0.08U
LS-7-A2	3/3/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
OFR-1	3/6/2008	0.12U	0.07U	0.08U	<b>0.26F</b>	0.05U	0.08U
OFR-3	3/3/2008	0.12U	0.07U	0.08U	<b>4.41</b>	<b>3.38</b>	0.08U
OFR-3-A2	3/3/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
OFR-4	3/6/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
RFR-10	3/3/2008	0.12U	0.07U	0.08U	<b>4.43</b>	<b>3.27</b>	0.08U
RFR-10-A2	3/3/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
RFR-10-B2	3/3/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
RFR-11	3/3/2008	0.12U	0.07U	0.08U	0.06U	<b>0.08F</b>	0.08U
RFR-11-A2	3/3/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
RFR-12	3/4/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
RFR-14	3/6/2008	0.12U	0.07U	0.08U	<b>0.18F</b>	0.05U	0.08U
RFR-4	3/4/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
RFR-4 FD	3/4/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
RFR-5	3/4/2008	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U

<b>BOLD</b>	= Above the MDL (F flagged)
<b>BOLD</b>	= Above the RL
<b>BOLD</b>	= Above the MCL

This table presents full analytical results.  
All samples were analyzed by APPL, Inc.  
All data reported in ug/L.

**Abbreviations/Notes:**  
FD           Field Duplicate  
TCE         Trichloroethene  
PCE         Tetrachloroethene  
DCE         Dichloroethene

**Data Qualifiers:**  
U - The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL.  
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.