PROGRESS REPORT

January 1, 2014 – June 30, 2014

(44th REPORT)

Camp Stanley Storage Activity

Boerne, Texas

USEPA ID No. TX2210020739

July 2014

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ATTACHMENTS

ACRONYMS AND ABBREVIATIONS

µg/l	micrograms per liter
1,1-DCE	1,1-dichloroethene
AOC	Area of Concern
APAR	affected property assessment report
APPL	Agriculture & Priority Pollutants Laboratories, Inc.
As	arsenic
Ba	barium
bgs	Below ground surface
BTOC	Below top of casing
CAH	chlorinated aliphatic hydrocarbons
Cd	cadmium
cis-1,2-DCE	*cis*-1,2-dichloroethene
COC	contaminant of concern
Cr	chromium
CSSA	Camp Stanley Storage Activity
Cu	copper
CY	cubic yard
DO	Dissolved oxygen
DQO	data quality objective
GAC	granular activated carbon
Hg	mercury
IRA	Interim removal action
I/SM	interim/stabilization measures
ISCO	in-situ chemical oxidation
LGR	Lower Glen Rose
LTMO	long-term monitoring optimization
MCL	maximum contaminant level
Mn	manganese
MPMW	multi-port monitoring well
NFA	No Further Action
NH	nonhazardous
Ni	nickel
O&M	operations and maintenance
Order	§3008(h) Administrative Order on Consent
Pb	lead
PBR	permit-by-rule
PCE	tetrachloroethene
PCL	protective concentration level
QAPP	Quality Assurance Program Plan
RAL	Residential Action Level
RCRA	Resource Conservation and Recovery Act
RFI	RCRA facility investigation
RIR	Release Investigation Report
RL	reporting limit
RMU	Range Management Unit
SCADA	supervisory control and data acquisition

SIW	steam injection well
SVE	soil vapor extraction
SVOC	semi-volatile organic compound
SWMU	Solid Waste Management Unit
TAC	Texas Administrative Code
TCE	trichloroethene
TCEQ	Texas Commission on Environmental Quality
trans-1,2-DCE	*trans*-1,2-dichloroethene
TSW	Treatability study well
UGR	Upper Glen Rose
UIC	underground injection control
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VC	vinyl chloride
VEW	vapor extraction well
VOC	volatile organic compound
WP	work plan
WWTP	wastewater treatment plant
XRF	x-ray fluorescence
Zn	zinc

PROGRESS REPORT
JANUARY 1, 2014 – JUNE 30, 2014
(44TH PERIOD)

INTRODUCTION

This 44th 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, 2014 through June 30, 2014. 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, until the Order is closed.

Summary of Activities this Period

Between January 1 and June 30, 2014, significant activities related to the Order included:

- Continuation of Solid Waste Management Unit (SWMU) B-3 bioreactor treatability studies;
- Continuation of AOC-65 in-situ chemical oxidation (ISCO) treatability study;
- Continuation of the groundwater monitoring program under the regulator-approved data quality objectives (DQO);
- Regulatory approval of closure of SWMU B-34;
- Submittal of draft updated RFI Work Plan;
- Submittal and regulatory approval of post-wide risk assessment;
- Continued maintenance of off-post granular activated carbon (GAC) systems;
- Public Meeting; 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, 2014 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, AOCs, and RMUs 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 for sampling events conducted this period. **Attachment 5** details the current and upcoming remedial activities at various SWMUs, AOCs, and RMUs at CSSA.

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 P44
Interim Measures	Mitigate a current or potential threat to human health and/or the environment.	30%				99.8%	
Interim Measures Work Plan			7%	98.8%	7%		No
Interim Measures Implementation			70%	99.8%	70%		No
Reports			23%	99.8%	23%		No
RCRA Facility Investigation	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.	30%				99%	
Preliminary Report			5%	100%	5%		No
RFI Work Plan			5%	100%	5%		Yes
Facility Investigation			40%	100%	39%		Yes
Risk Assessment			10%	100%	10%		Yes
Investigation Analysis			10%	100%	10%		Yes
Groundwater Investigation			15%	99%	15%		Yes
Treatability Studies			10%	95%	9%		Yes
Progress Reports			5%	99%	5%		Yes
Corrective Measures Study	Identification, screening, and development of alternatives for removal, containment, treatment, and/or other remediation of the contamination.	10%				93%	
Identify and Develop Alternatives			15%	100%	15%		Yes
Evaluate Alternatives			60%	100%	57%		Yes
Reports			25%	70%	18%		Yes
Corrective Measures Implementation	Design, construct, operate, maintain, and monitor the performance of corrective measure(s) selected to protect human health and the environment.	30%				44%	
Implementation Program Plan			5%	0%	0%		No
Corrective Measure Design			15%	7%	1%		No
Corrective Measure Construction			70%	35%	25%		No
Reports			10%	3%	0.3%		No
				% of All Phases Complete		82%	

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:

- Updated RFI Work Plan;
- Risk assessment;
- Groundwater monitoring of on- and off-post wells;
- Groundwater monitoring of Westbay®-equipped wells;
- Verification and validation of analytical data;
- SVE system O&M and treatability studies at AOC-65; and
- Continuation of bioreactor operation and other treatability studies at SWMU B-3;

RFI Work Plan

The Order requires the RFI work plan (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. This task makes up approximately 5 percent of the RFI phase. The draft updated RFI WP was submitted to USEPA on April 11, 2014. This updated RFI Work Plan shows that the majority of CSSA's sites have been successfully closed under State of Texas requirements, with two groundwater contamination sites remaining open: SWMU B-3 and AOC-65. Closure of the active firing range site (RMU-1), and sites that fall within the range (SWMU B-2, B-8, B-20/21, and B-24) will be deferred until the range is no longer in use.

Environmental Encyclopedia Updates

The CSSA website (www.stanley.army.mil) was updated with documents added to the Environmental Encyclopedia through the end of June 2014. The website serves as CSSA's Administrative Record as required under the Order. The Environmental Encyclopedia was updated with all final reports through June 2014. Updates made in Period 44 included the following:

January 2014

- Baseline Risk Assessment
- AOC-65 *In-Situ* Chemical Oxidation Operations and Monitoring Plan
- Final September 2013 Quarterly Groundwater Report
- Final September 2013 On-Post Quarterly Groundwater Report
- January 16, 2014 Public Meeting Slides

February 2014

- Updated Integrated Cultural Resources Management Plan (ICRMP)
- Final December 2013 Well Owner Letters
- Revised CSSA Integrated Natural Resources Management Plan (INRMP)
- Approved Affected Property Assessment Report (APAR) from TCEQ for SWMU B-4
- March Groundwater Sample Notification
- February 5, 2014 RMU-4 Closure Approval Letter

April 2014

- Site-Specific Closure Report, SWMU B-34, Cover Letter
- March 2014 Well Owner Letters
- Final RFI Work Plan
- ICRMP Transmittal Letter
- EPA Approval of the Baseline Risk Assessment

May 2014

- June Groundwater Sample Notification
- April 22 2014 Site-Specific Approval Letter, SWMU B-34, TCEQ
- March 2014 Off-Post Groundwater Monitoring Report
- March 2014 On-Post Groundwater Monitoring Report

Throughout Period 44:

- Various correspondence to and from CSSA;
- Various meeting minutes; and
- Various tables of contents, site chronologies, and indices.

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 were necessary. Investigation results will be used to develop and evaluate alternatives during the Corrective Measures Study (CMS). The CMS will consist of the identification, screening, and development of alternatives for removal, containment, treatment, and/or other remediation of the contamination identified at CSSA. The CMS will be based on results of the RFI, identified corrective measure technologies, and results of any treatability studies. The study will include: identification and development of alternatives (15 percent of CMS), evaluation of alternatives (60 percent), and reports (25 percent). The CMS is currently underway, and a CMS report is expected to be submitted in June 2014 (Period 44). The percent complete values shown in Table 1 are based on the corrective measures that have

been evaluated and implemented thus far at SWMU B-3 and AOC-65. 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 44, this task is approximately 97 percent complete.

A total of 84 SWMUs, AOCs, and RMUs have been identified at CSSA, and investigations have been conducted at most 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, closure of 77 CSSA sites has been approved by TCEQ, and four sites (SWMUs B-2, B-8, B-20/21, and B-24) will be combined into RMU-1. The three open sites include SWMU B-3, AOC-65, and RMU-1.

The remaining sites are listed in the table below, and additional information regarding recent actions are provided in the following paragraphs.

Remaining Sites at CSSA

Site Name	Status
o SWMU B-3 o AOC-65	Ongoing remediation or treatability study for groundwater.
o SWMU B-2 o SWMU B-8 o SWMU B-20/21 o SWMU B-24 o RMU-1	Sites located in current active range fan. Closure to be deferred to when range (RMU-1) closes, per USEPA Memo re: CSSA North Pasture Fencing (February 29, 2012).

Site Closure Investigations

No site closure investigations were performed during Period 44. Closure (NFA) approval for SWMU B-34 was received from TCEQ on April 22, 2014.

Human/Ecological Risk Assessment Efforts

The Baseline Risk Assessment Report for CSSA was submitted to USEPA on January 10, 2014, and was approved by USEPA on April 21, 2014.

Groundwater Investigation

The groundwater investigation subtask makes up approximately 15 percent of the RFI phase. As of the end of Period 44, this task is approximately 99 percent complete.

On- and off-post groundwater monitoring was conducted in accordance with regulator-approved DQOs during Period 44. Sampling frequencies for on-post and off-post wells are currently determined by the long-term monitoring optimization (LTMO) study updated in November 2010, as approved by TCEQ and USEPA. 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 work plans 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 (*trans*-1,2-DCE), tetrachloroethene (PCE), trichloroethene (TCE), and vinyl chloride (VC). On-post monitoring wells were sampled for the SW-846 Method 6010/6020 metals Pb, Cd, Hg, and Cr. On-post drinking water wells were also sampled for four additional metals: Ba, As, Cu, and Zn. Additional samples were collected off-post and from wells with GAC filtration systems. Samples were analyzed by Agriculture & Priority Pollutants Lab Inc. (APPL) in Clovis, California. 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 2013 Sampling

Five on-post wells were scheduled for sampling in December 2013. Off-post wells scheduled for sampling in December 2013 included 7 private and public drinking water wells. No Westbay well zones, from four multi-port wells (WB01-WB04), were scheduled for sampling in December 2013; however these wells were profiled to collect water level data in the area. Sampling was conducted December 2-9, 2013.

Analytical results from the December 2013 sampling event are included in Attachment 4. The average groundwater elevation in December 2013 increased 16.28 feet from that measured in September 2013. In San Antonio, water restrictions remained at Stage 2; as of May 1, 2012. The Trinity Glen Rose Groundwater Conservation District remained under stage 2 severe drought water restrictions, which went into effect June 1, 2011. The average depth to water in the Lower Glen Rose (LGR) screened wells was 284.82 feet below top of casing (BTOC) or 962.72 feet above mean sea level (msl).

The maximum contaminant level (MCL) was exceeded in on-post monitoring well CS-MW36-LGR for PCE and TCE during the December 2013 event. No on-post wells scheduled for sampling exceeded the MCL for metals in December 2013. No Westbay wells were sampled in December 2013; however, Westbay wells (WB01-WB04) were profiled to collect water level data in the area.

Analyses indicated that one off-post well, RFR-10, exceeded the MCL for PCE and TCE. Five other wells (I10-4, LS-5, LS-6, LS-7, and RFR-11) had PCE and/or TCE detections above the reporting limit, but below the MCL.

March 2014 Sampling

Fourteen on-post wells and 7 private and public off-post wells with 6 post-GAC samples were scheduled for sampling in March 2014 in accordance with the LTMO schedule. All samples were analyzed for VOCs. In addition, the on-post samples were analyzed for selected metals. Analytical results from the March 2014 sampling event are included in Attachment 4.

Sampling was conducted March 2-20, 2014. Average groundwater elevations in March 2014 decreased 13.91 feet from the elevations measured in December 2013. The average depth to water in the LGR screened wells was approximately 299.70 feet below ground surface.

Ten of the 14 on-post wells scheduled for sampling in March 2014 were sampled. Three wells were not sampled due to water levels falling below the dedicated bladder pumps, and one well (CS-9) was not sampled due to pump outage. All wells were analyzed for selected VOCs

(CSSA short list) and metals (Cr, Cd, Hg, and Pb). Additional metals (As, Ba, Cu, and Zn) were collected from the drinking water wells. Seven off-post wells and 6 post-GAC samples were collected in March 2014. All off-post samples scheduled for sampling in March 2014 were collected. All 46 Westbay Well zones were scheduled for sampling in March; these wells were also profiled to collect water level data in the area. No samples were collected from 7 dry zones.

The MCLs for PCE and TCE were exceeded in monitoring wells CS-MW1-LGR and CS-MW36-LGR in March 2014. No on-post wells scheduled for sampling in March 2014 reported metals above the MCL/AL/SS. Seventeen of 39 Westbay well zones, from WB01-WB04 in the vicinity of AOC-65, had detections of PCE and/or TCE above the MCL in March 2014.

A total of 5 off-post wells reported detections of PCE and/or TCE during the March 2014 event. One well (RFR-10) exceeded the MCL for PCE. This well is equipped with GAC filtration system. Four off-post wells (LS-5, LS-6, LS-7, and RFR-11) reported VOC concentrations below the MCL but above the RL.

GAC-filtered samples were also collected in March 2014. No VOCs were detected in any of these samples, indicating the GAC systems are functioning properly. GAC-filtered samples will be collected again during the September 2014 event.

Semi-annual GAC maintenance was performed February 5, 2014. This involved replacing the first carbon canister in each GAC unit and other routine maintenance. This carbon exchange is performed semi-annually.

June 2014 Sampling

Forty-three on-post wells are scheduled for sampling during the June 2014 event. Off-post wells scheduled for sampling in June 2014 will include 55 private and public drinking water wells. Eight Westbay well zones, from four multi-port wells (WB01-WB04), are scheduled for sampling in June 2014; these wells will also be profiled to collect water level data in the area. Sampling was conducted June 2-20, 2014. Laboratory results will be received in July 2014 and summarized in the next progress report.

Off-Post GAC Systems

Based on sampling results received in 2001, 2002, and 2011 indicating VOC levels above or approaching the MCL, GAC filtration systems were installed at six 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. One of these wells (OFR-3) has been offline due to the electricity being shut off at the property. No samples can be collected and GAC maintenance has been discontinued until the well is put back online. The property is currently vacant and several attempts to contact the property owner have been made but no response has been received.

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-5, LS-6, LS-7, RFR-10, and RFR-11. Post-GAC confirmation samples from all of the off-post GAC systems were collected during the March 2014 event. All VOC results for the post-GAC water samples were non-detect. Carbon canister exchange was completed February 5, 2014 for the off-post GAC systems and will be due again in August 2014.

Data Validation and Verification

Laboratory results from sampling efforts and investigations are validated and verified by chemists to ensure results are in compliance with CSSA QAPP requirements. Data validation and verification continued during Period 44.

Treatability Studies

The Treatability Study subtask makes up approximately 10 percent of the RFI phase. As of the end of Period 44, this task is approximately 93 percent complete.

SWMU B-3 Bioreactor

Approximately 89,000,000 gallons of groundwater extracted from CS-MW16-LGR, CS-MW16-CC, CS-B3-EXW01, CS-B3-EXW02, CS-B3-EXW03, CS-B3-EXW04 and CS-B3-EXW05 have been injected into the bioreactor trenches since the start of injection in 2007. An annual underground injection control (UIC) report was submitted to the TCEQ early in Period 43 (July 2013) in accordance with CSSA's Class V Aquifer Remediation Injection Well Permit, TCEQ Authorization No. 5X2600431; WWC12002216. UIC reports are submitted on an annual basis with the next report scheduled for submission early in Period 45. SWMU B-3 Bioreactor Performance Status Reports ~~were~~ will be submitted to CSSA, TCEQ, and USEPA during the next period. The reporting frequency is on an annual basis and the next performance status report is scheduled for submission early in Period 45.

Groundwater samples were collected from sumps, monitoring wells, Westbay-equipped wells, and the injection discharge. Sampling frequency was based on permit requirements and water availability. In general, injected groundwater samples are collected quarterly and monitoring samples from Westbay-equipped monitoring wells, injection trench sumps, and additional performance samples are collected semi-annually. All samples were analyzed for permit parameters – VOCs, total dissolved solids, and other selected performance parameters. Analyses were performed by APPL, DHL Laboratory, Microbial Insights, and Microseeps Laboratory. Collected field data included injection volumes, injection pressures, and the pH of recovered groundwater for TCEQ permit compliance. Results are reported on an annual basis with the next report due for submission in Period 45. Analytical data collected for performance parameters include:

- Dissolved Organic Carbon;
- Methane, Ethane, and Ethene;
- Hydrogen;
- Temperature, pH, and specific conductivity;
- Oxidation Reduction Potential;
- Dissolved Oxygen;
- Total Organic Carbon;
- Carbon Dioxide;
- Hydrogen;
- Sulfide;
- Additional ions including Sulfate, Chloride, Ferrous Iron, and Manganese; and
- *Dehalococcoides* populations.

During Period 44, the bioreactor remained at saturated conditions due to the continued supply of water from wells CS-MW16-CC, CS-MW16-LGR, B3-EXW01, B3-EXW02,

B3-EXW03, B3-EXW04 and B3-EXW05 as well as several heavy rainfall events during the period. Approximately 10,000,000 gallons of water were injected into bioreactor trenches 1 and 6 during Period 43.

Monitoring results continue to indicate that effective treatment of injected groundwater in the bioreactor is occurring; however, VOC components continue to remain in strata adjacent to and beneath the trenches. Breakdown products of highly chlorinated species, such as PCE and TCE, and minor amounts of fuel components, like toluene, are identified in groundwater samples from locations surrounding the bioreactor.

AOC-65 SVE System/In-Situ Chemical Oxidation

ISCO treatability study activities during Period 44 include quarterly regulatory and performance monitoring sampling following the Period 42 injections (May 2013). Groundwater monitoring of off-post wells with GACs during this period included analyses for metals, VOCs, and anions (chloride, sulfate, and bicarbonate). Additional sampling was completed for on-post VEWs, treatability study wells (TSWs), and Westbay wells within AOC-65. Groundwater monitoring associated with the Period 42 ISCO injections occurred 30, 60, and 90 days following the onset of injections. Scheduled quarterly groundwater monitoring efforts began in November, 2013 following the initial three month period of monthly monitoring (30, 60, and 90-day sampling) associated with an ISCO injection.

Meetings

A public meeting was held on January 16, 2014 at the Leon Springs Baptist Church, 24133 Boerne Stage Road, San Antonio, TX 78255. Approximately two weeks prior to the meeting, invitation postcards were sent to stakeholders and 2,015 landowners within a one-mile of the Plume 2 and/or CSSA boundary. Landowners were identified using Bexar County Appraisal District records. A public notice was published in the San Antonio Express-News (English), Conexion (Spanish), and the Boerne Star (English) newspapers.

A total of ten nearby residents and three local officials attended the 2014 meeting. Representatives from USEPA and TCEQ, as well as the Fort Sam Houston Public Affairs Officer, Phil Reidinger, were available to discuss issues specific to concerns raised by those in attendance.

The 2014 meeting was conducted in an open house format, with five laptop stations playing continually-looped PowerPoint presentations. Parsons personnel were available at each station to discuss the presentations and answer questions. The presentation topics included: 1) CSSA History and Mission; 2) Restoration Efforts; 3) Groundwater Compliance, 4) SWMU B-3 Treatment Technologies, and 5) AOC-65 Treatment Technologies. Several attendees had questions or concerns that were discussed with CSSA representatives at each meeting.

A meeting was also held on February 13, 2014 with Mayor Cheryl Landman of the City of Fair Oaks Ranch to brief her on recent CSSA environmental issues and successes.

Summary of Contacts

Letters summarizing the results of the December 2013 and March 2014 off-post groundwater monitoring events were mailed to owners of the off-post wells in Period 44. Groundwater sampling notification letters were sent to the USEPA and TCEQ one month prior to

the start of the September 2013 and December 2013 sampling events. Other Order-related correspondence during Period 43 included:

- Submittal of Period 43 Semi-Annual EPA Progress Report (January 10, 2014)
- Submittal of Baseline Risk Assessment (January 10, 2014)
- Submittal of RFI Work Plan (April 11, 2014)
- USEPA approval of Baseline Risk Assessment (April 21, 2014)
- TCEQ approval of NFA at SWMU B-34 (April 22, 2014)

PROJECTED WORK FOR THE NEXT PERIOD

SWMU, AOC, and RMU Investigations

No investigations are planned at any SWMUs, AOCs, or RMUs during Period 45. A summary of the status of investigations and closures of SWMUs, AOCs, and RMUs is included as Attachment 5. Open sites include SWMU B-3 and AOC-65, where groundwater treatability studies and monitoring continue, and RMU-1, the active firing range.

Groundwater Monitoring

Continued sampling of on- and off-post monitoring and water supply wells will continue in September and December 2014. Quarterly and annual groundwater monitoring reports will be submitted next period. O&M at the residential GAC filtration systems (LS-5, LS-6, LS-7, OFR-3, RFR-10, and RFR-11) will be conducted every three weeks during Period 45. The semi-annual carbon exchange will be performed in January 2014.

SWMU B-3 Bioreactor

Monitoring of the bioreactor at SWMU B-3 will continue during Period 44. Monitoring requirements will be performed to meet TCEQ's UIC authorization requirements. Performance monitoring data will be collected in accordance with the Bioreactor O&M Manual.

AOC-65 ISCO Treatability Study

CSSA will continue quarterly monitoring of the designated ISCO wells as identified in the *AOC-65 Operation and Monitoring Plan* as part of the performance determination of the ISCO treatability study. Additionally, injection of additional ISCO materials, preferably under saturated conditions within AOC-65's upper most vadose zone (i.e., the Upper Glen Rose [UGR] Formation), will be assessed. Saturated conditions are expected within AOC-65 UGR after several days of heavy rainfall events (> 3 inches/day). This will allow delivery of the ISCO material to UGR zones normally impacted during these saturated conditions. In the event that there is not enough precipitation to produce saturated conditions prior to September 2014, an injection will be conducted in the mid-September timeframe.

Meetings

Quarterly groundwater meetings will be held prior to quarterly events scheduled in September and December 2014.

Table 2, Project Task Completion to Date (Values updated through June 30, 2014)

Project Number	Description of Task	Relation to Order	Percent Complete	Start/End Dates
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%	2000-2003
TO0058	Treatability Study for AOC-65	RFI	100%	2001-2005
TO0042	Well Installations and Groundwater Monitoring	I/SM/RFI	100%	2001-2006
TO0017	East Pasture Removal Action	Other	100%	2005-2006
TO0019	SWMU Closures	RFI	100%	2003-2006
TO0005	Environmental Program Technical Support	I/SM/RFI	100%	2003-2007
TO0098	Miscellaneous Studies	Other	100%	2004-2007
TO0008	Groundwater Monitoring	I/SM/RFI	100%	2003-2008
TO0006	SWMU B-3 and AOC-65 Remediation	I/SM/RFI	100%	2004-2008
TO0207	Environmental Support, Groundwater Monitoring	I/SM/RFI	100%	2006-2008
DY01 (Weston)	Affected Property Assessment Investigations	RFI	100%	2006-2007
DY01 (Parsons)	Environmental Compliance, SWMU, and AOC Closure Investigations	RFI	100%	2006-2010
DY02 (Parsons)	Environmental Compliance, SWMU and AOC closure Investigations	I/SM/RFI	100%	2007-2009
DO11 (Parsons)	Environmental and Groundwater Investigations	RFI	100%	2008-2010

Table 2 Continued, Project Task Completion to Date for Open Projects Only (Values updated through June 30, 2014)

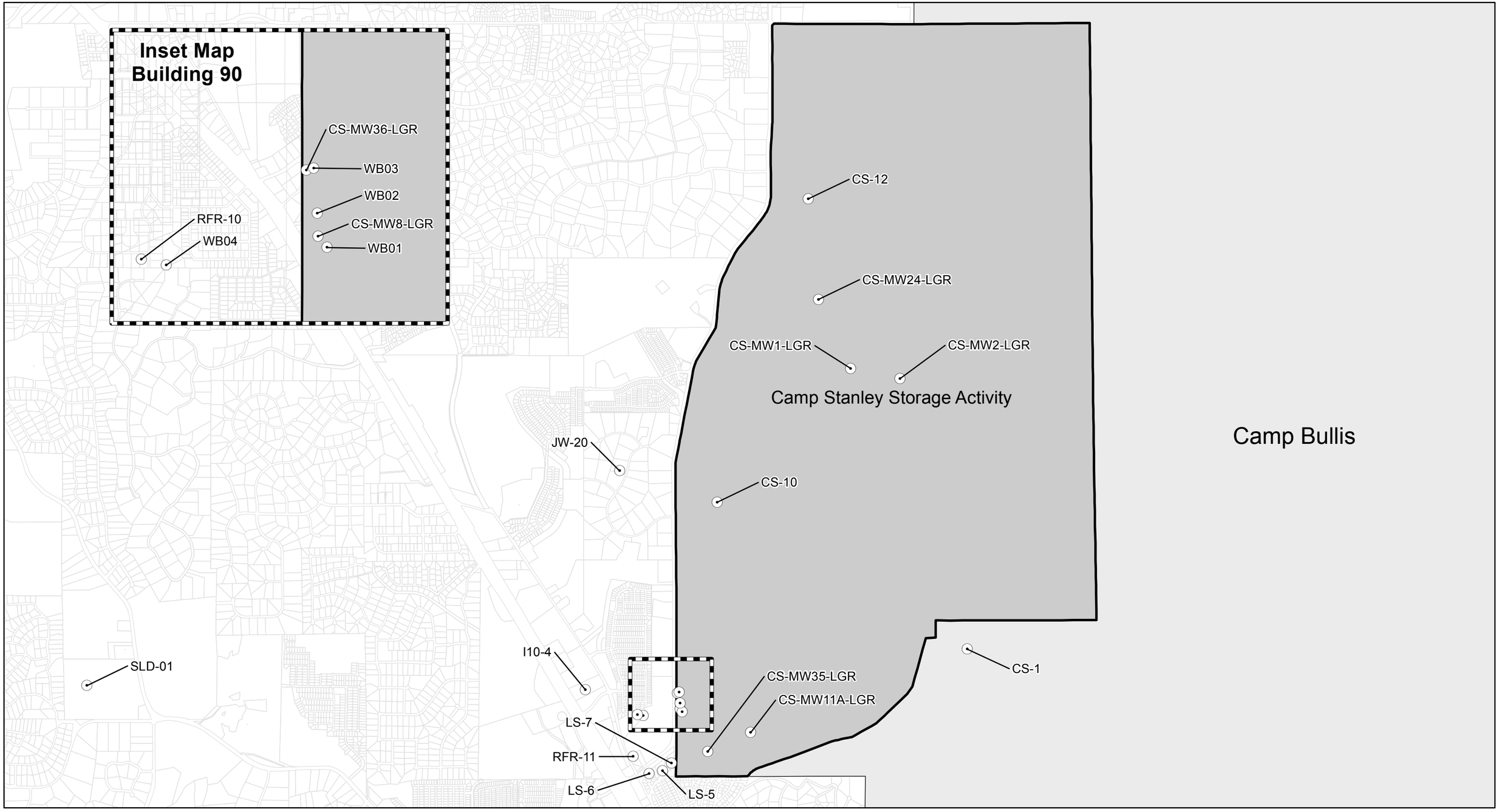
Project Number	Description of Task	Relation to Order	Percent Complete	Percent Spent
DY02 (Weston)	Removal Action at AOC-64, B-71	RFI	100%	100%
H&A (Parsons)	Administrative Support and Environmental Services	Other/RFI	100%	100%
DO50 (Parsons)	Environmental and Groundwater Investigations	RFI	100%	100%
Army Contract (Parsons)	Environmental and Groundwater Investigations	RFI	100%	100%
DO07(Parsons)	Environmental Program Support	RFI	100%	100%
Army Contract TO1 (Parsons)	Program Management	RFI	100%	100%
Army Contract TO2 (Parsons)	O&M, Compliance, & Monitoring	RFI	100%	100%
Army Contract TO3 (Parsons)	**Site Investigations and Closures**			
	AOC-51	RFI	100%	99.2%
	AOC-74	RFI	100%	100%
	RMU-5	RFI	100%	94.4%
	SWMU B-27	RFI	100%	100%
	AOC-72	RFI	100%	100%
	SWMU B-4	RFI	100%	100%
	SWMU B-13, AOC-75, RMU-4, RMU-3, SWMU B-34	RFI	100%	93%
	Bldg 705	RFI	100%	92%
Army Contract TO4 (Parsons)	**Environmental Studies**			
	AOC-65	RFI	100%	98%
	AOC-51	RFI	100%	98%
	AOC-65 Water Line Investigation	RFI	100%	98%
Army Contract TO5 (Parsons)	SWMU B-3 EXW-05 Installation	RFI	100%	100%
Army Contract TO6 (Parsons)	Building 95 Controls	RFI/Other	100%	100%
Army Contract TO7 (Parsons)	**Environmental Program Support**			
	Project Management	RFI	65%	65%
	Environmental SCADA Support	RFI	60%	60%
	SCADA Parts	RFI	60%	60%
	SCADA Instrumentation	RFI	60%	60%
	Data & Information Management	RFI	66%	66%
	MMA Parts	RFI	43%	43%
	Treatability Study	RFI/CMS	70%	70%
	Compliance and Sampling	RFI	30%	30%
	Groundwater Monitoring	RFI	47%	47%

Table 3, Project Team Contact Information

Name	Organization/Role	Street Address	City, State, Zip	Phone No.	Fax No.	E-mail
Burdey, Julie	Parsons, Project Mgr	8000 Centre Park Dr., Suite 200	Austin, TX 78754	(512) 719-6062	(512) 719-6099	julie.burdey@parsons.com
Caskey, Kyle	Parsons, Site Mgr	c/o Environmental Office, 25800 Ralph Fair Road	Boerne, TX 78015-4800	(210) 204-8529	(210) 295-7386	Kerry.k.caskey@parsons.com
Chang, Tammy	Parsons, Senior Scientist	8000 Centre Park Dr., Suite 200	Austin, TX 78754	(512) 719-6092	(512) 719-6099	tammy.chang@parsons.com
Elliott, Samantha	Parsons, Task Mgr	c/o Environmental Office, 25800 Ralph Fair Road	Boerne, TX 78015-4800	(210) 347-6012	(210) 295-7386	Samantha.elliot@parsons.com
Hatfield, Maureen	TCEQ, Project Manager	P.O. Box 13087, MC-127	Austin, TX 78711-3087			mhatfield@tceq.state.tx.us
Lyssy, Greg	USEPA, Project Manager	1445 Ross Avenue (6PD-N)	Dallas, TX 75202-2733	(214) 665-8317	(214) 665-6660	lyssy.gregory@epa.gov
Marbury, Laura	Parsons, Task Mgr	8000 Centre Park Dr., Suite 200	Austin, TX 78754	(512) 719-6855	(512) 719-6099	laura.marbury@parsons.com
Moreno, Gabriel-Fergusson	CSSA Environmental Program Manager	25800 Ralph Fair Road	Boerne, TX 78015-4800	(210) 698-5208	(210) 295-7386	morenog@ecssamma.com
Pearson, Scott	Parsons, Task Mgr	8000 Centre Park Dr., Suite 200	Austin, TX 78754	(512) 719-6087	(512) 719-6099	william.scott.pearson@parsons.com
Rice, Ken	Parsons, Task Mgr	8000 Centre Park Dr., Suite 200	Austin, TX 78754	(512) 719-6050	(512) 719-6099	ken.r.rice@parsons.com
Salazar, Jorge	TCEQ	14250 Judson Road	San Antonio, TX 78233	(210) 403-4059		jsalazar@tceq.state.tx.us
Shirley, Jason (LTC, retired)	CSSA Installation Manager	25800 Ralph Fair Road	Boerne, TX 78015-4800	(210) 295-7416	(210) 295-7386	jason.d.shirley.civ@mail.mil

ATTACHMENT 1

ON-POST AND OFF-POST SAMPLED WELLS FIGURE



Attachment 1

December 2013 and March 2014 Sampled On-Post and Off-post Groundwater Wells Camp Stanley Storage Activity

PARSONS

C:\CSSA\GIS\MXD\2013_Dec__2014_Mar_EPA_Progress_Rpt_Sampled_Wells.mxd - 5/22/2014 @ 11:25:19 AM

ATTACHMENT 2

SUMMARY OF STATUS OF EACH SWMU/AOC/RMU SITE

ATTACHMENT 2
STATUS OF SWMUs, AOCs, AND RMUs at CSSA

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

ATTACHMENT 2
STATUS OF SWMUs, AOCs, AND RMUs at CSSA

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

ATTACHMENT 2
STATUS OF SWMUs, AOCs, AND RMUs at CSSA

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

ATTACHMENT 2
STATUS OF SWMUs, AOCs, AND RMUs at CSSA

Unit No.	*Description*	*Investigation Report(s)*	*Recommendations*	**Requested Action**				*Closure Approved*	*Closure Type*
				RRS1	*NFA*	*Delisting*	*TRRP*		
AOC-49	Trench (4 x 7 ft) without surficial debris. Located SW of deer stand 41 in central East Pasture.	Delisting Report April 2005	NA			**X**		July-05	Delisting
AOC-50	Area with orange discolored material (most likely nickel penetrate) at ground surface. South of B-30 along gravel road.	RFI/Closure Report January 2005	NA	**X**				April-05	RRS1
AOC-51	East pasture, east of active range, approximately 25 acres, area around B-9	RIR July 2012	Closure		**X**			October-12	NFA
AOC-52	Area west of B-4 towards Salado Creek near trees, two trenches	RIR August 2011	NA		**X**			December-11	NFA
AOC-53	Building foundation near B-27 at Central Road and road to "D" Tank, batteries at rear of slab	RFI/Closure Report April 2005	NA	**X**				July-05	RRS1
AOC-54	Area near gutting pit, east of Welding Shop Building, right side of road batteries were stored in the area	Closure Report July 2004	NA	**X**				November-04	RRS1
AOC-55	Landfill, south of Tenberg Drive, east of Salado Creek	RFI/Closure Report Feb 04	NA	**X**				June-08	RRS1
AOC-56	Landfill, at intersection of Bernard Road and East Outer Road, surface depression on south side of intersection	Closure Report June 04	NA	**X**				September-04	RRS1
AOC-57	East of Building 98 and KOA Area, cleaning/maintenance activities performed at temporary structures	RIR May 2011	NA		**X**			September-11	NFA
AOC-58	Suspected disposal trench within Inner Cantonment	RFI Report October 2002 RIR August 2011	NA		**X**			December-11	NFA
AOC-59	Trench-type anomaly located west Test Pad in the East Pasture	RIR July 2011	NA		**X**			October-11	NFA
AOC-60	Trench located west of tunnel and entrance roadway in the East Pasture.	Delisting Report April 2005	NA			**X**		July-05	Delisting
AOC-61	Suspected landfill	RFI/Closure Report October 2002	NA	**X**				February-03	RRS1
AOC-62	Located west of monitoring well MW-2 and east of Salado Creek.	RIR August 2011	NA		**X**			December-11	NFA
AOC-63	Area consisting of 3 barrels containing rocks, south of deer stand 41 in the East Pasture.	APAR October 2008	NA				**X**	July-09	TRRP
AOC-65	A concrete pit area that housed a metal vat that contained TCE and PCE.	RFI Report August 2003	Additional investigation, ISCO remediation ongoing						

ATTACHMENT 2
STATUS OF SWMUs, AOCs, AND RMUs at CSSA

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

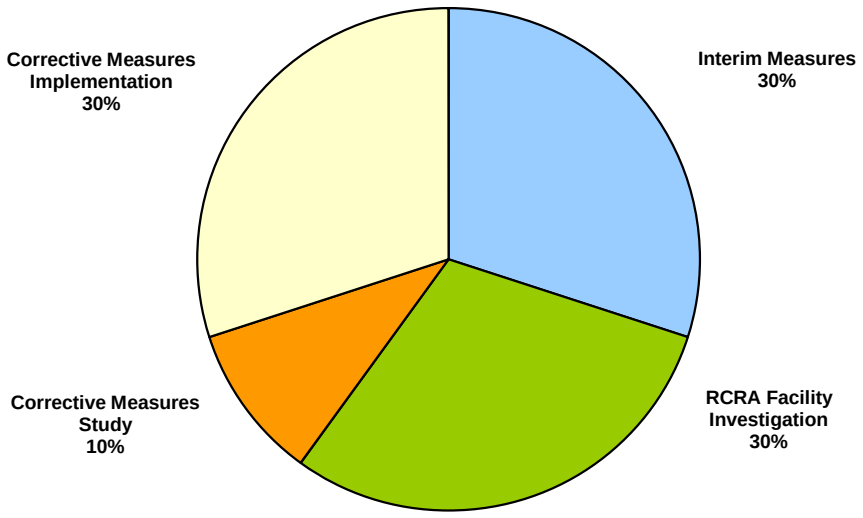
ATTACHMENT 3

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%				99.7%
Interim Measures Work Plan		7%	98.8%	6.9%	
Interim Measures Implementation		70%	99.8%	69.9%	
Reports		23%	99.8%	23.0%	
RCRA Facility Investigation	30%				99%
Preliminary Report		5%	100%	5%	
RFI Workplan		5%	100%	5%	
Facility Investigation		40%	100%	40%	
Risk Assessment		10%	100%	10%	
Investigation Analysis		10%	100%	10%	
Groundwater Investigation		15%	99%	15%	
Treatability Studies		10%	95%	10%	
Progress Reports		5%	99%	5%	
Corrective Measures Study	10%				93%
Identify and Develop Alternatives		15%	100%	15%	
Evaluate Alternatives		60%	100%	60%	
Reports		25%	70%	18%	
Corrective Measures Implementation	30%				47%
Implementation Program Plan		5%	0%	0%	
Corrective Measure Design		15%	45%	7%	
Corrective Measure Construction		70%	50%	35%	
Reports		10%	50%	5%	
		% of Phase Complete			83%

Section 3008(h) Order Tasks



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%					98.8%	
Draft IM Workplan		80%	100%	80%	0%		
Draft Final IM Workplan		15%	100%	15%	0%		
Final IM Workplan		5%	75%	4%	25%		
2 Interim Measures Implementation	70%					99.8%	
Sample 3 Off-Site Wells		1%	100%	1%	0%		
Sample 20 Off-Site Wells (6 events)		6%	100%	6%	0%		(remaining off-post sampling
2000 Groundwater Monitoring (4 events)		3%	100%	3%	0%		conducted under the RFI task)
2001 Groundwater Monitoring (4 events)		3%	100%	3%	0%		
2002 Groundwater Monitoring (4 events)		3%	100%	3%	0%		
2003 Groundwater Monitoring (4 events)		3%	100%	3%	0%		
2004 Groundwater Monitoring (4 events)		3%	100%	3%	0%		
2005 Groundwater Monitoring (4 events)		3%	100%	3%	0%		
2006 Groundwater Monitoring		3%	100%	3%	0%		
2007 Groundwater Monitoring		3%	100%	3%	0%		
2008 Groundwater Monitoring		3%	100%	3%	0%		
2009 Groundwater Monitoring		3%	100%	3%	0%		
2010 Groundwater Monitoring		3%	100%	3%	0%		
2011 Groundwater Monitoring		3%	100%	3%	0%		
2012 Groundwater Monitoring		3%	100%	3%	0%		
2013 Groundwater Monitoring		3%	100%	3%	0%		
2013 Groundwater Monitoring		3%	100%	3%	0%		
2014 Groundwater Monitoring		3%	50%	1%	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%	50%	1%	50%		may or may not be necessary.
Determine appropriate disposition of soil piles		5%	100%	5%	0%		After treatability studies.
Treat/dispose 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%		
3 Reports	23%					99.8%	
Quarterly Progress Report 1 (August 1999)		0.61%	100%	1%	0%		
Quarterly Progress Report 2 (November 1999)		0.61%	100%	1%	0%		
Quarterly Progress Report 3 (February 2000)		0.61%	100%	1%	0%		
Quarterly Progress Report 4 (May 2000)		0.61%	100%	1%	0%		
Quarterly Progress Report 5 (August 2000)		0.61%	100%	1%	0%		
Quarterly Progress Report 6 (November 2000)		0.61%	100%	1%	0%		
Quarterly Progress Report 7 (February 2001)		0.61%	100%	1%	0%		
Quarterly Progress Report 8 (May 2001)		0.61%	100%	1%	0%		
Quarterly Progress Report 9 (August 2001)		0.61%	100%	1%	0%		
Quarterly Progress Report 10 (November 2001)		0.61%	100%	1%	0%		
Quarterly Progress Report 11 (February 2002)		0.61%	100%	1%	0%		
Quarterly Progress Report 12 (May 2002)		0.61%	100%	1%	0%		
Quarterly Progress Report 13 (August 2002)		0.61%	100%	1%	0%		
Quarterly Progress Report 14 (November 2002)		0.61%	100%	1%	0%		
Quarterly Progress Report 15 (February 2003)		0.61%	100%	1%	0%		
Quarterly Progress Report 16 (May 2003)		0.61%	100%	1%	0%		
Quarterly Progress Report 17 (August 2003)		0.61%	100%	1%	0%		
Quarterly Progress Report 18 (November 2003)		0.61%	100%	1%	0%		
Quarterly Progress Report 19 (February 2004)		0.61%	100%	1%	0%		
Quarterly Progress Report 20 (May 2004)		0.61%	100%	1%	0%		
Quarterly Progress Report 21 (August 2004)		0.61%	100%	1%	0%		
Quarterly Progress Report 22 (November 2004)		0.61%	100%	1%	0%		
Quarterly Progress Report 23 (February 2005)		0.61%	100%	1%	0%		
Quarterly Progress Report 24 (May 2005)		0.61%	100%	1%	0%		
Quarterly Progress Report 25 (August 2005)		0.61%	100%	1%	0%		
Quarterly Progress Report 26 (October 2005)		0.61%	100%	1%	0%		
Quarterly Progress Report 27 (January 2006)		0.61%	100%	1%	0%		
Quarterly Progress Report 28 (April 2006)		0.61%	100%	1%	0%		
Semi-annual Progress Rpt 29 (Dec 2006)		0.61%	100%	1%	0%		
Semi-annual Progress Rpt 30 (July 2007)		0.61%	100%	1%	0%		
Semi-annual Progress Rpt 31 (Dec 2007)		0.61%	100%	1%	0%		
Semi-annual Progress Rpt 32 (July 2008)		0.61%	100%	1%	0%		
Semi-annual Progress Rpt 33 (Dec 2008)		0.61%	100%	1%	0%		
Semi-annual Progress Rpt 34 (July 2009)		0.61%	100%	1%	0%		
Semi-annual Progress Rpt 35 (Dec 2009)		0.61%	100%	1%	0%		
Semi-annual Progress Rpt 36 (July 2010)		0.61%	100%	1%	0%		
Semi-annual Progress Rpt 37 (Dec 2010)		0.61%	100%	1%	0%		
Semi-annual Progress Rpt 38 (July 2011)		0.61%	100%	1%	0%		
Semi-annual Progress Rpt 39 (Dec 2011)		0.61%	100%	1%	0%		
Semi-annual Progress Rpt 40 (July 2012)		0.61%	100%	1%	0%		
Semi-annual Progress Rpt 41 (Dec 2012)		0.61%	100%	1%	0%		
Semi-annual Progress Rpt 42 (July 2013)		0.61%	100%	1%	0%		
Semi-annual Progress Rpt 43 (Dec 2013)		0.61%	100%	1%	0%		
Semi-annual Progress Rpt 44 (July 2014)		0.61%	100%	1%	0%		
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		99.74%	

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%					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%		
Facility Investigation[1]	40%					100.0%	
Small Areas (0-2 acres in size)	74%						
B-3 Investigation/Report		1.24%	100%	1.240%	0%		Final report submitted, additional work required.
B-4 Investigation/Report		1.24%	100%	1.240%	0%		TRRP closure approved Feb 13
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%	100%	1.240%	0%		Active range
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%	100%	1.240%	0%		NFA closure approved July 13
B-15/16 Investigation/Report		1.24%	100%	1.240%	0%		NFA closure approved Sept 11
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%	100%	1.240%	0%		NFA closure approved Dec 11
B-28 Investigation/Report		1.24%	100%	1.240%	0%		NFA Closure approved Nov 11
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%	100%	1.240%	0%		NFA closure approved Apr 14
B-71 Investigation/Report		1.24%	100%	1.240%	0%		TRRP closure approved Oct 11
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%	100%	1.240%	0%		Closure approved Nov 08
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%	100%	1.240%	0%		NFA Closure Approved Oct 11
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 05
AOC 50 Investigation/Report		1.24%	100%	1.240%	0%		Closure approved Apr 05
AOC 52 Investigation/Report		1.24%	100%	1.240%	0%		NFA closure approved Dec 11
AOC 53 Investigation/Report		1.24%	100%	1.240%	0%		Closure approved July 05
AOC 54 Investigation/Report		1.24%	100%	1.240%	0%		Closure approved Nov 04
AOC 55 Investigation/Report		1.24%	100%	1.240%	0%		Closure approved June 08
AOC 56 Investigation/Report		1.24%	100%	1.240%	0%		Closure approved Sept 04
AOC 58 Investigation/Report		1.24%	100%	1.240%	0%		NFA closure approved Dec 11
AOC 59 Investigation/Report		1.24%	100%	1.240%	0%		NFA Closure Approved Oct 11
AOC 60 Investigation/Report		1.24%	100%	1.240%	0%		Delisting approved July 05
AOC 61 Investigation/Report		1.24%	100%	1.240%	0%		Closure approved Feb 03
AOC 62 Investigation/Report		1.24%	100%	1.240%	0%		NFA closure approved Dec 11
AOC 63 Investigation/Report		1.24%	100%	1.240%	0%		Closure approved Aug 09
AOC 64 Investigation/Report		1.24%	100%	1.240%	0%		TRRP closure approved Oct 11
AOC 67 Investigation/Report		1.24%	100%	1.240%	0%		NFA closure approved Sept 10
AOC 68 Investigation/Report		1.24%	100%	1.240%	0%		NFA closure approved Sept 10
AOC 69 Investigation/Report		1.24%	100%	1.240%	0%		TRRP closure approved Oct 09
AOC 70 Investigation/Report		1.24%	100%	1.240%	0%		NFA closure approved Sept 11
AOC 72 Investigation/Report		1.24%	100%	1.240%	0%		NFA closure approved May 12
AOC 73 Investigation/Report		1.24%	100%	1.240%	0%		NFA closure approved July 09
AOC 74 Investigation/Report		1.24%	100%	1.240%	0%		NFA closure approved May 12
AOC 75 Investigation/Report		1.24%	100%	1.240%	0%		NFA closure approved Nov 13
Medium Areas (2-10 acres in size)							
B-1 Investigation/Report		1.2%	100%	1.220%	0%		Closure approved Nov 02
B-2 Investigation/Report		1.2%	100%	1.220%	0%		Active range
B-22 Investigation/Report		1.2%	100%	1.220%	0%		Closure approved Dec 02
B-24 Investigation/Report		1.2%	100%	1.220%	0%		Active range
B-29 Investigation/Report		1.2%	100%	1.220%	0%		Closure approved Feb 08
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 05
AOC 42 Investigation/Report		1.2%	100%	1.220%	0%		NFA closure approved Dec 11
AOC 48 Investigation/Report		1.2%	100%	1.220%	0%		Delisting approved Nov 04
AOC 57 Investigation/Report		1.2%	100%	1.220%	0%		NFA closure approved Sept 11
Large Areas (>10 acres in size)							
B-20/21 Investigation/Report		1.2%	100%	1.220%	0%		Active range
AOC 38 Investigation/Report		1.2%	100%	1.220%	0%		Closure approved February 05
AOC 51 Investigation/Report		1.2%	100%	1.220%	0%		NFA Closure approved Oct 12
AOC 66 Investigation/Report		1.2%	100%	1.220%	0%		NFA Closure approved Feb 05
RMU-5 Investigation/Report		1.2%	100%	1.220%	0%		NFA Closure approved Sept 12
AOC 65 Investigation/Report		1.2%	100%	1.220%	0%		Final report submitted, additional work recommended
AOC 69 Investigation/Report		1.2%	100%	1.220%	0%		Closure approved Oct 09
Coal Bins Investigation/Report		1.2%	100%	1.220%	0%		Site de-listed as an AOC
RMU-2 Investigation/Report		1.2%	100%	1.220%	0%		NFA closure approved Feb 12
RMU-3 Investigation/Report		1.2%	100%	1.220%	0%		NFA closure approved May 13
RMU-4 Investigation/Report		1.2%	100%	1.220%	0%		Final report submitted to TCEQ
Groundwater Investigation	15%					99%	
Well Installation		10%	90%	9%	10%		
Groundwater Monitoring 1999		3%	100%	3%	0%		
Groundwater Monitoring 2000		3%	100%	3%	0%		
Groundwater Monitoring 2001		3%	100%	3%	0%		
Groundwater Monitoring 2002		3%	100%	3%	0%		
Groundwater Monitoring 2003		3%	100%	3%	0%		
Groundwater Monitoring 2004		3%	100%	3%	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 2005		3%	100%	3%	0%		
Groundwater Monitoring 2006		3%	100%	3%	0%		
Groundwater Monitoring 2007		3%	100%	3%	0%		
Groundwater Monitoring 2008		3%	100%	3%	0%		
Groundwater Monitoring 2009		3%	100%	3%	0%		
Groundwater Monitoring 2010		3%	100%	3%	0%		
Groundwater Monitoring 2011		3%	100%	3%	0%		
Groundwater Monitoring 2012		3%	100%	3%	0%		
Groundwater Monitoring 2013		3%	100%	3%	0%		
Groundwater Monitoring 2014		3%	50%	1%	50%		
Conceptual Site Model (CSM)		20.0%	100%	20%	0%		
CSM Update		5.0%	100%	5%	0%		
LTMO 2005 (optimization study)		10%	100%	10%	0%		Complete
LTMO 2010 (review of optimization)		10%	100%	10%	0%		Complete
Risk Assessment	10%					100%	
Draft Report		20%	100%	20%	0%		
Draft Final Report		4%	100%	4%	0%		
Final Report		1%	100%	1%	0%		RA approved by EPA Apr 14.
Draft CSM		60%	100%	60%	0%		
Update to CSM		10%	100%	10%	0%		
Final CSM		5%	100%	5%	0%		
Investigation Analysis	10%					100%	
Collect Background Data		10%	100%	10%	0%		
Draft Investigation Analysis		85%	100%	85%	0%		
Final Investigation Analysis		5%	100%	5%	0%		Information included in facility investigation reports; percent complete based on overall percent complete of facility investigation tasks.
Treatability Studies	10%					95%	
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%	100%	10%	0%		
Draft Treatability Study & Technology Evaluation Reports		10%	100%	10%	0%		
Final Treatability Study Report		25%	80%	20%	20%		
Recharge Study		25%	100%	25%	0%		
Progress Reports	5%					99%	
Quarter 1 (August 1999)		2.20%	100%	2.20%	0%		
Quarter 2 (November 1999)		2.20%	100%	2.20%	0%		
Quarter 3 (February 2000)		2.20%	100%	2.20%	0%		
Quarter 4 (May 2000)		2.20%	100%	2.20%	0%		
Quarter 5 (August 2000)		2.20%	100%	2.20%	0%		
Quarter 6 (November 2000)		2.20%	100%	2.20%	0%		
Quarter 7 (February 2001)		2.20%	100%	2.20%	0%		
Quarter 8 (May 2001)		2.20%	100%	2.20%	0%		
Quarter 9 (August 2001)		2.20%	100%	2.20%	0%		
Quarter 10 (November 2001)		2.20%	100%	2.20%	0%		
Quarter 11 (February 2002)		2.20%	100%	2.20%	0%		
Quarter 12 (May 2002)		2.20%	100%	2.20%	0%		
Quarter 13 (August 2002)		2.20%	100%	2.20%	0%		
Quarter 14 (November 2002)		2.20%	100%	2.20%	0%		
Quarter 15 (February 2003)		2.20%	100%	2.20%	0%		
Quarter 16 (May 2003)		2.20%	100%	2.20%	0%		
Quarter 17 (August 2003)		2.20%	100%	2.20%	0%		
Quarter 18 (November 2003)		2.20%	100%	2.20%	0%		
Quarter 19 (February 2004)		2.20%	100%	2.20%	0%		
Quarter 20 (May 2004)		2.20%	100%	2.20%	0%		
Quarter 21 (August 2004)		2.20%	100%	2.20%	0%		
Quarter 22 (November 2004)		2.20%	100%	2.20%	0%		
Quarter 23 (February 2005)		2.20%	100%	2.20%	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 24 (May 2005)		2.20%	100%	2.20%	0%		
Quarter 25 (August 2005)		2.20%	100%	2.20%	0%		
Quarter 26 (November 2005)		2.20%	100%	2.20%	0%		
Quarter 27 (February 2006)		2.20%	100%	2.20%	0%		
Quarter 28 (May 2006)		2.20%	100%	2.20%	0%		
Semi-Annual 29 (December 2006)		2.20%	100%	2.20%	0%		
Semi-Annual 30 (July 2007)		2.20%	100%	2.20%	0%		
Semi-Annual 31 (December 2007)		2.20%	100%	2.20%	0%		
Semi-Annual 32 (July 2008)		2.20%	100%	2.20%	0%		
Semi-Annual 33 (December 2008)		2.20%	100%	2.20%	0%		
Semi-Annual 34 (July 2009)		2.20%	100%	2.20%	0%		
Semi-Annual 35 (December 2009)		2.20%	100%	2.20%	0%		
Semi-Annual 36 (July 2010)		2.20%	100%	2.20%	0%		
Semi-Annual 37 (December 2010)		2.20%	100%	2.20%	0%		
Semi-Annual 38 (July 2011)		2.20%	100%	2.20%	0%		
Semi-Annual 39 (December 2011)		2.20%	100%	2.20%	0%		
Semi-Annual 40 (July 2012)		2.20%	100%	2.20%	0%		
Semi-Annual 40 (July 2012)		2.20%	100%	2.20%	0%		
Semi-Annual 41 (December 2012)		2.20%	100%	2.20%	0%		
Semi-Annual 42 (July 2013)		2.20%	100%	2.20%	0%		
Semi-Annual 43 (December 2013)		2.20%	100%	2.20%	0%		
Semi-Annual 44 (July 2014)		2.20%	100%	2.20%	0%		
				% of Phase Complete		99.29%	

[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%				100.0%
Update DCC Report		35%	100%	35%	
Establish Corrective Action Objectives		30%	100%	30%	
ID, Screen, Develop CM Alternatives		35%	100%	35%	
Evaluate Alternatives	60%				100.0%
Draft Description of CM Alternative		90%	100%	90%	
Final Description of CM Alternative		10%	100%	10%	
Reports	25%				70.0%
Draft CMS Report		75%	80%	60%	
Final CMS Report		5%	0%	0%	
Quarter 1 Progress Report (Period 43)		5%	100%	5%	
Quarter 2 Progress Report (Period 44)		5%	100%	5%	
Quarter 3 Progress Report		5%	0%	0%	
Quarter 4 Progress Report		5%	0%	0%	
		% of Phase Complete			90.0%

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%				45%
Draft CMD Report		90%	50%	45%	
Final CMD Report		10%	0%	0%	
Corrective Measure Construction	70%				50%
Draft Construction QAPP		35%	50%	18%	
Final Construction QAPP		5%	50%	3%	
Implementation of Construction QAPP		60%	50%	30%	
Reports	10%				50%
Progress Report 1 (Period 43)		25%	100%	25%	
Progress Report 2 (Period 44)		25%	100%	25%	
Progress Report 3		25%	0%	0%	
Progress Report 4		25%	0%	0%	
		% of Phase Complete			36.25%

ATTACHMENT 4

GROUNDWATER RESULTS SUMMARY

Attachment 4
December 2013 On-Post Groundwater Results

Well ID	Sample Date	Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Zinc	Mercury
CS-MW36-LGR	12/2/2013	NA	NA	0.0005U	0.0010U	NA	0.0019U	NA	0.0001U
CSSA Drinking Water Well System									
CS-1	12/3/2013	0.0002U	**0.0378**	0.0005U	0.0010U	**0.008F**	0.0019U	**0.334**	0.0001U
CS-10	12/3/2013	0.0002U	**0.039**	0.0005U	0.0010U	**0.005F**	0.0019U	**0.054**	0.0001U
CS-12	12/3/2013	0.0002U	**0.0316**	0.0005U	0.0010U	**0.022**	0.0019U	**0.102J**	0.0001U
CS-12 FD	12/3/2013	0.0002U	**0.0342**	0.0005U	0.0010U	0.003U	0.0019U	**0.068J**	0.0001U

Well ID	Sample Date	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	TCE	Vinyl Chloride
CS-MW36-LGR	12/2/2013	0.12U	**0.38F**	0.08U	**11.21**	**14.84**	0.08U
CSSA Drinking Water Well System							
CS-1	12/3/2013	0.12U	0.07U	0.08U	0.06U	**0.20F**	0.08U
CS-10	12/3/2013	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
CS-12	12/3/2013	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
CS-12 FD	12/3/2013	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U

BOLD	≥ MDL
BOLD	≥ RL
BOLD	≥ MCL

All samples were analyzed by APPL, Inc.
VOC data reported in ug/L & metals data reported in mg/L.

Abbreviations/Notes:

FD	Field Duplicate
TCE	Trichloroethene
PCE	Tetrachloroethene
DCE	Dichloroethene
AL	Action Level
SS	Secondary Standard
NA	Not Analyzed for this parameter

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.

Attachment 4
December 2013 Off-Post Groundwater Results

Well ID	Sample Date	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	TCE	Vinyl Chloride
I10-4	12/9/2013	0.12U	0.07U	0.08U	**4.04**	**1.61**	0.08U
LS-5	12/9/2013	0.12U	0.07U	0.08U	**0.95F**	**2.53**	0.08U
LS-6	12/9/2013	0.12U	0.07U	0.08U	**0.84F**	**2.72**	0.08U
LS-7	12/9/2013	0.12U	0.07U	0.08U	**2.15**	**0.23F**	0.08U
RFR-10	12/9/2013	0.12U	**0.16F**	0.08U	**13.7**	**6.42**	0.08U
RFR-11	12/9/2013	0.12U	0.07U	0.08U	0.06U	**2.52**	0.08U
SLD-01	12/3/2013	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U

BOLD	≥ MDL
BOLD	≥ RL
BOLD	≥ MCL

All samples were analyzed by APPL, Inc.
VOC 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.

Attachment 4
March 2014 On-Post Groundwater Results

Well ID	Sample Date	Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Zinc	Mercury
CS-MW1-LGR	3/4/2014	NA	NA	0.0005U	**0.0028F**	NA	0.0019U	NA	0.0001U
CS-MW2-LGR	3/4/2014	NA	NA	0.0005U	0.0010U	NA	0.0019U	NA	0.0001U
CS-MW8-LGR	3/6/2014	NA	NA	0.0005U	0.0010U	NA	0.0019U	NA	0.0001U
CS-MW11A-LGR	3/4/2014	NA	NA	0.0005U	0.0010U	NA	0.0019U	NA	0.0001U
CS-MW24-LGR	3/6/2014	NA	NA	0.0005U	0.0010U	NA	0.0019U	NA	0.0001U
CS-MW35-LGR	3/6/2014	NA	NA	0.0005U	**0.0024F**	NA	0.0019U	NA	0.0001U
CS-MW36-LGR	3/6/2014	NA	NA	0.0005U	0.0010U	NA	0.0019U	NA	0.0001U
CSSA Drinking Water Well System									
CS-1	3/4/2014	0.0002U	**0.0348**	0.0005U	0.0010U	**0.004F**	0.0019U	**0.227**	0.0001U
CS-10	3/4/2014	**0.0008F**	**0.0397**	0.0005U	0.0010U	**0.007F**	0.0019U	**0.063**	0.0001U
CS-10 FD	3/4/2014	**0.0007F**	**0.0408**	0.0005U	0.0010U	**0.005F**	0.0019U	**0.065**	0.0001U
CS-12	3/18/2014	0.0002U	**0.0316**	0.0005U	0.0010U	**0.005F**	0.0019U	**0.096**	0.0001U

Well ID	Sample Date	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	TCE	Vinyl Chloride
CS-MW1-LGR	3/4/2014	0.12U	**30.96**	**0.47F**	**17.31**	**37.28**	0.08U
CS-MW2-LGR	3/4/2014	0.12U	**0.50F**	0.08U	0.06U	0.05U	0.08U
CS-MW8-LGR	3/6/2014	0.12U	0.07U	0.08U	**1.75**	0.05U	0.08U
CS-MW11A-LGR	3/4/2014	0.12U	0.07U	0.08U	**0.92F**	0.05U	0.08U
CS-MW24-LGR	3/6/2014	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
CS-MW35-LGR	3/6/2014	0.12U	0.07U	0.08U	**0.46F**	0.05U	0.08U
CS-MW36-LGR	3/6/2014	0.12U	**0.79F**	0.08U	**18.27**	**32.77**	0.08U
CSSA Drinking Water Well System							
CS-1	3/4/2014	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
CS-10	3/4/2014	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
CS-10 FD	3/4/2014	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
CS-12	3/18/2014	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U

BOLD	≥ MDL
BOLD	≥ RL
BOLD	≥ MCL

All samples were analyzed by APPL, Inc.
VOC data reported in ug/L & metals data reported in mg/L.

Abbreviations/Notes:

FD	Field Duplicate
TCE	Trichloroethene
PCE	Tetrachloroethene
DCE	Dichloroethene
NA	Not Analyzed for this parameter

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.

Attachment 4
March 2014 Off-Post Groundwater Results

Well ID	Sample Date	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	PCE	TCE	Vinyl Chloride
JW-20	1/22/2014	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
	3/5/2014	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
LS-5	3/5/2014	0.12U	0.07U	0.08U	**1.01F**	**2.99**	0.08U
LS-5-A2	3/5/2014	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
LS-6	3/5/2014	0.12U	0.07U	0.08U	**0.76F**	**3.19**	0.08U
LS-6-A2	3/5/2014	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
LS-7	3/5/2014	0.12U	0.07U	0.08U	**1.62**	**0.44F**	0.08U
LS-7-A2	3/5/2014	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
RFR-10	3/5/2014	0.12U	0.07U	0.08U	**8.36**	**3.43**	0.08U
RFR-10-A2	3/5/2014	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
RFR-10-B2	3/5/2014	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
RFR-11	3/5/2014	0.12U	0.07U	0.08U	**0.54F**	**2.29**	0.08U
RFR-11-A2	3/5/2014	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
SLD-01	3/5/2014	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U
SLD-01 FD	3/5/2014	0.12U	0.07U	0.08U	0.06U	0.05U	0.08U

BOLD	≥ MDL
BOLD	≥ RL
BOLD	≥ MCL

All samples were analyzed by APPL, Inc.
VOC data reported in ug/L.
Abbreviations/Notes:

FD	Field Duplicate
TCE	Trichloroethene
PCE	Tetrachloroethene
DCE	Dichloroethene

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.

Attachment 4
March 2014 Westbay Analytical Results

Well ID	Date Sampled	1,1-DCE	cis-1,2-DCE	TCE	PCE	trans-1,2-DCE	Vinyl Chloride
CS-WB01-UGR-01	3/20/2014	DRY					
CS-WB01-LGR-01	3/20/2014	<0.12	<0.07	<0.05	**3.33**	<0.08	<0.08
CS-WB01-LGR-02	3/20/2014	<0.12	<0.07	**2.47**	**10.97**	<0.08	<0.08
CS-WB01-LGR-03	3/20/2014	<0.12	<0.07	**6.51**	**2.27**	<0.08	<0.08
CS-WB01-LGR-04	3/20/2014	<0.12	**0.23F**	<0.05	<0.06	<0.08	<0.08
CS-WB01-LGR-05	3/20/2014	<0.12	<0.07	**0.16F**	**0.31F**	<0.08	<0.08
CS-WB01-LGR-06	3/20/2014	<0.12	**0.30F**	**0.37F**	**0.34F**	<0.08	<0.08
CS-WB01-LGR-07	3/20/2014	<0.12	**0.18F**	**10.65**	**14.11**	<0.08	<0.08
CS-WB01-LGR-08	3/20/2014	<0.12	**1.23**	**6.95**	**5.24**	<0.08	<0.08
CS-WB01-LGR-09	3/20/2014	<0.12	**0.61F**	**15.93**	**13.78**	<0.08	<0.08
CS-WB02-UGR-01	3/19/2014	DRY					
CS-WB02-LGR-01	3/19/2014	DRY					
CS-WB02-LGR-02	3/19/2014	DRY					
CS-WB02-LGR-03	3/19/2014	<0.12	<0.07	**2.19**	**6.1**	<0.08	<0.08
CS-WB02-LGR-04	3/19/2014	<0.12	<0.07	**8.01**	**4.05**	<0.08	<0.08
CS-WB02-LGR-05	3/19/2014	<0.12	<0.07	**2.23**	**1.09F**	<0.08	<0.08
CS-WB02-LGR-06	3/19/2014	<0.12	**0.17F**	**2.06**	**1.09F**	**0.19F**	<0.08
CS-WB02-LGR-07	3/19/2014	<0.12	**0.69F**	**0.55F**	**0.44F**	<0.08	<0.08
CS-WB02-LGR-08	3/19/2014	<0.12	**1.34**	**0.66F**	**0.87F**	**0.30F**	<0.08
CS-WB02-LGR-09	3/19/2014	<0.12	<0.07	**5.81**	**7.79**	<0.08	<0.08
CS-WB03-UGR-01	3/17/2014	<0.12	**2.89**	**111.4**	**19818.79****	<0.08	<0.08
CS-WB03-LGR-01	3/17/2014	<0.12	**0.64F**	**22.89**	**1024.18***	<0.08	<0.08
CS-WB03-LGR-02	3/17/2014	DRY					
CS-WB03-LGR-03	3/17/2014	<0.12	<0.07	**8.2**	**30.69**	<0.08	<0.08
CS-WB03-LGR-04	3/17/2014	<0.12	<0.07	**6.49**	**17.55**	<0.08	<0.08
CS-WB03-LGR-05	3/17/2014	<0.12	<0.07	**3.84**	**15.99**	<0.08	<0.08
CS-WB03-LGR-06	3/17/2014	<0.12	**1.29**	**0.93F**	**5.05**	<0.08	<0.08
CS-WB03-LGR-07	3/17/2014	<0.12	**4.58**	**0.34F**	**0.83F**	<0.08	<0.08
CS-WB03-LGR-08	3/17/2014	<0.12	**1.95**	**0.69F**	**1.13F**	<0.08	<0.08
CS-WB03-LGR-09	3/17/2014	<0.12	**4.1**	**1.52**	**2.86**	<0.08	**0.92F**
CS-WB04-UGR-01	3/6/2014	DRY					
CS-WB04-LGR-01	3/6/2014	<0.12	<0.07	<0.05	**0.50F**	<0.08	<0.08
CS-WB04-LGR-02	3/6/2014	DRY					
CS-WB04-LGR-03	3/6/2014	<0.12	<0.07	<0.05	<0.06	<0.08	<0.08
CS-WB04-LGR-04	3/6/2014	<0.12	<0.07	<0.05	<0.06	<0.08	<0.08
CS-WB04-LGR-06	3/6/2014	<0.12	**2.94**	**10.01**	**34.11**	**0.28F**	<0.08
CS-WB04-LGR-07	3/6/2014	<0.12	**2.47**	**9.24**	**26.41**	**0.21F**	<0.08
CS-WB04-LGR-08	3/6/2014	<0.12	<0.07	**0.74F**	**0.33F**	<0.08	<0.08
CS-WB04-LGR-09	3/6/2014	<0.12	<0.07	**4.71**	**5.63**	<0.08	<0.08
CS-WB04-LGR-10	3/6/2014	<0.12	<0.07	**0.65F**	**1.73**	<0.08	<0.08
CS-WB04-LGR-11	3/6/2014	<0.12	<0.07	<0.05	<0.06	<0.08	**0.42F**
CS-WB04-BS-01	3/6/2014	<0.12	<0.07	<0.05	<0.06	<0.08	<0.08
CS-WB04-BS-02	3/6/2014	<0.12	<0.07	<0.05	<0.06	<0.08	<0.08
CS-WB04-CC-01	3/6/2014	<0.12	**0.69F**	<0.05	<0.06	<0.08	<0.08
CS-WB04-CC-02	3/6/2014	<0.12	<0.07	<0.05	<0.06	<0.08	<0.08
CS-WB04-CC-03	3/6/2014	<0.12	<0.07	<0.05	<0.06	<0.08	<0.08

Data Qualifiers

TCE	Trichloroethene
PCE	Tetrachloroethene
DCE	Dichloroethene

F-The analyte was positively identified but the associated numerical value is below the RL.
* The analyte was run at a dilution of 50.
** The analyte was run at a dilution of 1500.
All values are reported in µg/L.

BOLD	≥ MDL
BOLD	≥ RL
BOLD	≥ MCL

ATTACHMENT 5

SUMMARY OF CURRENT AND UPCOMING REMEDIAL ACTIVITIES AT SWMUS, AOCS, AND RMUS

Site Status Matrix
Last Updated: 7/1/2014

Site	Area	Suspected Munitions	type of site	Work Needed	Current Status	Progress	Site Size (acres)	Estimated Excavation Extent (acres)	total estimated volume to remove CY	estimated excavation time	Original Description	Type of Closure Report	Potential COCs	Office data analysis to date	Notes
Field Effort in Progress															
Field Effort Compete - Site Open															
SWMU B-8	**North Pasture**	**none**	**soil contamination**		see TCEQ letter dated 2/29/2012	1/11 samples collected to help delineate vert and horz contamination plus waste characterization.	5.2 acres				former burn area	APAR	Ba, Cu, Pb, Zn		
SWMU B-20/21	**North Pasture**	**various MEC/MD**	**soil contamination**		see TCEQ letter dated 2/29/2012	'ESS finalized 3/14. XRF survey conducted 6/16/2011 to characterize Zn levels across the site. UCL calculations showed native soil calculations below PCLs (Tier 2).	36				OB/OD area, MEC and MC issues. MEC will need to be addressed seperately. PIMS area doesn't need to be sifted.	APAR	PIMS Treatment Area		Remove PIMS Treatment area only.
SWMU B-24	**North Pasture**	**misc. small arms munitions, etc.**	**soil contamination w/ MEC**		see TCEQ letter dated 2/29/2012	12/6 flagged XRF sites. 12/7- 8 completed XRF survey (67 of points). XRF samples mapped 1/10. 2/16, soil piles sampled for TCLP. 21-day TAT. Soil matrix of the the overage pile (now partially on B-27 staging area) sampled for berm appropriateness on 2/24. results back 3/2/2011 - good for East Pasture Berm. 2/28 week - looked through overage for MEC, etc. Deemed ok for berm. 3/3 - 8, overage pile moved completely to east pasture berm. ESS finalized 3/14. Surface soil samples collected 3/29 (SS15 - SS29). Results back 4/11 . Additional soil samples collected 1/5/2012 to delineate vertical and horizontal extent.	4.1				Disposal area. Need soil excavation to get closure for MC. MEC will be addressed seperately. TRRP: residential, eco, Tier 2	APAR	Ba, Cu, Pb, Zn		
Site Closed															
SWMU B-4 - Extra Trench	**Inner Cantonment**	**various MEC/MD**	**trench**		Compete.	8/3 Final WP/SAP, SWPPP, RFI IM/WMP Submitted to CSSA. 8/3 Began MEC identification and sorting. 9/7 Sorting of Metal Debris pile complete. Exposed additional trench during the cleaning of the site on September 27th. September 29, work stopped. UXO team worked at site from 10/31 to 11/4. 11/9 to 11/10. Began work moving overs on 2/1/12. Work halted week of 2/6 due to rain. Kickoff meeting for trench excavation on 2/15/12. Excavation of trench complete on 2/28/12. Trench samples collected 2/27 and 2/29. Additional surface zone trench samples were collected 3/8. Bottom samples came back and bottom rescraped. New bottom samples collected 3/12. Backfilling began week of 3/12 - 3/16. Used Soil pile 1 to refill up to 6 feet depth. then continued to the surface with borrow pit soils. 3/19 - re-excavated shallow sidewall in vicinity of US01. Re-collect sample after excavation - SU10. Backfilling complete on 3/26. Data packaged submitted to Weston - 4/18/2012. Geophysical performed week of 5/14. Hauling restarted on 5/23. Hauling completed on 5/30. APAR finalized						APAR - Weston			
SWMU B-13	**Inner Cantonment**	**small arms munitions**	**construction debris site**		Compete.	6/21/11 XRF Survey performed across site: 9/24/12 Field plans finalized and began excavation. :10/11: collected confirmation samples and WC samples: 10/17 Hit pocket of non-friable asbestos tiling: 10/18 collected WC samples; 10/22 cleared additional vegetation to expand staging area, exploratory excavation performed to help assess landfill extent in se corner of site; 10/24 wc samples collected: 10/31/2012, confirmation samples collected from the northern portion of the excavation area; 11/1/2012, sample from below the asbestos tiling sent for aspestos analysis; 6500 CY excavated to date of 11/2/2012; 11/7 excavation complete. Hauling from 11/12 to 11/27; 11/13 confirmation samples collected from southern section of site; 11/27 Additional WC sample collected for soils bound for east pasture. moved equipment to AOC-75; 11/29 rescraped area around SW09. Collected new sample at same area for confirmation; Final volume to Covel gardens: 4980 CY, 1620 w/ non-friable asbestos tiling (see manifest for more details. Waste characterization samples collecte 12/5. Confirmation samples collected 12/18/2012. 1/7 - hauling on hold due to weather. 1/14 - 1/21- hauling soils to east pasture berm. Complete field effort on 1/21. Additional materials uncovered during the sloping of the area for the construction of the wildlife tank. Approximately 100CYs of metal/asphalt debris transported off-site for disposal as class 2 nonhazardous material. 3/7 collected samples for methcholor hits check and also confirmation samples from the newly wildlife pond reworked area to the sw of the site. RIR submitted on 4/15/2013. TCEQ Approval dated July 9, 2013						RIR			

Site Status Matrix
Last Updated: 7/1/2014

Site	Area	Suspected Munitions	type of site	Work Needed	Current Status	Progress	Site Size (acres)	Estimated Excavation Extent (acres)	total estimated volume to remove CY	estimated excavation time	Original Description	Type of Closure Report	Potential COCs	Office data analysis to date	Notes
SWMU B-27	**Inner Cantonment, Salado Creek**	**37 mm projectiles**	**trenches**	- RIR (JM)	Complete.	completed draft of WP/SAP and SWPPP - 1/2011. SWPPP and WP/SAP finalized on 2/25/2011. ESS finalized 3/14. Excavation began 6/15 with Trench 1. Mainly soil with minor amounts of tin cans, etc. Began excavation of trench 2 on 6/27. Still mainly soil w/ minor amounts of tin cans, bottles, 1 gallon containers marked chlorox. Collected Trench 1 confirmation samples on 6/28. Hot cooler issue and VOCs scraped. Recollected VOCs on 7/6. Sampled stockpile soils to be sifted and clean top soil cover from trench 1 on 6/29. Completed trench 2 on7/6, began Trench 3. Trench 3 completed on 7/12, began work on trench 4. Collected samples from trench 2, 3, and 4 on 7/18 and 7/19. Trench 4 completed 7/14/ Trench 5 started 7/18. Trench 6 started 7/26. Trench 7 started 7/28. Trench 8 completed 8/3. Two locations above with metals above PCL - SW06 and SW67 - rescraped on 8/22/2011. Resampled on 8/23 for 7 day tat (9/2) (SW85 for cu and zn, SW86 for barium - see prelim data file for old locations). Also resample SS09, SS10, and SS14 forMC only - SS20, SS21, and SS22 collected on 8/31. All clean. 9/6 - ran UCL for Barium - good (79.78mg/kg). Sampled remaining topsoil pile on 9/7. Draft RIR submitted for CSSA review - 9/26/2011. Site reconstruction work continued through October 27. RIR approved - letter dated 12/29/2011.						RIR			
SWMU B-28	**Inner Cantonment, Salado Creek**	**none**	**soil contamination**	None	Complete. CSSA PW to re-vegetate.	Surface soil samples collected on 11/15 (37 samples). Additional soil samples collected to N. of site 11/22 (3 samples). Erosion control put in place 11/29. Surface soils excavated 11/30-12/2 (Volume removed = 2200 CY). Waste characterization samples, ditch samples sent to the lab 12/1. XRF used to verify vertical excavation on 12/1 (36 samples) and 12/02 (9 samples). Waste Characterization sample back non-hazardous (12/9). Excavation of high ditch levels (12/14). Hauled dirt 12/13-17. BOT samples collected 12/27. BOT samples returned (1/26) - hits of Barium above Tier 1 PCL in 7/10 samples. 2/17, area of site slated for re-excavation 2 additional feet accomplished. Took additional BOT samples for Barium evaluation (2/25). 3/3 95%UCL calculated for remaining samples = 207.5. 3/24 - excavate drainage ditch. Remaining soil hauled to east pasture berm _____. Draft RIR submitted to CSSA on 7/22. Final submitted to CSSA on 8/3. RIR approved - Letter dated 11/17/2011.						RIR			
SWMU B-34	**Inner Cantonment**	**none**	**soil contamination**		Field effort comlete. Drafting Site Closure Document	XRF sampled 12/1/2010 (40 locations). XRF results contoured 12/27. Tentative Tier 2 PCL for lead developed. Collected addiitonal XRF survey locations 6/13 and 6/14/2011. Collected additional XRF and soil samples 1/16/2012. 3/8 submitted the SIN. 3/12-13 collected surface soil samples to better delineate Affected property boundary. 3/18 collected XRF information around the edge of the parking lot. 6/8 through 9, collected subsurface samples from beneath the road and the parking lot. Site-specific Closure Report approved April 2014.		NA	NA	NA	Originally buried pipe, but soil contamination is problem. Surface and subsurface soil samples collected. No MEC concerns.	APAR	Pb		commercial, no eco, tier 2
AOC-45	**Inner Cantonment**	**none**	**soil contamination**	None	Complete. Silt fencing still in place. Final top soil and revegetation to be done by CSSA PW. On hold until drainage plans for area are finalized.	XRF samples collected 12/6, 12/7, 12/21 (69 locations). XRF results contoured 12/27. Surface soil samples collecte 4/7 (SS01 - SS14. all analyzed for metals, two analyzed for vocs, svocs, explosives). Results back 4/12. high lead issue at southern end of site. 4/20 collected additional samples for Pb analysis (_SS15-SS17). All three came back clean so now have horizontal extent of excavation defined. Began excavation 5/11. Work halted 5/12 for weather. Picked back up 5/16. 5/16 confirmation samples collected. Excavation complete 5/16. Some hits above PCL, but not when using 95% UCL - one hot spot. re-excavation around hot spot 5/23. Confirmation sample collected 5/24. Draft RIR submitted to CSSA for review 7/21. Final submitted to CSSA 8/2. RIR Approved - Letter Dated 10/20/2011.						RIR			XRF showed site is actually situated to the west of the original location, High Pb levels, minimal Zn above background.
AOC-42	**Inner Cantonment, Salado Creek**	**radios, grease guns**	**trenches**	None	Complete. CSSA PW to reseed area.	Final WP/SAP completed 3/14. 3/22 began conducting exploratory excavations. 3/23 encountered white substance. Collected sample to send to lab for identification. 3/23 pulled to the north of site to continue excavating. 4/7 collected soil pile sample (AOC42-SP01 for metals, SVOCs, VOCs, explosives). 4/12 SP01 results came back clean. 4/19 2 samples collected from soil piles (SP02 and SP03), 3-day tat. 4/18 sampled asbestos-like material uncovered at trench 2. All trench samples and SPO3 are clean. Asbestos-like material is fibrous glass. Approximately 160 CY of Fibrous glass. Fibrous glass removed June 28th, samples confirmation samples collected 6/28 . Two samples (SW13 and BOT03) had high levels of metals and need to be re-excavated. 7/12 overexcavated Trench 2 in the area where the fibrous glass was removed. Salado Creek area - - done hauling sifted pile by June 30. Grading of site took place week of 7/5. Geophysical survey conducted the week of July 5th and July 18th. Survey complete. Draft RIR submitted to CSSA for review - 8/29. Final submitted to CSSA 9/6/2011. RIR Approved - letter dated 12/16/2011.						RIR			[1]-Excavated volume: Top soil = 2,300, Trench soil/metal debris = 1,400, Fiber Glass Area = 60.

Site Status Matrix
Last Updated: 7/1/2014

Site	Area	Suspected Munitions	type of site	Work Needed	Current Status	Progress	Site Size (acres)	Estimated Excavation Extent (acres)	total estimated volume to remove CY	estimated excavation time	Original Description	Type of Closure Report	Potential COCs	Office data analysis to date	Notes
AOC-51	**East Pasture**		**Misc.**		Complete.	XRF survey completed 12/28 (69 locations). Soil samples (SS10, 11, and 12) collected 11/15. UXO investigation began 12/2011 and wrapped up 1/2012. Surface soil samples collected 1/16/12. Areas B and C explored with XRF on 2/14/12 to help delineate contamination extent. UXO sweep of excavation/staging/roadway in to AOC51-A took place 3/5 - 3/7. Tree removal took place 3/12-3/16. 3/14 and 3/15 - collected samples across site and deeper in the AOC51-A area. Due back 3/23. Excavation effort began 4/16. Hauling began 5/21 and was completed on 5/23. RIR submitted July 13, 2012. AOC-51 UXO Investigation Tech Memo submitted 9/11/2012 - RIR approved - letter dated 10/15/2012.						RIR			
AOC-52	**Inner Cantonment, Salado Creek**	**spring-filled clips**	**trenches**	None	Complete. CSSA PW to reseed area.	Final WP/SAP completed 3/14. Began excavation 4/18. Pocket of medicaldebris found - est. >500 cy of it. Suspected Asbestos sampled collected 5/24. Confirmation samples collected 5/24 (due back 5/31 and 6/1). All confirmation samples came back clean. Medical debris excavated 6/28/2011. see Salado Creek describtion under AOC-42.						RIR			
AOC-57	**Inner Cantonment**	**none**	**soil contamination**	None	Complete.	XRF samples completed 12/2, 12/3, and 12/21 (67 locations). 1/12 collected 10 surface soil samples + QA/QC. 10 for CSSA 9 metals, + 3 of those for vocs and svocs). 2/14 lab results back. RIR submitted to CSSA for review in May, 2011. RIR submitted to TCEQ June, 2011. TCEQ approval recieved - 9/13,2011.						RIR			
AOC-58	**Inner Cantonment, Salado Creek**	**bayonnetts**	**trenches**	None	Complete. CSSA PW to reseed area.	Final WP/SAP completed 3/14. 4/4 Field effort began. 4/7 collected soil pile sample (AOC58-SP01 for metals, SVOCs, VOCs, explosives). 4/7 excavation complete. 4/12 SP01 results came back clean. 4/19 sample taken of soil pile (SP02) and trench - both trench and pile came back clean. Trench Backfilled. see Salado Creek describtion under AOC-42.						RIR			
AOC-59	**East Pasture**	**unknown**	**trench-type anomaly/soil berm**	None	Complete.	XRF survey completed 12/20 (30 locations). 1/13 collected surface soil samples for metals and explosives (4 samples collected +QA/QC). Completed draft WP/SAP 1/2011. Lab results back 2/14. 3/7 excavation began and wrapped up 3/8. Confirmation samples collected 3/29 (SS05-SS08; BOT05 - BOT-06). Results back 4/7. all below TRRP but one, slightly high. Additional samples collected 4/20 (SS09, SS10, BOT07 and BOT08) to enable 95%UCL calculation. Draft RIR submitted to CSSA for review 7/22. Final submitted to CSSA 8/2. RIR approved - letter dated 10/20/2011.						RIR			
AOC-62	**Inner Cantonment, Salado Creek**	**20 mm guns**	**trenches**	None	Complete. CSSA PW to reseed area.	12/21 completed XRF Survey (16 locations). 3/14 completed final WP/SAP. 3/14 began field effort. 3/22 completed excavation of materials w/ the excavation of 405 CY. Collected confirmation and WC samples 3/29 (SW01-SW16; BOT01-BOT04). Results clean, but need to resample SW14 and BOT02 again. WC01 also TRRP clean. 4/19 sampled SW14 and BOT02 - samples came back clean. Samples SW17 and SW18 - samples were clean.						RIR			
AOC-70	**Inner Cantonment**	**none**	**soil contamination**	None	Complete.	Surface soil samples collected 1/12 for pesticides (4 samples plus QA/QC). Lab results back 2/14. RIR submitted to CSSA for review in May, 2011. RIR submitted to TCEQ June 7, 2011. TCEQ Closure Letter dated September 1, 2011.						RIR			
AOC-72	**Inner Cantonment**	**none**	**construction debris**		Complete.	XRF samples collected 12/15 (17 locations). Surface soil samples around the edge of the site collected 6/23 - all clean. 10/31 Tree clearing activities began. 11/3 tree removal efforts completed. 11/8 waste characterization and soil sample collection performed. soil samples due back 11/21. WC fro class I/II 11/21. WC for Class III 12/1. 11/23 WC sample results sumbitted to WM for verification. Verification came mid december. Began excavation on 1/23/12. Rain delays. 2/16/12 hauled out remaining soils and backfilled excavation area. Excavation complete. AOC-72 submitted to the TCEQ 3/6. TCEQ Closure Letter dated May 18, 2012.						RIR	VOCs, metals, and asbestos		XRF survey showed no Zn or Pb above background in surface soils.
AOC-74	**Inner Cantonment**	**none**	**construction debris**		Complete. Site needs top cover and revegetation - CSSA to take care of.	XRF samples collected in June 2011. Soil samples collected 11/7 (SS01 - SS10). Results due back 11/14. UXO investistigation conducted 11/7 and 11/8. 11/15 rained out. 11/15 SS02 tested for herbs/pesticides. Came back clean. 11/16 collected samples SS11- SS14 and BOT01 and BOT02. Due back 11/21. 11/16 Began tree removal work at site. 11/21 still removing trees. 11/22 began excavation at site. 11/23 day off before thanksgiving. 11/28 collected ss16, 17, 18, and WC01. Excavation completed 11/30. Rain delays in December. Began Hauling soils 1/3/2012. Rain delays begin 1/9/2012. 1 pile remaining to haul. Hauling began again 1/16. Fence contruction began 1/12, completed 1/18/12. Hauling completed 1/19/12. RIR submitted to TCEQ on 2/14/12. TCEQ Closure Letter dated May 8, 2012.						RIR			

Site Status Matrix
Last Updated: 7/1/2014

Site	Area	Suspected Munitions	type of site	Work Needed	Current Status	Progress	Site Size (acres)	Estimated Excavation Extent (acres)	total estimated volume to remove CY	estimated excavation time	Original Description	Type of Closure Report	Potential COCs	Office data analysis to date	Notes
AOC-75	**Inner Cantonment**	**none**	**surface soil contamination**		Compete.	1/10 Samples collected to help w/ horizontal and vertical contamination delineation and waste characterization purposes. 11/5/12 start tree clearing activities. 11/28/12 begin excavation of top layer of soil. 12/3/12 uncover trench (100ftx12ftx4ft) - begin exavation. continue and complete additional trench excavation on 12/4/12. Material includes soil media mixed w/ styrofoam (150 CY) and cabinets (50 CY). 12/5/12 collected WC samples from the newly excavated trench material and the top layer of soil from the site. Complete the excavation of soils on 12/6/12. 4000 CY excavated in all. 1/28 cleared trees in NT area. 1/30/13 - 1/31/13 conducted geophysical survey of NT area. Additional excavation of the area occured the week of 2/4/13. Exploratory excavations performed in the NT area on 2/26 - nothing found. RIR submitted August 2, 2013. TCEQ approved RIR on November 8, 2013						pending	mercury		
RMU-2	**Inner Cantonment**	**small arms munitions**	**rifle range**	-RIR	Complete. Ready for topsoil and re-vegetation.	Basemap w/ XRF survey locations completed 12/29. Completed draft WP/SAP 1/2011. Samples collected 3/1/2011. WP/SAP finalized 3/8. Samples back from lab 3/23- high Pb throughout. TCLP results back 3/29 - hazardous soils. Plans finalized 5/26/ PIMS began arriving 5/26. XRF began May 31. Excavation began June 1. Samples collected 6/1, 6/2, 6/3. XRF perimeter 6/15. collect soil samples for lab analysis 6/16. Complete hauling of PIMS treated piles 6/16. Phase 2: Work started up on 8/1 to complete excavation to RIR standards. 8/16 - new excavation extent excavated. 8/16 - collected confirmation samples from the excavation floor. 8/24 Phase 3 excavation: re-excavated a number of locations w/ hits or boundary issues - SS55, SS43/SS62, and SS44, SS65, and SS19. Additional samples collected 8/31 and 8/30 in newly re-excavated areas- SS69, 70. 71, 72, 73, and 74. Results due back 9/6. 9/8 Pb UCL run for all remaining samples minus SS70/SS74 (at the time - had not collected SS75 and SS76) = 69.43. Two too hot areas remain - SS 70 and sS74. Began Phase 4 excavation in those areas on 9/12. Compete with the collection of 2 additional ss's for Pb (SS75 and SS76) and 2 WC pile samples. All due back 9/19. Final RIR submitted to CSSA on 11/17/2011. RIR approved - letter dated 2/14/2012.						RIR			
RMU-3	**Inner Cantonment**	**small arms munitions**	**rifle range**		Complete.	XRF survey completed 12/8, 12/14, 12/20. (80 locations). XRF results contoured 12/27. 2/25 collected surface soil samples (10) Results back 3/2. Collected soil samples 1/3/2012 and 1/10 to further delineate horizontal and verticle delineation. 12/5 began removing cacti from the excavation footprint. 12/10 Began excavation of soils from excavation footprint. Excavation completed on 12/18. Waste Characterization and confirmation samples collected on 12/19/2012. 1/22 began hauling soils to east pasture. 1/29 additional XRF done to delineate additional excavations planned. 1/30 mixed PIMS with 100 CYs of soil. 2/4 additional excavation began to remove the road portion of the site and also the areas that need to be dug deeper. Confirmation samples collected from newly excavated areas. 2/6 WC samples collected from remaining stockpiles and also the PIMS treated soils. Last confirmation sample collected on 2/26/13. RIR submitted on 5/9/2013. RIR appproved 9/12/13.						RIR	Pb		
RMU-4	**East Pasture**	**small arms munitions, stokes mortars**	**rifle range**		Field effort complete. Awaiting TCEQ approval of RIR.	XRF Survey completed 12/15, 12/17, and 12/21 (53 locations). XRF results contoured 12/27. Surface soil samples collected 6/23 and 6/24/2011 to confirm XRF survey results (21 day TAT). Collected soil samples 1/5/2012 to further delineate horizontal and vertical extent. 9/28 Field Plans finalized. 10/8/12 Donny mobs to site. 10/9/12 UXO team performing UXO surface clearance of the staging areas. 10/22 UXO investigating identified anomalies and clearing trees from the excavation area. 3/4 excavation work began. 3/1 collected in-situ WC samples on 3/1/2013. 4/18/13 All non-hazardous so started hauling concurently with excavation on 3/11. Excavation completed on 4/18. Resampled on 4/23 and 4/29. 4000 cy of soil managed at east pasture berm. 160 cy of concrete material recylced at Teslar concrete. RIR approved February 2014.						RIR	metals		Zig zag trenches in area.
RMU-5	**North Pasture**	**Same as B-20/21**	**possible rocket range**		Complete.	XRF survey conducted 12/8-9 (45 points collected). 10/3 NP UXO Investigation began. Survey continued intermittently through December. Lab samples collected on 2/7/12 to confirm XRF survey results. In addition, XRF survey and samples collected to the se of site in area of original arrow - 21 day TAT (2/27/12). RIR submitted to TCEQ 6/15/2012. TCEQ letter of approval dated 9/20/2012									