479-32

MEMORANDUM FOR RECORD

SUBJECT: Environmental Liabilities **Date:** 13 January 2009

This memorandum serves as formal documentation of the information used to develop the Cost-To-Complete (CTC) estimate for the 2009 data call. The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of the Site Close-Out Documentation and Land Use Controls.

Site: SEAD-59/71, Fill Area West 135/Paint Disposal Area

Source:
1. Final Removal Report, SEAD-59 and 71, January 2003
2. Draft Phase II Remedial Investigation, SEAD-59 and SEAD-71, June 2005
3.Draft Record of Decision, SEAD-59 and 71, January 2008
4. Professional judgment based on site knowledge
5. CERM-P Memo, FY 2008, S&A rate, 13 March 2008
6. Email from John Nohrstedt, HNC, Subject: Contracting Cost

Assumptions: No Further Action will be required at SEAD-59/71. An Interim Removal Action has been completed and the contamination has been removed. Currently, these sites are in the Phase II RI stage to document the removal action has eliminated all the risk from the site and a proposed plan will address the No Further Action recommendation for SEAD-59/71. This site will require Site Close-Out Documentation and Land Use Controls. COE Support needed for Contracting, Oversight and On-Site Supervision. A contract for 5 year increments for 30 years is planned.

RACER Assumptions:

Site Closeout Documentation (LTM):
1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years

Well Abandonment (LTM):
1. Number of wells: 11
2. Depth of wells: 15 feet
3. Diameter of wells: 2"
4. Unconsolidated
5. Overdrill/removal

Land Use Controls (LTM phase)
1. Tasks include Implementation, Monitoring & Enforcement, and Modification/Termination
2. Implementation parameters used are Deed Notification and Restrictive Covenants (all with Low complexity)
3. Monitoring & Enforcement parameters used are Report & Certifications annually
4. Modification/Termination parameters used are Document Evaluation, Modify LUCIP, Amend Decision Documents, and Termination Letters (all with Low complexity)

Cost Summary SEAD-59,71

LTM

Site Closeout and Well Abandonment from RACER	$60,775
Land Use Controls from RACER in perpetuity costed for 30 years	331,345

COE Support:

Contracting Procurement	
6 events x 3,000/event	18,000
Contract Monitoring	
30 years x 5,000/year	150,000
Contract Closeout	
6 events x 1,000/event	6,000
S&A (Site Closeout + Well Abandonment + LUC) 0.058 =	22,743

Total Site Cost **$588,863**

Cost Increase > 10% from 2008 Report? Yes

Reason: RACER update and Procurement Cost added

Prepared by: Randall Battaglia _____ 11 MAR 09
Signature Date

Reviewed by: Stephen M. Absolom _____ 11 Mar 09
Signature Date

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

CERM-P (37)

13 MAR 2008

MEMORANDUM FOR MAJOR SUBORDINATE COMMANDS (MSC)

SUBJECT: Fiscal Year (FY) 2008 Supervision and Administration (S&A) Rate Changes

1. References:

a. CERM-P memorandum, 27 July 2005, Subject: S&A Accounting Procedures for Modularity Projects.

b. CERM-P memorandum, 20 September 2006, Subject: FY 2006 S&A Rate Changes.

2. Effective 1 April 2008 the Operation and Maintenance (O&M) and the Defense Environmental Restoration Program (DERP) S&A rate for the Continental United States (CONUS) is reduced for new Fiscal Year 2008 (FY08) contract awards from six and one-half percent to five and eight-tenths percent. The intent of this change is to adjust the S&A rate to match the current expense and income activity; the level of service or effort should remain unchanged. Any O&M losses to your S&A checkbook that result from the rate change will be reimbursed from the national S&A account. The Major Subordinate Command (MSC) maximum checkbook carryover will be increased to three months' expense and reflected in the next update to the consolidated command guidance.

S&A RATE

3. The one percent furniture rate in reference "a" was not intended to be restricted to modularity projects. It may be used for any MILCON or O&M project. This change in the O&M rate does not affect modularity/relocatable projects as they continue to be charged the MILCON rate per reference "a".

CERM-P (37)
SUBJECT: FY 2008 Supervision and Administration (S&A) Rate Changes

4. Since these changes significantly affect S&A schedules the FY08 S&A performance will be measured against your mid-year schedules due 25 April 2008. Special instructions are provided in the enclosed standing operating procedures to assist in implementation of these changes. These changes will be codified in the next update to the consolidated command guidance.

5. Point of contact for this action is Mr. Philip Blount, CERM-P, (202) 761-8908.

FOR THE COMMANDER:

Encl

Wesley C. Miller
Director of Resource Management

Absolom, Stephen M Mr CIV USA

From: Nohrstedt, John HNC [John.Nohrstedt@usace.army.mil]
Sent: Monday, January 12, 2009 4:18 PM
To: Absolom, Stephen M Mr CIV USA
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Cost per year for contracting to monitor a contractor:
5 hrs/month X 12 months = 60 hrs
Approximately $5,000 to $7,000

Cost for contracting Task Order Close out:
Firm Fixed Price - 5 to 10 hrs - Approx. $500 to $1000
Cost Plus - 10 to 25 hrs - Approx. $1000 to $2,500

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA [mailto:stephen.m.absolom@us.army.mil]
Sent: Monday, January 12, 2009 8:07 AM
To: Nohrstedt, John HNC; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,
What will the cost per year be to monitor the TO if it is a multiple year task order.
Also need to a cost for TO Close out.
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362
-----Original Message-----
From: Nohrstedt, John HNC [mailto:John.Nohrstedt@usace.army.mil]
Sent: Friday, January 09, 2009 12:35 PM
To: Absolom, Stephen M Mr CIV USA; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Below are the man-hours to prepare and issue a simple task order:

Prepare SOW and IGE	- 6 to 10 hrs
Review	- 0.5 to 2 hr
Issue RFP	- 2 to 3 hrs
Review Proposal	- 2 to 4 hrs
Tech Evaluation	- 4 to 8 hrs
Negotiation	- 2 to 4 hrs
Review Revised Proposal	- 2 to 3 hrs
Tech Eval. of revised	- 0.5 to 2 hrs
Issue Award	- 4 to 6 hrs

TOTAL - 23 to 42 hours

The cost would be approximately $3,000 to $5,000. Procurement Cost

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA
[mailto:stephen.m.absolom@us.army.mil]
Sent: Friday, January 09, 2009 9:14 AM
To: Battaglia, Randy W NAN02; Nohrstedt, John HNC
Subject: Contracting Cost

Steve,
I am starting to update my CTC for this year. One area not preivously included in the costing is the establishment of a new Task/Delivery order. Can you give me a Cost to be included in my CTC for the COE to prepare and issue a task order? Please note that your email will be included in the CTC file so it needs to be accurate as possible.

Thanks
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362

DRAFT
RECORD OF DECISION

FOR

THE FILL AREA WEST OF BUILDING 135 (SEAD-59) AND THE ALLEGED PAINT DISPOSAL AREA (SEAD-71)

ROD for Site

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

Prepared for:

SENECA ARMY DEPOT ACTIVITY
5786 STATE ROUTE 96
ROMULUS, NEW YORK 14541

and

UNITED STATES ARMY CORPS OF ENGINEERS
4820 UNIVERSITY SQUARE
HUNTSVILLE, ALABAMA 35816

Prepared By:

Parsons
150 Federal St., 4th Floor
Boston, Massachusetts 02110

Contract Number: DACA87-02-D-0005
Delivery Orders: 0013
USEPA Site ID: NY0213820830; NY Site ID: 8-50-006

January 2008

1.0 DECLARATION OF THE RECORD OF DECISION

Areas of Concern Name and Location

The Fill Area West of Building 135 (SEAD-59) and the Alleged Paint Disposal Area (SEAD-71)
Seneca Army Depot Activity
5786 State Route 96
ROMULUS, NEW YORK 14541
USEPA Site ID: NY0213820830; NY Site ID: 8-50-006

Statement of Basis and Purpose

This Record of Decision (ROD) documents the U.S. Army's (Army's) and the U.S. Environmental Protection Agency's (USEPA's) selected remedies for the Fill Area West of Building 135 (SEAD-59) and the Alleged Paint Disposal Area (SEAD-71) located at the Seneca Army Depot Activity (SEDA or the Depot) in the Towns of Varick and Romulus, Seneca County, New York. The decisions for these two areas of concern (AOCs) were developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended, 42 U.S.C. Section 9601, *et seq.* and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300. The Base Realignment and Closure (BRAC) Environmental Coordinator, the Chief, Alpha Branch, Army BRAC Division, and the USEPA Region II have been delegated the authority to approve this Record of Decision (ROD).

This ROD is based on the Administrative Record that has been developed in accordance with Section 113(k) of CERCLA. The Administrative Record is available for public review at the Seneca Army Depot Activity, 5786 State Route 96, Building 123, Romulus, NY 14541. The Administrative Record Index identifies each of the items considered during the selection of the remedial actions. This index is included in **Appendix A**.

The State of New York, through the New York State Department of Environmental Conservation (NYSDEC), has concurred with the selected remedies. The NYSDEC Declaration of Concurrence is provided in **Appendix B** of this ROD.

AOC Assessment

The response actions selected in this ROD are necessary to protect human health or the environment from actual or threatened releases of hazardous substances into the environment or from actual or threatened releases of pollutants or contaminants from SEAD-59 and SEAD-71, which may present an imminent and substantial endangerment to public health or welfare.

Description of the Selected Remedies

The selected remedies for SEAD-59 and SEAD-71 address contaminated soil and groundwater. The selected remedies will result in the removal of soil and groundwater as exposure pathways for potential receptors.

The elements that compose the selected remedies at SEAD-59 and SEAD-71 include:

- Spreading previously excavated soils that are currently staged in piles in SEAD-59 out over a portion of the AOC, covering them with a layer of demarcation fabric, and then interring the fabric and the spread soils under a 12-inch layer of acceptable backfill that is graded and upon which a vegetative cover is established;
- Implementing a land use control (LUC) that prohibits unauthorized excavations or activities likely to disturb the demarcation fabric in the location(s) where the interred soil is placed;
- Establishing and maintaining land use control (LUCs) that prohibit access to or use of the groundwater and that prohibit residential activities until unrestricted use and unlimited exposure criteria are attained at SEAD-59 and SEAD-71; and,
- Completing a review of the selected remedies every 5 years (at minimum), in accordance with Section 121(c) of the CERCLA.

LUC's 5yr review

The unauthorized excavation LUC will be implemented only on those locations where previously excavated soil has been laid out, marked and interred under a vegetated 12-inch soil cap. The LUCs that prohibit groundwater access/use and residential activities will be implemented over all land contained within the boundaries of SEAD-59 and SEAD-71. Equivalent AOC-wide LUCs have been implemented over other land that is located within the greater Planned Industrial/Office Development and Warehousing (PID) Area, but these LUCs were not officially imposed on parcels of land within the PID Area that are retained by the Army, pending completion of the CERCLA regulatory process. The existing PID Area-wide LUCs were implemented as a result of conditions identified in SEADs 27, 64A, and 66 and these conditions are presented in the Record of Decision entitled *Final ROD for Sites Requiring Institutional Controls in the Planned Industrial/Office Development or Warehousing Areas* (Parsons, 2004). The groundwater and residential activity LUCs may be eliminated, on a site-by-site basis, if data is provided to, and approved by, the Army, USEPA, and the NYSDEC and document that groundwater quality achieves NYSDEC's GA standards and that soil data allows for unrestricted use and unlimited exposures.

The location(s) of the interred soils will be determined and documented subsequent to the completion of their interment and covering. The LUC prohibiting unauthorized excavations will continue in perpetuity or until the interred soil is exhumed from SEAD-59 and transported off-site for disposal at an off-site licensed landfill.

To implement the Army's selected remedies, which include the imposition of LUCs, a LUC Remedial Design for SEAD-59 and SEAD-71 will be prepared which is consistent with Paragraphs (a) and (c) of the New York State Environmental Conservation Law (ECL) Article 27, Section 1318: Institutional and Engineering Controls. In addition, the Army will prepare an environmental easement for SEAD-59 and SEAD-71, consistent with Section 27-1318(b) and Article 71, Title 36 of ECL, in favor of the State of New York and the Army, which will be recorded at the time of the property's transfer from federal ownership and which will require the owner and/or any person responsible for implementing the LUCs set forth in this ROD to periodically certify that such institutional controls are in place. A schedule for completion of the draft SEAD-59 and SEAD-71 LUC Remedial Design Plan (LUC RD) will be

US Army
Engineering & Support Center
Huntsville, AL

FINAL

Removal Report
SEAD-59 and 71
Time Critical Removal Action
Seneca Army Depot Activity
Romulus, NY

Contract No. GS-10F-0115K
Delivery Order No. DACA87-02-F-0137

ENSR Corporation
January 2003
Document Number 09090-029-320

5.0 DEBRIS FOUND

During the excavation phase various types of debris was located. The most commonly found items were construction and demolition debris consisting of bricks, concrete, asphalt, and scrap metal, pipe, lumber and wood. All large pieces of concrete that were discovered, and were clean, were used as backfill in SEAD 59, Area1. The remaining construction and demolition debris was shipped off-site for disposal. Some wood debris, consisting of logs and tree stumps was left at the site.

There were two areas were drums and pails were found. In SEAD 59, Area 3, dried and crushed paint pails from one quart to five gallons in size were discovered. These items were staged and handled separately from the other excavated material. In SEAD 59, Area 1, 55 gallon drums, and pieces of drums and pails were discovered. Most of these were empty and had been previously crushed. Approximately nine drums had substantial amounts of material in them, all of which was in a solid state. These drums were staged separately from the other debris and then sampled and analyzed for waste categorization. Based on this analysis all of these materials were able to be shipped for disposal as non-hazardous debris.

The April 2002 Action Memorandum outlined the objective of the remedial action to eliminate or significantly reduce potential risks to human health, the environment and groundwater quality by focusing on the removal of drums, paint cans and other containers as well as addressing the surrounding soils and groundwater. Based on the actual debris and containers found, the analysis of their contents, and the analysis of the surrounding soils that were removed and left in place, this objective has been met. Refer to:

- Appendix G, Analytical Results
- Appendix K, Confirmation Soil Sampling Logs
- Table 1, Pile Summary

RA completed and objectives were met

Estimate Documentation Report

System:

RACER Version: 10.2.0
Database Location: C:\Documents and Settings\Andy W\Application Data\Earth Tech\RACER 10.2\Racer.mdb

Folder:

Folder Name: Seneca

Project:

Project ID: SEAD-59 and 71
Project Name: SEAD-59 and 71
Project Category: Planned Industrial Area

Location
State / Country: NEW YORK
City: SENECA ARMY DEPOT

Location Modifier	Default	User
	1.114	1.114

Options
Database: System Costs
Cost Database Date: 2009
Report Option: Fiscal

Description

SEAD-59/71 - Fill Area West of Bldg.135 and Paint Disposal Area

The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of the Site Close-Out Documentation and Land Use Controls.

Site: SEAD-59/71, Fill Area West 135/Paint Disposal Area

Source:
1. Final Removal Report, SEAD-59 and 71, January 2003
2. Draft Phase II Remedial Investigation, SEAD-59 and SEAD-71, June 2005
3. Professional judgment based on site knowledge

Assumptions: No Further Action will be required at SEAD-59/71. An

Estimate Documentation Report

Interim Removal Action has been completed and the contamination has been removed. Currently, these sites are in the Phase II RI stage to document the removal action has eliminated all the risk from the site and a proposed plan will address the No Further Action recommendation for SEAD-59/71. This site will require Site Close-Out Documentation and Land Use Controls.

RACER Assumptions:

Site Closeout Documentation (LTM):
1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years
5. Well abandonment includes sub-contractor costs for fieldwork

Land Use Controls (LTM phase)
1. Tasks include Implementation, Monitoring & Enforcement, and Modification/Termination
2. Implementation parameters used are Deed Notification and Restrictive Covenants (all with Low complexity)
3. Monitoring & Enforcement parameters used are Report & Certifications annually
4. Modification/Termination parameters used are Document Evaluation, Modify LUCIP, Amend Decision Documents, and Termination Letters (all with Low complexity)

Estimate Documentation Report

Site Documentation:

Site ID: SEAD-59 and 71
Site Name: Fill Area West 135 and Paint Disposal Area
Site Type: None

Media/Waste Type
Primary: Soil
Secondary: N/A

Contaminant
Primary: Metals
Secondary: None

Phase Names
SI: ☐
RI/FS: ☐
RD: ☐
IRA: ☐
RA(C): ☐
RA(O): ☐
LTM: ☑
Site Closeout: ☐

Documentation
Description: Site Closeout Documentation, Well Abandonment and LUCs for SEAD-59/71.

Changes from FY08 estimate:
- costs updated to FY09 basis
- LUC implementation date moved to FY09

Support Team: Stephen M. Absolom - BEC, Seneca Army Depot
Janet R. Fallo - US Army Coprs of Engineers, Project Engineer

References:
1. Final Removal Report, SEAD-59 and 71, January 2003
2. Draft Phase II Remedial Investigation, SEAD-59 and SEAD-71, June 2005
3. Professional judgment based on site knowledge

Estimator Information
Estimator Name: Andrew Weinberg
Estimator Title: Senior Geologist
Agency/Org./Office: Bechtel-S Corp.
Business Address: 203 E. Milton St.
Austin, TX 78704
Telephone Number: 512-344-9657
Email Address: aweinberg@bechtel-s.com
Estimate Prepared Date: 01/21/2009

Estimator Signature: _____ **Date:** _____

Estimate Documentation Report

Reviewer Information

Reviewer Name: Steve Absolom
Reviewer Title: Installation Manager
Agency/Org./Office: Seneca Army Depot Activity
Business Address: .
Telephone Number: (607) 869-1309
Email Address: stephen.m.absolom@us.army.mil
Date Reviewed: 02/09/2009

Reviewer Signature: _____ **Date:** _____

Estimated Costs:

Phase Names		Direct Cost	Marked-up Cost
LTM #1		$28,637	$60,775
LTM #2		$121,371	$331,347
	Total Cost:	$150,009	$392,123

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM #1
Description: Site Closeout Documentation for SEAD-59/71 and well abandonment at end of FY09.

Start Date: September, 2009
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate
Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
Site Close-Out Documentation	Yes	100	0
Well Abandonment	Yes	100	0

Total Marked-up Cost: $60,775

Technologies:

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Meetings		Yes	n/a
Work Plans and Reports		Yes	n/a
Documents		Yes	n/a
Site Close-Out Complexity		Low	n/a
Meetings			
Required Parameters			
Kick Off/Scoping Meetings		Yes	n/a
Kick Off/Scoping Meetings: Number of Meetings	1	1	EA
Kick Off/Scoping Meetings: Travel		Yes	n/a
Kick Off/Scoping Meetings: Travelers		2	EA
Kick Off/Scoping Meetings: Days		5	Days
Kick Off/Scoping Meetings: Air Fare		0	$
Review Meetings		Yes	n/a
Review Meetings: Number of Meetings	1	1	EA
Review Meetings: Travel		No	n/a
Regulatory Review Meetings		Yes	n/a
Regulatory Review Meetings: Number of Meetings	1	1	EA
Regulatory Review Meetings: Travel		No	n/a
Work Plans & Reports			
Required Parameters			
Work Plans		Yes	n/a
Draft Work Plan		Yes	n/a
Final Work Plan		Yes	n/a
Reports		Yes	n/a
Draft Close-Out Report		Yes	n/a
Draft Final Close-Out Report		Yes	n/a
Final Close-Out Report		Yes	n/a
Progress Reports		Yes	n/a
Project Duration	8	8	months
Documents			
Required Parameters			

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
Documents			
Required Parameters			
Draft Decision Document		Yes	n/a
Draft Final Decision Document		Yes	n/a
Final Decision Document		Yes	n/a
Long Term Document Storage		Yes	n/a
Number of Boxes		2	EA
Duration of Storage		30	Yrs

Comments:

Technology Name: **Well Abandonment (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Safety Level		D	n/a
Abandon Wells			
Required Parameters			
Technology/Group Name		Well Group	n/a
Number of Wells		11	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a

Comments:

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM #2
Description: Land Use Controls for the SEAD-59/71

Start Date: September, 2009
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate
Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
ADMINISTRATIVE LAND USE CONTROLS	Yes	100	0

Total Marked-up Cost: $331,347

Technologies:

Estimate Documentation Report

Technology Name: **Administrative Land Use Controls (# 1)**
User Name: **ADMINISTRATIVE LAND USE CONTROLS**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Rename Model		ADMINISTRATIVE LAND USE CONTROLS	n/a
Planning Documents		No	n/a
Implementation		Yes	n/a
Implementation: Start Date		2009	n/a
Monitoring & Enforcement		Yes	n/a
Monitoring & Enforcement: Start Date		2009	n/a
Modification/Termination		Yes	n/a
Modification/Termination: Start Date		2038	n/a
Type of Site		Transferring Government Installation	n/a
Implementation			
Required Parameters			
Modify Installation (or City) Master Plan		No	n/a
Deed Notification		Yes	n/a
Deed Notification: Number		1	EA
Deed Notification: Task Complexity		Low	n/a
Negotiating Easements		No	n/a
Restrictive Covenants		Yes	n/a
Restrictive Covenants: Number		1	EA
Restrictive Covenants: Task Complexity		Low	n/a
Equitable Servitudes		No	n/a
Access Control Signs		No	n/a
Utility Notification Service		No	n/a
Geographic Information Systems (GIS)/Overlay Maps		No	n/a
Develop Finding of Suitability to Transfer (FOST)		No	n/a
Monitoring & Enforcement			
Required Parameters			
Duration of Monitoring/Enforcement		30	Years
Notice Letters		No	n/a
Guard Service/Security		No	n/a
Reports & Certifications		Yes	n/a

Estimate Documentation Report

Technology Name: **Administrative Land Use Controls (# 1)**
User Name: **ADMINISTRATIVE LAND USE CONTROLS**

Description	*Default*	*Value*	*UOM*
Monitoring & Enforcement			
Required Parameters			
Reports & Certifications: Frequency		Annually	n/a
Site Visits/Inspections		No	n/a
Modify/Termination			
Required Parameters			
Document Evaluation		Yes	n/a
Document Evaluation: Number		1	EA
Document Evaluation: Plan Complexity		Low	n/a
Modify LUC Documents		Yes	n/a
Modify LUC Documents: Number		1	EA
Modify LUC Documents: Plan Complexity		Low	n/a
Amend Decision Documents		Yes	n/a
Amend Decision Documents: Number		1	EA
Amend Decision Documents: Plan Complexity		Low	n/a
Termination Letters		Yes	n/a
Termination Letters: Number		1	EA
Termination Letters: Plan Complexity		Low	n/a

Comments:

MEMORANDUM FOR RECORD

SUBJECT: Environmental Liabilities **Date:** 13 January 2009

This memorandum serves as formal documentation of the information used to develop the Cost-To-Complete (CTC) estimate for the 2009 data call The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the Site Closeout costs.

Site: SEAD-24, SEAD-50/54, and SEAD-67, Metals Removal Sites

Source:

1. Final Completion Report, Time Critical Removal Action, Metals Site, SEAD-24, March 2006
2. Final ROD for Seventeen SWMUs Requiring Institutional Controls, SEADs-13,39,40,43/56/69,44A,44B,52,62,64B,64C,64D,67,122B,122E; October 2005
3. Final Completion Report, Time Critical Action, Metals Site, SEAD-67 (February 2005)
4. Final Record of Decision for No Further Action for SWMUs SEAD50/54, December 2004
5. Draft ROD Five Former SWMUs—SEADs-1, 2, 5, 24, and 48, December 2008
6. Professional judgment based on site knowledge
7. Corps of Engineers memo, March 13, 2008
8. Corps of Engineers email, John Nohrstedt, Subject: Contracting Cost

Assumptions: No Further Action will be necessary at these sites. After the remedial action of soil removal and the confirmation sampling, the source of the contamination was removed at all of these sites. SEAD-67 is addressed in the Draft ROD in referenced number two (2) above will require Land Use Controls in the form of an Institutional Control and cost for this action is included with SEAD-9. SEADs 50/54 has been transferred to Seneca County and is classified as a No Further Action site as per ROD. SEAD-24 has also been remediated for metals in soils and regulatory approval of the Completion Report is expected. site Close-Out Cost will be for SEAD-24 and SEAD-67. Corps of Engineer Support required for one time Contract Support, Oversight, and Closeout to closeout site.

RACER Assumptions:

Site Closeout Documentation (LTM):

1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years

Well Abandonment (LTM):
1. Number of wells: 9
2. Depth of wells: 15 feet
3. Diameter of wells: 2"
4. Unconsolidated
5. Overdrill/removal

Cost Summary SEAD-24, 50/54, 67

Site Closeout (RACER)	$57,298
COE Support:	
Contract Procurement	$3,000
Contract Monitoring	$5,000
Contract Closeout	$1,000
On site Supervision (57,298) x 1.058	$3323
Total Site Cost	**$69,621**

Cost Increase > 10% from 2008 Report? Yes

Reason: RACER update and Corps of Engineers Support added.

Prepared by: Randall Battaglia _____ 11 MAR 09
Signature Date

Reviewed by: Stephen M. Absolom _____ 11 Mar 09
Signature Date

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

CERM-P (37)

13 MAR 2008

MEMORANDUM FOR MAJOR SUBORDINATE COMMANDS (MSC)

SUBJECT: Fiscal Year (FY) 2008 Supervision and Administration (S&A) Rate Changes

1. References:

a. CERM-P memorandum, 27 July 2005, Subject: S&A Accounting Procedures for Modularity Projects.

b. CERM-P memorandum, 20 September 2006, Subject: FY 2006 S&A Rate Changes.

2. Effective 1 April 2008 the Operation and Maintenance (O&M) and the Defense Environmental Restoration Program (DERP) S&A rate for the Continental United States (CONUS) is reduced for new Fiscal Year 2008 (FY08) contract awards from six and one-half percent to five and eight-tenths percent. The intent of this change is to adjust the S&A rate to match the current expense and income activity; the level of service or effort should remain unchanged. Any O&M losses to your S&A checkbook that result from the rate change will be reimbursed from the national S&A account. The Major Subordinate Command (MSC) maximum checkbook carryover will be increased to three months' expense and reflected in the next update to the consolidated command guidance.

S&A RATE

3. The one percent furniture rate in reference "a" was not intended to be restricted to modularity projects. It may be used for any MILCON or O&M project. This change in the O&M rate does not affect modularity/relocatable projects as they continue to be charged the MILCON rate per reference "a".

CERM-P (37)
SUBJECT: FY 2008 Supervision and Administration (S&A) Rate Changes

4. Since these changes significantly affect S&A schedules the FY08 S&A performance will be measured against your mid-year schedules due 25 April 2008. Special instructions are provided in the enclosed standing operating procedures to assist in implementation of these changes. These changes will be codified in the next update to the consolidated command guidance.

5. Point of contact for this action is Mr. Philip Blount, CERM-P, (202) 761-8908.

FOR THE COMMANDER:

Encl

Wesley C. Miller
Director of Resource Management

Absolom, Stephen M Mr CIV USA

From: Nohrstedt, John HNC [John.Nohrstedt@usace.army.mil]
Sent: Monday, January 12, 2009 4:18 PM
To: Absolom, Stephen M Mr CIV USA
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Cost per year for contracting to monitor a contractor:
5 hrs/month X 12 months = 60 hrs
Approximately $5,000 to $7,000

Contract Monitoring

Cost for contracting Task Order Close out:
Firm Fixed Price - 5 to 10 hrs - Approx. $500 to $1000
Cost Plus - 10 to 25 hrs - Approx. $1000 to $2,500

Contract Closeout

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA [mailto:stephen.m.absolom@us.army.mil]
Sent: Monday, January 12, 2009 8:07 AM
To: Nohrstedt, John HNC; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,
What will the cost per year be to monitor the TO if it is a multiple year task order.
Also need to a cost for TO Close out.
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362
-----Original Message-----
From: Nohrstedt, John HNC [mailto:John.Nohrstedt@usace.army.mil]
Sent: Friday, January 09, 2009 12:35 PM
To: Absolom, Stephen M Mr CIV USA; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Below are the man-hours to prepare and issue a simple task order:

Prepare SOW and IGE	- 6 to 10 hrs
Review	- 0.5 to 2 hr
Issue RFP	- 2 to 3 hrs
Review Proposal	- 2 to 4 hrs
Tech Evaluation	- 4 to 8 hrs
Negotiation	- 2 to 4 hrs
Review Revised Proposal	- 2 to 3 hrs
Tech Eval. of revised	- 0.5 to 2 hrs
Issue Award	- 4 to 6 hrs

TOTAL - 23 to 42 hours

The cost would be approximately $3,000 to $5,000. Procurement Cost

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA
[mailto:stephen.m.absolom@us.army.mil]
Sent: Friday, January 09, 2009 9:14 AM
To: Battaglia, Randy W NAN02; Nohrstedt, John HNC
Subject: Contracting Cost

Steve,
I am starting to update my CTC for this year. One area not preivously included in the costing is the establishment of a new Task/Delivery order. Can you give me a Cost to be included in my CTC for the COE to prepare and issue a task order? Please note that your email will be included in the CTC file so it needs to be accurate as possible.

Thanks
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362

DRAFT
RECORD OF DECISION

For

Five Former Solid Waste Management Units (SWMUs)
SEAD 1 (Hazardous Waste Container Storage Facility), SEAD 2 (PCB Transformer Storage Facility), SEAD 5 (Sewage Sludge Waste Piles), SEAD 24 (Abandoned Powder Burn Pit), and SEAD 48 (Row E0800 Pitchblende Storage Igloos)

Site

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

Prepared for:

SENECA ARMY DEPOT ACTIVITY
5786 STATE ROUTE 96
ROMULUS, NEW YORK 14541

and

UNITED STATES ARMY CORPS OF ENGINEERS
4820 UNIVERSITY SQUARE
HUNTSVILLE, ALABAMA 35816

Prepared By:

PARSONS
150 Federal St., 4th Floor
Boston, Massachusetts 02110

Contract Number: DACA87-02-D-0005
Delivery Orders: 0033
EPA Site ID: NY0213820830
NY Site ID: 8-50-006

December 2008

1.0 DECLARATION FOR THE RECORD OF DECISION

Areas of Concern Names and Site Location

SEAD 1 – the former Hazardous Waste Container Storage Facility (Building 307)
SEAD 2 – the former PCB Transformer Storage Facility (Building 301)
SEAD 5 – Sewage Sludge Waste Piles
SEAD 24 – the Abandoned Powder Burn Pit
SEAD 48 – Row E0800 Pitchblende Ore Storage Igloos

Seneca Army Depot Activity
5786 State Route 96
Romulus, New York 14541
CERCLIS ID# NY0213820830; New York Site ID# 8-50-0006

Statement of Basis and Purpose

This Record of Decision (ROD) documents the U.S Army's (Army's) and U.S Environmental Protection Agency's (EPA's) selected remedies for five historic solid waste management units (SWMUs) at the former Seneca Army Depot Activity (the Site, SEDA, or Depot) in the Towns of Varick and Romulus, Seneca County, New York. The decisions were developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended, 42 U.S.C. § 9601, *et seq.*, and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), Title 40, Protection of Environment, Code of Federal Regulations (CFR) Part 300. The Base Realignment and Closure (BRAC) Environmental Coordinator; the Chief, Consolidation Branch, Army BRAC Division; and, the Acting Director, EPA Region II have been delegated the authority to approve this ROD.

This ROD is based on the Administrative Record that has been developed in accordance with Section 113(k) of CERCLA. The Administrative Record is available for public review at the Seneca Army Depot Activity, 5786 State Route 96, Building 123, Romulus, NY 14541. The Administrative Record Index identifies each of the items considered during the selection of the remedial actions for these historic SWMUs. This index is included in **Appendix A**.

The State of New York, through the New York State Department of Environmental Conservation (NYSDEC), has concurred with the selected remedies. The NYSDEC Declaration of Concurrence is provided in **Appendix B** of this ROD.

AOC Assessment

The selected remedies for three of the historic SWMUs (i.e., SEADs 1, 2, and 5) address contaminated soil and groundwater. The selected remedies for these SEADs will result in the removal of soil and groundwater as exposure pathways for potential receptors. The response actions selected in this ROD for SEADs 1, 2, and 5 are necessary to protect human health and the environment from actual or threatened releases of hazardous substances into the environment or from actual or threatened releases of pollutants

or contaminants, which may present an imminent and substantial endangerment to public health or welfare.

No Further Action (NFA) is necessary at SEAD 24 where a time-critical removal action (TCRA) previously removed soil contaminated with hazardous substances, and where conditions now indicate that the land is suitable for unrestricted use and unlimited exposures. Finally, NFA is also selected for SEAD 48 where radiological decontamination and remedial actions completed as part of the SEDA's Nuclear Regulatory Commission (NRC) radiological license termination process have shown that soils, groundwater, and building surfaces are suitable for unrestricted use and unlimited exposures.

Description of the Selected Remedies

The selected remedies for SEAD 24 (the Abandoned Powder Burning Pit) and SEAD 48 (Row E0800 Pitchblende Ore Storage Igloos) are No Further Action (NFA). These selections are based on the Army's and EPA's determination that these sites do not pose a significant threat to human health or the environment.

The response actions selected in this ROD for SEAD 1 (the Hazardous Waste Container Storage Facility), SEAD 2 (the PCB Transformer Storage Facility), and SEAD 5 (Sewage Sludge Waste Piles) address contaminated soil and groundwater.

The common elements of the selected remedies at SEADs 1, 2, and 5 include:

- Establishing, maintaining and monitoring a land use control (LUC) that prohibits residential housing, elementary and secondary schools, childcare facilities and playgrounds until unrestricted use and unlimited exposure criteria are attained within the areas of concern (AOCs); and,
- Establishing, maintaining, and monitoring a second LUC that prohibits access to, and use of, groundwater at the AOCs until its quality allows for unrestricted use and unlimited exposures.

In addition, at SEAD 5 the selected remedy requires that:

- Stockpiled soils located in, and adjacent to, the AOC be used as part of a multi-layered protective cover stockpiled soil; demarcation fabric [e.g., colored "snow" or safety fence]; top layer, at least 1 foot of clean fill that meets New York's Restricted Commercial Use soil cleanup objective [SCO] levels) overlying shallow soils where potential human health risks have been identified due to the presence of hazardous substances on the ground; and,
- Establishing, maintaining, and monitoring a third LUC that prohibits unauthorized excavations or activities that might compromise the integrity of the multi-layered cover material.

As the selected remedies for the latter three AOCs (i.e., SEADs 1, 2, and 5) do not allow unrestricted use and unlimited exposures, the Army or its successors will be required to complete a review of the selected remedies at least once every 5 years, in accordance with Section 121(c) of the CERCLA.

Land Use Control (LUC) Performance Objectives:

The common LUC performance objectives for SEADs 1, 2, and 5 are to:

Estimate Documentation Report

System:

RACER Version: 10.2.0
Database Location: C:\Documents and Settings\Andy W\Application Data\Earth Tech\RACER 10.2\Racer.mdb

Folder:

Folder Name: Seneca

Project:

Project ID: SEAD-24
Project Name: SEAD-24
Project Category: Multiple Locations

Location
State / Country: NEW YORK
City: SENECA ARMY DEPOT

Location Modifier	Default	User
	1.114	1.114

Options
Database: System Costs
Cost Database Date: 2009
Report Option: Fiscal

Description

SEAD-24, SEAD-50/54, and SEAD-67, Metals Removal Sites

Some of the source documents referenced for the final action at all of these sites have not yet received regulatory approval. However, as per previous discussions with the regulators, it is expected that all of these sites will be classified as No Further Action. The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the Site Closeout costs.

Site: SEAD-24, SEAD-50/54, and SEAD-67, Metals Removal Sites

Source:
1. Final Completion Report, Time Critical Removal Action, Metals Site, SEAD- 24, March 2006
2. Draft PRAP For Seventeen SWMUs Requiring Institutional Controls,

Estimate Documentation Report

SEADs- 13,39,40,43/56/69,44A,44B,52,62,64B,64C,64D,67,122B,122E; October 2005
3. Final Completion Report, Time Critical Action, Metals Site, SEAD-67 (February 2005)
4. Final Record of Decision for No Further Action for SWMUs SEAD50/54, December 2004
5. Professional judgment based on site knowledge

Assumptions: No Further Action will be necessary at these sites. After the remedial action of soil removal and the confirmation sampling, the source of the contamination was removed at all of these sites. SEAD-67 is addressed in the Draft PRAP in referenced number two (2) above will require Land Use Controls in the form of an Institutional Control and cost for this action is included with SEAD-9. SEADs 50/54 has been transferred to Seneca County and is classified as a No Further Action site as per ROD. SEAD-24 has also been remediated for metals in soils and regulatory approval of the Completion Report is expected. site Close-Out Cost will be for SEAD-24 and SEAD-67.

RACER Assumptions:

Site Closeout Documentation (LTM):
1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years
5. Well abandonment includes sub-contractor costs for fieldwork

Estimate Documentation Report

Site Documentation:

Site ID: SEAD-24
Site Name: Metals Removal Site
Site Type: None

Media/Waste Type
Primary: Soil
Secondary: N/A

Contaminant
Primary: Metals
Secondary: None

Phase Names
SI: ☐
RI/FS: ☐
RD: ☐
IRA: ☐
RA(C): ☐
RA(O): ☐
LTM: ☑
Site Closeout: ☐

Documentation
Description: SEAD-24, SEAD-50/54, and SEAD-67 Metals Removal Site. The Long Term Maintenance Costs will be required for Site Close-Out of SEAD-24 and SEAD-67. SEAD-50/54 has been transfered to Seneca County.

FY2008 estimate updated to FY09 cost database.

Support Team: Stephen M. Absolom - SEDA BEC
Randy Battaglia - US Army Corps of Engineers, Project Engineer

References:
1. Final Completion Report, Time Critical Removal Action, Metals Site, SEAD-24, March 2006
2. Final ROD for Seventeen SWMUs Requiring Institutional Controls, SEADs-13,39,40,41,43/56/69,44A,44B,52,62,64B,64C,64D,67,122B,122E; July 2007
3. Final Completion Report, Time Critical Action, Metals Site, SEAD-67 (February 2005)
4. Final Record of Decision for No Further Action for SWMUs SEAD50/54, December 2004
5. Revised Draft Final Proposed Plan Five Former SWMUs- SEADs 1,2,5,24 and 48 November 2007
6. Professional judgment based on site knowledge

Estimator Information
Estimator Name: Andrew Weinberg
Estimator Title: Senior Geologist
Agency/Org./Office: Bechtel-S Corp.

Estimate Documentation Report

Business Address: 203 E. Milton St.
Austin, TX 78704
Telephone Number: 512-344-9657
Email Address: aweinberg@bechtel-s.com
Estimate Prepared Date: 01/21/2009

Estimator Signature: _____ **Date:** _____

Reviewer Information

Reviewer Name: Steve Absolom
Reviewer Title: Installation Manager
Agency/Org./Office: Seneca Army Depot Activity
Business Address: .
Telephone Number: (607) 869-1309
Email Address: stephen.m.absolom@us.army.mil
Date Reviewed: 02/09/2009

Reviewer Signature: _____ **Date:** _____

Estimated Costs:

Phase Names	Direct Cost	Marked-up Cost
LTM #1	$26,554	$57,298
Total Cost:	$26,554	$57,298

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM #1
Description: SEAD-24, 50/54, and 67 site closeout and well abandonment in FY2010.

Start Date: October, 2009
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate
Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
Site Close-Out Documentation	Yes	100	0
Well Abandonment	Yes	100	0

Total Marked-up Cost: $57,298

Technologies:

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Meetings		Yes	n/a
Work Plans and Reports		Yes	n/a
Documents		Yes	n/a
Site Close-Out Complexity		Low	n/a
Meetings			
Required Parameters			
Kick Off/Scoping Meetings		Yes	n/a
Kick Off/Scoping Meetings: Number of Meetings	1	1	EA
Kick Off/Scoping Meetings: Travel		Yes	n/a
Kick Off/Scoping Meetings: Travelers		2	EA
Kick Off/Scoping Meetings: Days		5	Days
Kick Off/Scoping Meetings: Air Fare		0	$
Review Meetings		Yes	n/a
Review Meetings: Number of Meetings	1	1	EA
Review Meetings: Travel		No	n/a
Regulatory Review Meetings		Yes	n/a
Regulatory Review Meetings: Number of Meetings	1	1	EA
Regulatory Review Meetings: Travel		No	n/a
Work Plans & Reports			
Required Parameters			
Work Plans		Yes	n/a
Draft Work Plan		Yes	n/a
Final Work Plan		Yes	n/a
Reports		Yes	n/a
Draft Close-Out Report		Yes	n/a
Draft Final Close-Out Report		Yes	n/a
Final Close-Out Report		Yes	n/a
Progress Reports		Yes	n/a
Project Duration	8	8	months
Documents			
Required Parameters			

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
Documents			
Required Parameters			
Draft Decision Document		Yes	n/a
Draft Final Decision Document		Yes	n/a
Final Decision Document		Yes	n/a
Long Term Document Storage		Yes	n/a
Number of Boxes		2	EA
Duration of Storage		30	Yrs

Comments:

Technology Name: **Well Abandonment (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Safety Level		D	n/a
Abandon Wells			
Required Parameters			
Technology/Group Name		Well Group	n/a
Number of Wells		9	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a

Comments:

FINAL

RECORD OF DECISION

FOR

NO FURTHER ACTION FOR SWMUs SEAD 5

SENECA ARMY DEPOT ACTIVITY

ROMULUS, NEW YORK

Do NOT Submit

Prepared for:

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

and

UNITED STATES ARMY CORPS OF ENGINEERS
4820 UNIVERSITY SQUARE
HUNTSVILLE, ALABAMA

Prepared By:

PARSONS
100 Summer Street, Suite 800
Boston, Massachusetts 02110

CERCLIS Site ID No.: NY0213820830
NY State Site ID No.: 8-50-006
Contract Number: DACA87-02-D-0005
Delivery Order 0022

December 2004

9.0 SELECTED REMEDY

Based on the findings of the investigations completed for the sites, the Army and the EPA have selected No Further Action as the remedy for the SWMUs SEAD-50/54. This determination is based on the Army's determination that these sites do not pose a significant threat to human health or the environment.

No Further Action

##########

Proposed Plan – Revised Draft Final

FIVE FORMER SOLID WASTE MANAGEMENT UNITS (SWMUs) – SEADs 1, 2, 5, 24, and 48
SENECA ARMY DEPOT ACTIVITY (SEDA)
ROMULUS, NEW YORK

November 2007

##########

Site

SEAD 24

PURPOSE OF THE PLAN

This Proposed Plan describes the remedial alternatives selected for five areas of concern (AOCs), SEAD 1 (the former Hazardous Waste Container Storage Facility, Building 307), SEAD 2 (the former PCB Transformer Storage Facility, Building 301), SEAD 5 (the former Sewage Sludge Piles), SEAD 24 (the Abandoned Power Burn Pit), and SEAD 48 (Row 0E800 Pitchblende Storage Igloos) at the Seneca Army Depot Activity (SEDA or Depot) Superfund Site, located in Seneca County, New York. This Proposed Plan was developed by the U.S. Army (Army) and the U.S. Environmental Protection Agency (EPA) in consultation with the New York State Department of Environmental Conservation (NYSDEC). The Army and the EPA are issuing this Proposed Plan as part of their public participation responsibilities under Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Action (CERCLA) of 1980, as amended, and Sections 300.430(f) and 300.435(c) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The nature and extent of the contamination remaining at the five AOCs is described in greater detail in the following documents:

- *"RCRA Closure Report: Building 307, Hazardous Waste Container Storage Facility; Building 301, Transformer Storage Building"*;
- Letter to Mr. James Dolen, Jr. from Todd Heino dated September 9, 2005 regarding "Response to Comments on the Draft Closure Plan dated September 4, 2003, Building 307, Hazardous Waste Storage Facility and Building 301, PCB Transformer Storage Building, Seneca Army Depot Activity, Romulus, New York, NYSDEC Site No.: 8-50-006";
- Letter to Mr. Stephen Absolom from James Dolen, Jr. dated September 29, 2005 regarding "SEDA – Facility EPA I.D. No. NY0213820830, Building 307, Hazardous Waste Storage Facility & Building 301, PCB Transformer Storage Building, Closure Certification Approval";
- *"Industrial Waste Site (Sludge Piles) – SEAD 5 Time-Critical Removal Action Final Completion Removal Report"*;
- *"Time Critical Removal Action, Metal Sites – SEAD 24 Final Completion Removal Report"*; and,
- *"Final Status Survey Report, E0800 Row Pitchblende Ore Storage Igloos (SEAD-48)"* (Parsons, 2006).

The Army, EPA, and NYSDEC encourage the public to review these documents to gain a more comprehensive understanding of the AOCs, the site and the Superfund activities that have been completed.

This Proposed Plan is being provided as a supplement to the aforementioned documents to inform the public of the Army's, EPA's and NYSDEC's preferred remedies for the AOCs and to solicit public comments pertinent to the selected remedies. The preferred remedy for three of the AOCs (i.e., SEADs 1, 2, and 5) is to formally impose and implement Land Use Controls (LUCs) that prohibit the use of the designated land and buildings for residential activities, and to prohibit access to and use of groundwater. The preferred remedy for SEAD 24 and SEAD 48 is No Further Action.

The identified LUCs selected for SEADs 1, 2, and 5 were previously established for three other AOCs (i.e., SEADs 27, 64A, and 66) that are located in proximity to the three subject AOCs. At the time of the Army's, EPA's and NYSDEC's final determination for SEADs 27, 64A, and 66, all parties agreed that the identified LUCs should be imposed on all land within the Planned Industrial / Office Development and Warehousing (PID) Area at the former Depot due to the anticipated future use of the land and the similarity of its known past uses by the Army and predecessors.

The remedies described in this Proposed Plan are the preferred remedies for each of the identified AOCs. Changes to the preferred remedy, or a change from the preferred remedy to another remedy, may be made if public comments or additional data indicate that such a change will result in a more appropriate remedial action. The final decision regarding the selected remedies will be made after the Army and the EPA have taken all public comments into consideration. The Army and the EPA are soliciting comments because the Army, EPA and NYSDEC may select a remedy other that the preferred remedy for either or both of the AOCs.

MARK YOUR CALENDAR

[Date] – [Date]:

Public comment period related to this Proposed Plan.

[Date] at 7:00 P.M.: Public meeting at the Seneca County Office Building, Village of Waterloo New York.

COMMUNITY ROLE IN SELECTION PROCESS

The Army, EPA, and NYSDEC rely on public input to ensure that the concems of the community are considered in selecting an effective remedy for each Superfund site. To this end, the RI Report and this proposed plan have been made available to the public for a public comment period which begins on Date and concludes on Date 2.

A public meeting will be held during the public comment period at the Seneca County Office Building on Date 3 at 7:00 p.m. to present the conclusions of the RI, to elaborate further on the reasons for selecting the preferred remedy, and to receive public comments.

Comments received at the public meeting, as well as written comments, will be documented in the Responsiveness Summary Section of the Record of Decision (ROD), the document that formalizes the selection of the remedy.

Written comments on the Proposed Plan should be addressed to:

Mr. Stephen M. Absolom
BRAC Environmental Coordinator
Seneca Army Depot Activity
Building 123, P.O. Box 9
5786 State Route 96
Romulus, NY 14541-0009

SCOPE AND ROLE OF ACTION

The primary goal of the proposed actions is to enable the Army to transfer or lease the land occupied by the identified AOCs to other private or public parties for beneficial reuse. Prior to transfer or lease of any property at the SEDA, the Army is required to ensure that the property is suitable for release and reuse.

Historically SEADs 1, 2, and 5 were used as temporary storage facilities for solid waste, hazardous waste or toxic (i.e., polychlorinated biphenyl) materials prior to off-site disposal or recycle. The area including SEAD-5 was also historically used as the Army's version of a Department of Public Works (DPWs) supply and staging area and equipment storage yard. The planned future use for land encompassing and surrounding SEADs 1, 2, and 5 is Planned Industrial / Office Development or Warehousing.

SEAD 24 was previously used for destruction of black powder, solid propellants and explosive contaminated trash. The planned future use for land surrounding and encompassing SEAD 24 is Development Reserve/Ethanol Plant construction.

The historic use of the igloos at SEAD 48 involved storage of pitchblende ore as part of the Manhattan Project, and later the igloos were used for ammunition storage; the planned future use of this area is Training.

Information exists for SEADs 1, 2, 5, that indicates that chemical contaminants are still present in the soil at these three AOCs at levels that pose potential risks to selected populations. Risk assessments based on exposure scenarios that are consistent with the planned future use of the land in these AOCs indicate that such uses are possible and appropriate given the residual levels of hazardous substances that remain at the AOCs. Therefore, the Army has determined that LUCs prohibiting residential activities, and access to and use of groundwater are needed to minimize any potential future health and environmental impacts at these three AOCs.

Information also exists for SEAD 24 that indicates that residual concentrations of chemicals are generally consistent with background and no further action is required.

No Further Action

Finally, information developed for radiological constituents at SEAD 48 indicate that residual radiation levels present are consistent with background concentrations and no further action is required.

FINAL
RECORD OF DECISION
FOR
Seventeen No Action/No Further Action SWMUs Requiring Land Use Controls
(SEADs 13, 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64B, 64C, 64D, 67, 122B, and 122E)

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

Prepared for:

SENECA ARMY DEPOT ACTIVITY
5786 STATE ROUTE 96
ROMULUS, NEW YORK 14541

and

UNITED STATES ARMY CORPS OF ENGINEERS
4820 UNIVERSITY SQUARE
HUNTSVILLE, ALABAMA 35816

Prepared By:

PARSONS
150 Federal St., 4th Floor
Boston, Massachusetts 02110

Contract Number: DACA87-02-D-0005
Delivery Orders: 0026
USEPA Site ID: NY0213820830; NY Site ID: 8-50-006

March 2007

1.0 DECLARATION OF THE RECORD OF DECISION

Site Names and Location

Seneca Army Depot Activity
CERCLIS ID# NY0213820830
New York Site ID# 8-50-0006
Romulus, Seneca County, New York

This Record of Decision (ROD) formalizes and documents the U.S Army's (Army's) and U.S Environmental Protection Agency's (USEPA's) selected remedy for 17 historic solid waste management units (SWMUs) at the former Seneca Army Depot Activity (SEDA). Each of the Army's selected remedies for the 17 former SWMUs requires the definition and use of Land Use Controls (LUCs). The 17 former SWMUs discussed in this ROD include:

- SEAD-13, Inhibited Red-Fuming Nitric Acid (IRFNA) Disposal Site;
- SEAD-39, Building 121 Boiler Blowdown Leach Pit;
- SEAD-40, Building 319 Boiler Blowdown Leach Pit;
- SEAD-41, Building 718 Boiler Blowdown Leaching Pit;
- SEADs-43/56/69, Building 606 – Old Missile Propellant Test Laboratory/Herbicide and Pesticide Storage/Disposal Area;
- SEAD-44A, Quality Assurance Test Laboratory;
- SEAD-44B, Quality Assurance Test Laboratory;
- SEAD-52, Buildings 608 and 612 – Ammunition Breakdown Area;
- SEAD-62, Nicotine Sulfate Disposal Area near Buildings 606 and 612;
- SEAD-64B, Garbage Disposal Area;
- SEAD-64C, Garbage Disposal Area;
- SEAD-64D, Garbage Disposal Area;
- SEAD-67, Dump Site East of Sewage Treatment Plant No. 4;
- SEAD-122B, Small Arms Range, Airfield Parcel; and
- SEAD-122E, Plane Deicing Area.

Site SEAD67

These SWMUs are also referred to below as "Areas of Concern" or "AOCs" or individually as an "Area of Concern" or "AOC."

Statement of Basis and Purpose

This decision document presents the Army's and the USEPA's selected remedy for SEADs 13, 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64B, 64C, 64D, 67, 122B, and 122E (or the AOCs), located at the Seneca Army Depot Activity (SEDA or the Depot) in the Towns of Romulus and Varick, Seneca County, New York. The decisions were developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended, 42 U.S.C. §9601 et seq., and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

40 CFR Part 300. The Base Realignment and Closure (BRAC) Environmental Coordinator, the Chief, Alpha Branch, Army BRAC Division, and the USEPA Region 2 have been delegated the authority to approve this Record of Decision (ROD).

This ROD is based on the Administrative Record that has been developed by the Army in accordance with Section 113(k) of CERCLA. The Administrative Record is available for public review at the Seneca Army Depot Activity, 5786 State Route 96, Building 123, Romulus, NY 14541. The Administrative Record Index identifies each of the items considered during the selection of the remedial action. This index is included in **Appendix A**.

The New York State Department of Environmental Conservation (NYSDEC) has concurred with the selected remedy. The NYSDEC Declaration of Concurrence is provided in **Appendix B** of this ROD.

Site Assessment

The response action selected for each SWMU identified in this ROD is necessary to protect human health or the environment from actual or threatened releases of hazardous substances into the environment or from actual or threatened releases of pollutants or contaminants from these SWMUs, which may present an imminent and substantial endangerment to public health or welfare.

Description of the Selected Remedy

The selected remedy for each of the 17 AOCs discussed in this ROD is either No Action (NA) or No Further Action (NFA) combined with the establishment, maintenance, and monitoring of Land Use Controls (LUCs). AOCs where the selected remedy is NA with LUCs include:

- SEAD-13, Inhibited Red-Fuming Nitric Acid (IRFNA) Disposal Site;
- SEADs-43/56/69, Building 606 – Old Missile Propellant Test Laboratory/Herbicide and Pesticide Storage/Disposal Area;
- SEAD-44B, Quality Assurance Test Laboratory;
- SEAD-52, Buildings 608 and 612 – Ammunition Breakdown Area;
- SEAD-62, Nicotine Sulfate Disposal Area near Buildings 606 and 612;
- SEAD-64C, Garbage Disposal Area; and
- SEAD-122E, Plane Deicing Area.

AOCs where the Army's selected remedy is NFA with LUCs include:

- SEAD-39, Building 121 Boiler Blowdown Leach Pit;
- SEAD-40, Building 319 Boiler Blowdown Leach Pit;
- SEAD-41, Building 718 Boiler Blowdown Leaching Pit;
- SEAD-44A, Quality Assurance Test Laboratory;
- SEAD-64B, Garbage Disposal Area;
- SEAD-64D, Garbage Disposal Area;
- SEAD-67, Dump Site East of Sewage Treatment Plant No. 4; and,
- SEAD-122B, Small Arms Range, Airfield Parcel.

"PID Area" Land Use Controls (SEADs 39, 40 and 67):

Residential Use and Groundwater Access/Use Restrictions

A ROD was signed by the Army and USEPA in 2004 for land within the Planned Industrial/Office Development (PID) and Warehousing Area (see **Figure 1-1**) of the former Depot. The PID Area encompasses numerous historic Seneca Army Depot SWMUs. The PID Area-wide land use restriction imposes LUCs that:

- Prohibit residential housing, elementary and secondary schools, childcare facilities and playgrounds activities; and,
- Prohibit access to or use of the groundwater until Class GA Groundwater Standards are met.

These LUCs are documented in the "Final, Record of Decision for Sites Requiring Institutional Controls in the Planned Industrial/Office Development or Warehousing Area, Seneca Army Depot Activity" (September 2004).

These use restrictions result from determinations made specifically for SWMUs designated as SEAD-27 (Building 360 Steam Cleaning Waste Tank), SEAD-64A (Garbage Disposal Area), and SEAD-66 (Pesticide Storage near Buildings 5 and 6) in the PID Area. These land use restrictions will now be applied to three AOCs discussed in this Record of Decision and designated as:

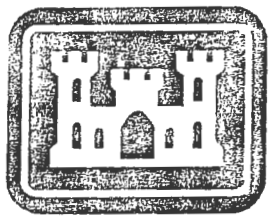
- SEAD-39 (Building 121 Boiler Blow Down Pit);
- SEAD-40 (Building 319 Boiler Blow Down Pit); and
- SEAD-67 (Dump Site East of Sewage Treatment Plant No. 4).

Future land owners or users of sites located in the PID Area may request a variance to the LUCs identified above on a location-by-location basis. However, the future owner/user seeking the variance will need to provide relevant data to substantiate the validity of its request. Once a request is received, the Army, USEPA, and NYSDEC will evaluate and assess waiver requests for land in the PID Area on a case-by-case basis. Otherwise, the LUCs will remain in effect until the concentrations of hazardous substances in the soil and the groundwater beneath the sites have been reduced to levels that allow for unlimited exposure and unrestricted use of the land.

"North End Barracks" Area Land Use Controls (SEAD-41):

Existing Deed with Groundwater Notification

A deed was used to document the transfer of the land currently used for the Hillside Children's Center (i.e., former "North End Barracks" Area, see **Figure 1-1**) at the north end of the former Depot to the SCIDA. In the deed, the Army notified SCIDA that groundwater contamination had been identified in the vicinity of the former Building 718. This determination was made based on the results of historic groundwater sampling data that was collected during the investigation of SEAD-41, which indicated that total petroleum hydrocarbons (TPH, 690 parts per billion [ppb]) were present in the upper aquifer of the



U.S. Army Corps of Engineers

Omaha District
Offutt AFB, Nebraska

SENECA ARMY DEPOT ACTIVITY
TIME CRITICAL REMOVAL ACTION
METAL SITES – SEAD 24
SENECA COUNTY
ROMULUS, NEW YORK

Contract No. DACA45-98-D-0004
Task Order No. 0035

FINAL
COMPLETION REMOVAL REPORT

March 2006

01M-0007

WESTON SOLUTIONS
Restoring Resour[illegible] Efficiency

5. CONCLUSION

This Final Completion Report documents completion of the TCRA conducted at the SEAD 24 SWMU in accordance with the *Final Action Memorandum and Decision Document* (Parsons, 2002). During this TCRA, WESTON excavated soil from Areas 1, 2 and 3 to a minimum depth of 6 inches, and reduced residual contaminant concentrations of the target metals (arsenic, lead, and zinc) and PAHs in accordance with ESI and *Final Action Memorandum and Decision Document* (Parsons, 2002) objectives. The soil removed during excavation was transported off-site and disposed of as non-hazardous metals and PAH contaminated soil at the Seneca Meadows Landfill in Waterloo, New York.

The three AOCs (Excavation Areas 1, 2, and 3) identified in the ESI and *Final Action Memorandum and Decision Document* (Parsons, 2002) have been properly delineated through confirmatory sampling to the vertical and horizontal extents required, the surface soils have been removed to the 6 inch minimum depth required (a maximum depth of 2 ft achieved in some areas), the U-Shaped berm has been completely removed, and the elevated levels of target constituents have been reduced in the SEAD 24 soils as a result of this TCRA. Consequently, the potential threat to human health and the environment posed by the formerly impacted site surface soils has been reduced and/or eliminated through the source reduction and removal efforts completed as part of this TCRA. In addition, no apparent CERCLA releases were identified. Based on completion of the TCRA and the results contained herein, it is recommended that the site be evaluated for no further action. In addition, it is intended that this Completion Report, in conjunction with the *Proposed Remedial Action Plan* (to be submitted under separate cover by USACE) serve as the basis for the ROD, and the site be considered by USACE, SEDA, NYSDEC, and EPA for closure and/or transfer status.

FINAL

COMPLETION REMOVAL REPORT
TIME-CRITICAL REMOVAL ACTION
METALS SITE – SEAD 67
SENECA COUNTY
ROMULUS, NEW YORK

Contract No. DACA45-98-D-0004
Task Order No. 0035

Prepared for

U.S. ARMY CORPS OF ENGINEERS,
OMAHA DISTRICT
Castle Hall Building No. 525
3rd Floor
Offutt AFB, Nebraska

Prepared by

WESTON SOLUTIONS, INC.
One Wall Street
Manchester, New Hampshire 03101-1501

February 2005

W.O. No. 20074.515.035

equipment was demobilized from the site in a phased manner following completion of each activity. Final demobilization was performed on 1 August 2003, following completion of T&D activities.

3.8 CONCLUSION

This final report documents completion of the metals and PAH removal from the SEAD 67 SWMU in accordance with the WESTON *Final Task Work Plan* (WESTON, 2002), which was prepared in accordance with the *Final Action Memorandum and Design Document* (Parsons, 2002). During the TCRA conducted at SEAD 67, WESTON removed a total of seven former waste soil piles that were identified as the source for metals (mercury) and PAH impacted soil at the site. Following removal of the waste soil piles, additional soil was excavated to a 1 ft depth from the surrounding area. All excavated soils were disposed off-site as non-hazardous material.

Following a comparison of confirmatory sample results with the cleanup goals, it is concluded that the horizontal and vertical extents of elevated levels of mercury and PAHs in soil have been sufficiently delineated and removed from SEAD 67. As a result, the potential threat to human health and the environment posed by the formerly impacted site soils has been eliminated through the source reduction and removal efforts described in this report. The confirmatory soil sample results presented in this report indicate that the average mercury content in SEAD 67 soils is below the 0.1 mg/kg cleanup goal for mercury. Confirmatory soil sample results also indicate that neither the maximum result nor the site-wide average for total cPAHs in SEAD 67 soils exceeds the Benzo(a)pyrene TEQ of 10,000 µg/kg. Based on these results, it is recommended that USACE, SEDA, NYSDEC, and EPA evaluate this site for closure and/or transfer status.

MEMORANDUM FOR RECORD

SUBJECT: Environmental Liabilities **Date:** 13 January 2009

This memorandum serves as formal documentation of the information used to develop the Cost-To-Complete (CTC) estimate for the 2009 data call. The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of the 5-Year Review period and Site Closeout costs. The following sites are included with SEAD-9: SEADs 1,2,5,13,27,39,40,41,42,44A,44B,52,56,62,64A,64B,64C,64D,66,67,121C,121I, 122B and 122E.

Site: SEAD- 9 Old Scrap Wood Pile

Source:
1. Record of Decision for Twenty No Action SWMUs (SEADs7,9,10,18,19,20,21,22,23,33,35,36,37,42,47,49,51,53,55,65, and 68) and Eight No Further Action SWMUs (SEADs 28,29,30,31,32,34,60, and 61) September 2003
2. Final ROD For Seventeen SWMUs Requiring Institutional Controls, SEADs-13,39,40,43/56/69,44A,44B,52,62,64B,64C,64D,67,122B,122E; July 2007.
3. Draft ROD Five Former SWMUs SEADs-1,2,5,24 and 48, June 2007.
4. Professional judgment based on site knowledge.
5. Final ROD for sites requiring Institutional Controls in Planned Industrial/Office Development or Warehousing Area, July 2004
6. Final ROD for DRMO Yard (SEAD-121C) and Rumored Cosmoline Oil Disposal Area (SEAD-121I), June 2008
7. Corps of Engineer email from John Nohrstedt January 12, 2009, Subject: Contracting Cost
8. Corps of Engineer memo dated March 13, 2008, FY08 Supervision and Administration Rate
9. Professional judgment

NOTE:
1. SEAD-1, SEAD-2, SEAD-5 and SEAD-67 have been included with this site for LTM. SEAD-005 well abandonment costs are shown on a separate estimate for that site.
2. SEAD 121C and SEAD 121I have been included with this site for LTM.

Corps of Engineers Support Assumptions:
Procurement support every year with new procurement actions every 5 years. Closeout occurs every five years. S&A needed for all onsite efforts. Procurement to be firm fixed price effort.

RACER Assumptions:

Site Closeout Documentation (LTM)

1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years
5. Well abandonment includes sub-contractor costs for fieldwork

Well Abandonment (LTM):

1. Number of wells: 12
2. Depth of wells: 15 ft.
3. Diameter of wells: 2"
4. Unconsolidated
5. Overdrill/removal

Land Use Controls (second LTM phase)

1. Tasks include Implementation, Monitoring & Enforcement, and Modification/Termination
2. Implementation parameters used are Deed Notification and Restrictive Covenants (all with Low complexity)
3. Monitoring & Enforcement parameters used are Report & Certifications annually
4. Modification/Termination parameters used are Document Evaluation, Modify LUCIP, Amend Decision Documents, and Termination Letters (all with Low complexity)
5. Land Use Control, in the form of an Institutional Control, will be applied to all sites in SEAD-9

Cost Summary SEAD-9

LTM

Site Closeout and well abandonment (RACER)	$79,666
Land Use Controls (RACER) To monitor environmental easement for 30 yrs.	338,307
5-Year reviews (RACER)	176,106

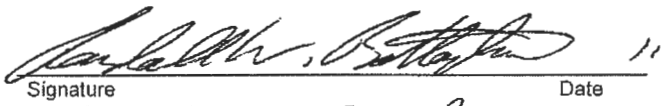
COE Support:

Contracting Procurement 6 events x 3,000/event	18,000
Contract Monitoring 30 years x 5,000/year	150,000
Contract Closeout 6 events x 1,000/event	6,000

S&A (Site Closeout + LUC) 0.058 = (79,666 + 338,307 + 176,106)0.058	34,456	$208,456
Total Site Cost		**$802,532**

Cost Increase > 10% from 2008 Report? Yes

Reason: RACER cost update and Corps of Engineer support added.

Prepared by: Randall Battaglia  11 MAR 09
Signature Date

Reviewed by: Stephen M. Absolom 
Signature Date

Absolom, Stephen M Mr CIV USA

From: Nohrstedt, John HNC [John.Nohrstedt@usace.army.mil]
Sent: Monday, January 12, 2009 4:18 PM
To: Absolom, Stephen M Mr CIV USA
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Cost per year for contracting to monitor a contractor:
5 hrs/month X 12 months = 60 hrs
Approximately $5,000 to $7,000

annual monitoring

Cost for contracting Task Order Close-out:
Firm Fixed Price - 5 to 10 hrs - Approx. $500 to $1000
Cost Plus - 10 to 25 hrs - Approx. $1000 to $2,500

multi year closeout

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA [mailto:stephen.m.absolom@us.army.mil]
Sent: Monday, January 12, 2009 8:07 AM
To: Nohrstedt, John HNC; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,
What will the cost per year be to monitor the TO if it is a multiple year task order.
Also need to a cost for TO Close out.
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362
-----Original Message-----
From: Nohrstedt, John HNC [mailto:John.Nohrstedt@usace.army.mil]
Sent: Friday, January 09, 2009 12:35 PM
To: Absolom, Stephen M Mr CIV USA; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Below are the man-hours to prepare and issue a simple task order:

Prepare SOW and IGE	- 6 to 10 hrs
Review	- 0.5 to 2 hr
Issue RFP	- 2 to 3 hrs
Review Proposal	- 2 to 4 hrs
Tech Evaluation	- 4 to 8 hrs
Negotiation	- 2 to 4 hrs
Review Revised Proposal	- 2 to 3 hrs
Tech Eval. of revised	- 0.5 to 2 hrs
Issue Award	- 4 to 6 hrs

TOTAL - 23 to 42 hours

The cost would be approximately $3,000 to $5,000. Procurement cost

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA
[mailto:stephen.m.absolom@us.army.mil]
Sent: Friday, January 09, 2009 9:14 AM
To: Battaglia, Randy W NAN02; Nohrstedt, John HNC
Subject: Contracting Cost

Steve,
I am starting to update my CTC for this year. One area not preivously included in the costing is the establishment of a new Task/Delivery order. Can you give me a Cost to be included in my CTC for the COE to prepare and issue a task order? Please note that your email will be included in the CTC file so it needs to be accurate as possible.

Thanks
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

CERM-P (37)

13 MAR 2008

MEMORANDUM FOR MAJOR SUBORDINATE COMMANDS (MSC)

SUBJECT: Fiscal Year (FY) 2008 Supervision and Administration (S&A) Rate Changes

1. References:

a. CERM-P memorandum, 27 July 2005, Subject: S&A Accounting Procedures for Modularity Projects.

b. CERM-P memorandum, 20 September 2006, Subject: FY 2006 S&A Rate Changes.

2. Effective 1 April 2008 the Operation and Maintenance (O&M) and the Defense Environmental Restoration Program (DERP) S&A rate for the Continental United States (CONUS) is reduced for new Fiscal Year 2008 (FY08) contract awards from six and one-half percent to five and eight-tenths percent. The intent of this change is to adjust the S&A rate to match the current expense and income activity; the level of service or effort should remain unchanged. Any O&M losses to your S&A checkbook that result from the rate change will be reimbursed from the national S&A account. The Major Subordinate Command (MSC) maximum checkbook carryover will be increased to three months' expense and reflected in the next update to the consolidated command guidance.

3. The one percent furniture rate in reference "a" was not intended to be restricted to modularity projects. It may be used for any MILCON or O&M project. This change in the O&M rate does not affect modularity/relocatable projects as they continue to be charged the MILCON rate per reference "a".

CERM-P (37)
SUBJECT: FY 2008 Supervision and Administration (S&A) Rate Changes

4. Since these changes significantly affect S&A schedules the FY08 S&A performance will be measured against your mid-year schedules due 25 April 2008. Special instructions are provided in the enclosed standing operating procedures to assist in implementation of these changes. These changes will be codified in the next update to the consolidated command guidance.

5. Point of contact for this action is Mr. Philip Blount, CERM-P, (202) 761-8908.

FOR THE COMMANDER:

Encl

Wesley C. Miller
Director of Resource Management

DRAFT
RECORD OF DECISION

For

Five Former Solid Waste Management Units (SWMUs)
SEAD 1 (Hazardous Waste Container Storage Facility), SEAD 2 (PCB Transformer Storage Facility), SEAD 5 (Sewage Sludge Waste Piles), SEAD 24 (Abandoned Powder Burn Pit), and SEAD 48 (Row E0800 Pitchblende Storage Igloos)

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

Prepared for:

SENECA ARMY DEPOT ACTIVITY
5786 STATE ROUTE 96
ROMULUS, NEW YORK 14541

and

UNITED STATES ARMY CORPS OF ENGINEERS
4820 UNIVERSITY SQUARE
HUNTSVILLE, ALABAMA 35816

Prepared By:

PARSONS
150 Federal St., 4th Floor
Boston, Massachusetts 02110

Contract Number: DACA87-02-D-0005
Delivery Orders: 0033
EPA Site ID: NY0213820830
NY Site ID: 8-50-006

December 2008

1.0 DECLARATION FOR THE RECORD OF DECISION

Areas of Concern Names and Site Location

Sites

SEAD 1 – the former Hazardous Waste Container Storage Facility (Building 307)
SEAD 2 – the former PCB Transformer Storage Facility (Building 301)
SEAD 5 – Sewage Sludge Waste Piles
SEAD 24 – the Abandoned Powder Burn Pit
SEAD 48 – Row E0800 Pitchblende Ore Storage Igloos

Seneca Army Depot Activity
5786 State Route 96
Romulus, New York 14541
CERCLIS ID# NY0213820830; New York Site ID# 8-50-0006

Statement of Basis and Purpose

This Record of Decision (ROD) documents the U.S Army's (Army's) and U.S Environmental Protection Agency's (EPA's) selected remedies for five historic solid waste management units (SWMUs) at the former Seneca Army Depot Activity (the Site, SEDA, or Depot) in the Towns of Varick and Romulus, Seneca County, New York. The decisions were developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended, 42 U.S.C. § 9601, *et seq.*, and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), Title 40, Protection of Environment, Code of Federal Regulations (CFR) Part 300. The Base Realignment and Closure (BRAC) Environmental Coordinator; the Chief, Consolidation Branch, Army BRAC Division; and, the Acting Director, EPA Region II have been delegated the authority to approve this ROD.

This ROD is based on the Administrative Record that has been developed in accordance with Section 113(k) of CERCLA. The Administrative Record is available for public review at the Seneca Army Depot Activity, 5786 State Route 96, Building 123, Romulus, NY 14541. The Administrative Record Index identifies each of the items considered during the selection of the remedial actions for these historic SWMUs. This index is included in **Appendix A**.

The State of New York, through the New York State Department of Environmental Conservation (NYSDEC), has concurred with the selected remedies. The NYSDEC Declaration of Concurrence is provided in **Appendix B** of this ROD.

AOC Assessment

The selected remedies for three of the historic SWMUs (i.e., SEADs 1, 2, and 5) address contaminated soil and groundwater. The selected remedies for these SEADs will result in the removal of soil and groundwater as exposure pathways for potential receptors. The response actions selected in this ROD for SEADs 1, 2, and 5 are necessary to protect human health and the environment from actual or threatened releases of hazardous substances into the environment or from actual or threatened releases of pollutants

or contaminants, which may present an imminent and substantial endangerment to public health or welfare.

No Further Action (NFA) is necessary at SEAD 24 where a time-critical removal action (TCRA) previously removed soil contaminated with hazardous substances, and where conditions now indicate that the land is suitable for unrestricted use and unlimited exposures. Finally, NFA is also selected for SEAD 48 where radiological decontamination and remedial actions completed as part of the SEDA's Nuclear Regulatory Commission (NRC) radiological license termination process have shown that soils, groundwater, and building surfaces are suitable for unrestricted use and unlimited exposures.

Description of the Selected Remedies

The selected remedies for SEAD 24 (the Abandoned Powder Burning Pit) and SEAD 48 (Row E0800 Pitchblende Ore Storage Igloos) are No Further Action (NFA). These selections are based on the Army's and EPA's determination that these sites do not pose a significant threat to human health or the environment.

The response actions selected in this ROD for SEAD 1 (the Hazardous Waste Container Storage Facility), SEAD 2 (the PCB Transformer Storage Facility), and SEAD 5 (Sewage Sludge Waste Piles) address contaminated soil and groundwater.

The common elements of the selected remedies at SEADs 1, 2, and 5 include:

- Establishing, maintaining and monitoring a land use control (LUC) that prohibits residential housing, elementary and secondary schools, childcare facilities and playgrounds until unrestricted use and unlimited exposure criteria are attained within the areas of concern (AOCs); and,
- Establishing, maintaining, and monitoring a second LUC that prohibits access to, and use of, groundwater at the AOCs until its quality allows for unrestricted use and unlimited exposures.

In addition, at SEAD 5 the selected remedy requires that:

- Stockpiled soils located in, and adjacent to, the AOC be used as part of a multi-layered protective cover stockpiled soil; demarcation fabric [e.g., colored "snow" or safety fence]; top layer, at least 1 foot of clean fill that meets New York's Restricted Commercial Use soil cleanup objective [SCO] levels) overlying shallow soils where potential human health risks have been identified due to the presence of hazardous substances on the ground; and,
- Establishing, maintaining, and monitoring a third LUC that prohibits unauthorized excavations or activities that might compromise the integrity of the multi-layered cover material.

As the selected remedies for the latter three AOCs (i.e., SEADs 1, 2, and 5) do not allow unrestricted use and unlimited exposures, the Army or its successors will be required to complete a review of the selected remedies at least once every 5 years, in accordance with Section 121(c) of the CERCLA.

Land Use Control (LUC) Performance Objectives:

The common LUC performance objectives for SEADs 1, 2, and 5 are to:

LUC

- Prohibit access to, or use of, the groundwater until groundwater cleanup standards are achieved; and,
- Prohibit the use of the land within the AOCs for residential housing, elementary and secondary schools, childcare facilities, and playground activities.

At SEAD 5, the additional LUC performance objective is to:

- Prohibit unauthorized excavation or other activities that could compromise the integrity of the multi-layered cover material.

SEADs 1, 2, and 5 represent a small portion of a larger tract of land located in the east-central portion of the former SEDA that comprises the Planned Industrial / Office Development and Warehousing (PID) Area that has been transferred to the Seneca County Industrial Development Agency (SCIDA), exclusive of any Army retained property. Based on an agreement reached between the Army, the EPA, and the NYSDEC, the entire PID Area, exclusive of Army retained property, is subject to equivalent LUCs (i.e., prohibit groundwater access/use; prohibit residential housing/elementary and secondary schools/childcare facilities/playgrounds) as are proposed for imposition at SEADs 1, 2, and 5. The referenced LUCs were the remedy selected in a 2004 ROD [*Final ROD for Sites Requiring Institutional Controls in the Planned Industrial/Office Development or Warehousing Areas* (Parsons, 2004)] for SEAD 27, 64A, and 66, three other AOCs within the PID Area, due to levels of contaminants that were identified at those AOCs. At the time of the 2004 ROD, the Army, EPA, and NYSDEC agreed that these LUCs should be applied to all land within the greater PID Area, pending the provision and evaluation of new data for specific sites within the PID Area if a future owner or occupant wished to apply for a variance from the specified LUCs. The PID Area LUCs were implemented when the PID Area was transferred to the SCIDA by the Army, but they are not applied to the land comprising SEADs 1, 2, or 5, as these parcels were retained by the Army at the time of the greater PID Area's transfer, pending completion of necessary investigations and studies, the evaluation of potential remedial actions, and the selection of an approved remedy for SEADs 1, 2, and 5. The location of SEADs 1, 2, and 5, and the land that is subject to institutional controls in the PID Area are shown in **Figure 1-1**.

The unauthorized excavation LUC for SEAD 5 will be implemented only on that location where the protective cover is established over SEAD 5 soils. The location where multi-layered cover is installed will be documented during the Remedial Action Design phase, and formally documented subsequent to the completion of the remedial action at this AOC.

To implement the remedies selected in this ROD, which include the imposition of LUCs, a LUC Remedial Design for SEAD 1, SEAD 2, and SEAD 5 will be prepared which is consistent with Paragraphs (a) and (c) of the New York State Environmental Conservation Law (ECL) Article 27, Section 1318: Institutional and Engineering Controls. In addition, the Army will prepare an environmental easement for SEADs 1, 2, and 5 consistent with Section 27-1318(b) and Article 71, Title 36 of ECL, in favor of the State of New York, which will be recorded at the time of the property's transfer from Federal ownership and which will require the owner and/or any person responsible for implementing the LUCs set forth in this ROD to periodically certify that such institutional controls are in place. The Army and the EPA will be named as third-party beneficiaries on the environmental easement.

A schedule for completion of the draft SEAD 1, SEAD 2, and SEAD 5 LUC Remedial Design Plan (LUC RD) will be completed within 21 days of the ROD signature, consistent with Section 14.4 of the Federal Facilities Agreement (FFA).

The Army shall implement, inspect, report, and enforce the LUCs described in this ROD in accordance with the approved LUC RD. Although the Army may later transfer these responsibilities to another party by contract, property transfer agreement, or through other means, the Army shall retain ultimate responsibility for remedy integrity.

State Concurrence

NYSDEC forwarded a letter of concurrence to the EPA regarding the selection of the remedial actions in the future. This letter of concurrence has been placed in **Appendix B**.

Declaration

The remedies selected in this ROD are, as required by CERCLA and the NCP protective of human health and the environment; cost effective, compliant, with applicable or relevant and appropriate requirements, criteria or limitations promulgated under federal or state laws (ARARs) unless waived; and, use permanent solutions, alternative treatment technologies, and resource recovery options to the maximum extent possible. CERCLA and the NCP also state a preference for treatment as a principal element for the reduction of toxicity, mobility, or volume of the hazardous substances.

The remedies identified for SEAD 1, 2, and 5 will result in hazardous substances and pollutants or contaminants remaining on-site above levels that allow for unlimited use and unrestricted exposure for an indeterminate period. A review of the AOCs and the selected remedies will be conducted within five years after initiation of the remedial action at each of these AOCs to ensure that the remedy is, or will be, protective of human health and the environment, with consideration given to each AOC's continuing and planned future use.

5 year review

The remedies identified for SEAD 24 and SEAD 48 do not result in hazardous substances and pollutants or contaminants remaining on-site. The selected remedies for SEAD 24 and SEAD 48 (NFA) are protective of human health and the environment, comply with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and are cost effective. The remedy uses permanent solutions. Insofar as contamination does not remain at the SWMUs at concentrations above levels that provide for unrestricted use and unlimited exposure, institutional controls and five-year reviews are not necessary.

The estimated cost associated with implementing, monitoring, assessing and reporting on the continued suitability of the recommended actions at SEADs 1, 2, and 5 is $379,380 in aggregate. There are no estimated costs for the implementation of remedies selected (i.e., NFA) for SEADs 24 and 48.

RECORD OF DECISION

Sites

FOR

THE DEFENSE REUTILIZATION AND MARKETING OFFICE (DRMO) YARD (SEAD 121C)
AND
THE RUMORED COSMOLINE OIL DISPOSAL AREA (SEAD 121I)

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

Prepared for:

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

and

UNITED STATES AIR FORCE CENTER FOR ENGINEERING AND THE ENVIRONMENT
3300 SYDNEY BROOKS
BROOKS CITY-BASE, TEXAS 78235

Prepared By:

PARSONS
150 Federal Street, 4th Floor
Boston, Massachusetts

Contract Number: FA8903-04-D-8675
Task Order: 0031
CDRL: A001C
EPA Site ID: NY0213820830; NY Site ID: 8-50-006

June 2008

1 DECLARATION OF THE RECORD OF DECISION

Site Name and Location

The Defense Reutilization and Market Office (DRMO) Yard (SEAD 121C) and the Rumored Cosmoline Oil Disposal Area (SEAD 121I)
Seneca Army Depot Activity
CERCLIS ID# NY0213820830
Romulus, Seneca County, New York

Statement of Basis and Purpose

This decision document presents the U.S. Army's (Army's) and the U.S. Environmental Protection Agency's (EPA's) selected remedies for two areas of concern (AOCs), SEAD 121C and SEAD 121I located at the Seneca Army Depot Activity (SEDA or the Depot) in the Towns of Varick and Romulus, Seneca County, New York. The decisions were developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended, 42 U.S.C. §9601 et seq., and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300. The Base Realignment and Closure (BRAC) Environmental Coordinator, the Chief, Consolidations Branch, Army BRAC Division, and the Acting Director, EPA Region II have been delegated the authority to approve this Record of Decision (ROD).

This ROD is based on the Administrative Record that has been developed in accordance with Section 113(k) of CERCLA. The Administrative Record is available for public review at the Seneca Army Depot Activity, 5786 State Route 96, Building 123, Romulus, NY 14541. The Administrative Record Index identifies each of the items considered during the selection of the remedial actions. This index is included in **Appendix A**.

The State of New York, through the New York State Department of Environmental Conservation (NYSDEC), has concurred with the selected remedy. The NYSDEC Declaration of Concurrence is provided in **Appendix B** of this ROD.

Site Assessment

The response actions selected in this ROD are necessary to protect human health and the environment from actual or threatened releases of hazardous substances into the environment or from actual or threatened releases of pollutants or contaminants from SEAD 121C and SEAD 121I, which may present an imminent and substantial endangerment to public health or welfare.

Description of the Selected Remedy

Remed-1

The ~~selected remedies for SEAD~~ 121C and SEAD 121I address contaminated soil and groundwater. The selected remedies will result in the elimination of soil and groundwater as exposure pathways for potential receptors.

The elements that compose the selected remedies at SEAD 121C and SEAD 121I include:

- Establish and maintain land use controls (LUCs) that prohibit residential housing, elementary and secondary schools, childcare facilities, and playgrounds until unrestricted use and unlimited exposure criteria are attained at the two AOCs; and,

- Establish and maintain LUCs that prohibit access to, and use of, groundwater until its quality allows for unrestricted use and unlimited exposure.

As the selected remedies for the AOCs do not allow unrestricted use and unlimited exposures, the Army or its successors will be required to complete a review of the selected remedies every 5 years (at minimum), in accordance with Section 121(c) of the CERCLA.

SEAD 121C and SEAD 121I Land Use Control (LUC) Performance Objectives

The LUC performance objectives for SEAD 121C and SEAD 121I are to:

- Prohibit access to or use of the groundwater until New York State's GA groundwater standards are achieved; and,

- Prohibit residential housing, elementary and secondary schools, childcare facilities and playgrounds activities.

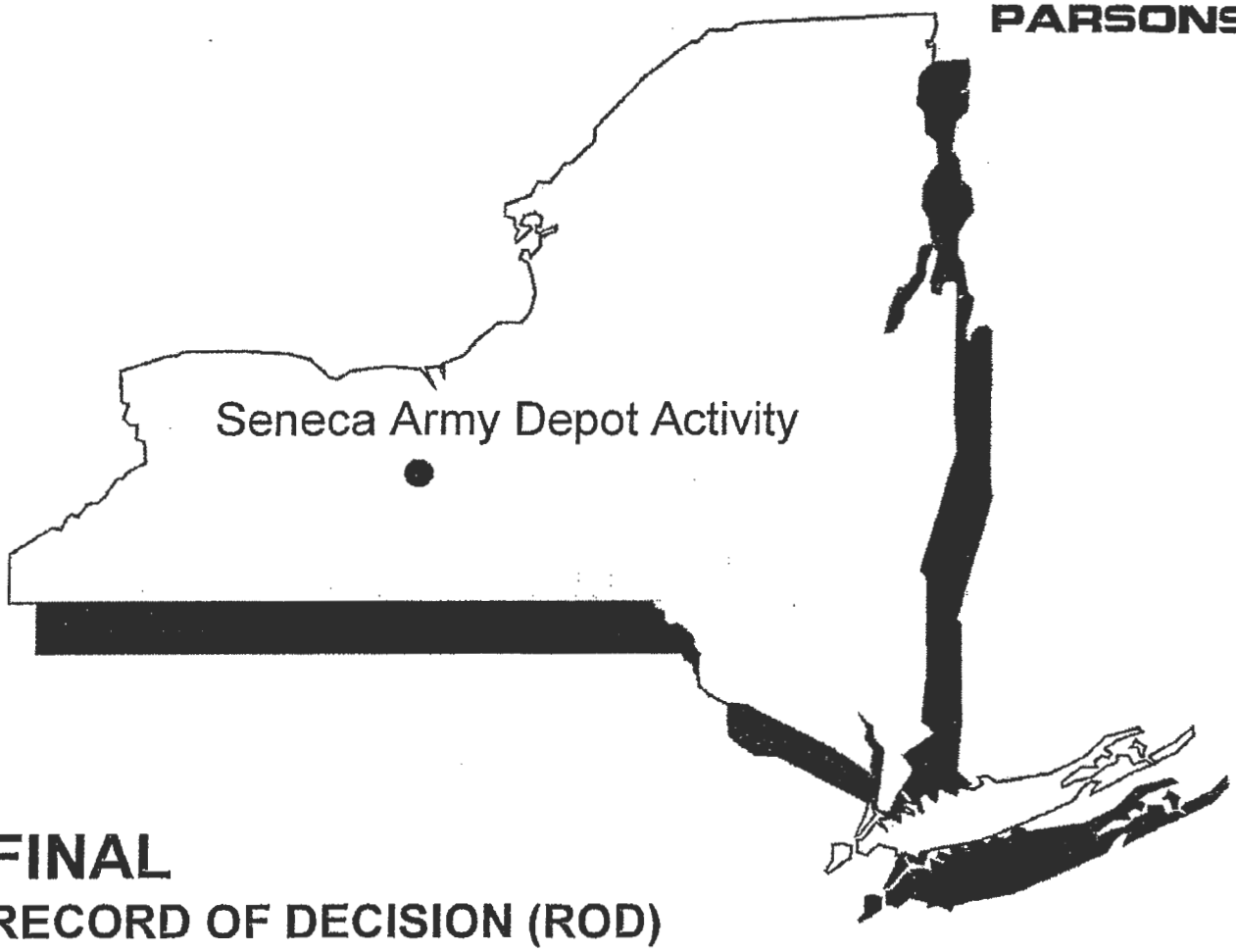
The LUCs will be implemented over the land contained within the boundaries of SEAD 121C and SEAD 121I. Equivalent LUCs have been implemented over other land that is located within the greater Planned Industrial / Office Development and Warehousing Area (PID Area) at the Depot, but these LUCs were not imposed on parcels of land within the PID Area that were retained by the Army, pending completion of the CERCLA regulatory process. The existing PID Area-wide LUCs were implemented as a result of conditions identified in SEADs 27, 64A, and 66, and these conditions are presented in the Record of Decision entitled *Final ROD for Sites Requiring Institutional Controls in the Planned Industrial/Office Development or Warehousing Areas* (Parsons, 2004). The location of SEAD 121C, SEAD 121I, and the land that is subject to institutional controls in the PID Area are shown in **Figure 1-1**. Under the 2004 PID Area-wide ROD, LUCs have been implemented for those properties within the PID Area that are the subject of the 2004 PID ROD to prohibit residential housing, elementary and secondary schools, childcare facilities, and playground activities, and to prohibit access to and use of the groundwater. The restrictions may be removed at specific AOCs or specific portions of the PID Area upon a determination by the Army and EPA, with concurrence from the NYSDEC, that soil and groundwater constituent concentrations at such areas are at levels that allow for unrestricted exposure and unrestricted use.

To implement the remedies selected in this Record of Decision, which include the imposition of LUCs, a LUC Remedial Design for SEAD 121C and SEAD 121I will be prepared which is consistent with Paragraphs (a) and (c) of the New York State Environmental Conservation Law (ECL) Article 27, Section 1318: Institutional and Engineering Controls. In addition, the Army will prepare an environmental easement for SEAD 121C and

US Army, Engineering & Support Center
Huntsville, AL

Seneca Army Depot Activity
Romulus, NY

PARSONS



FINAL

RECORD OF DECISION (ROD)
SITES REQUIRING INSTITUTIONAL CONTROLS IN THE PLANNED INDUSTRIAL/OFFICE DEVELOPMENT OR WAREHOUSING AREAS

SENECA ARMY DEPOT ACTIVITY

EPA Site ID# NY0213820830
NY Site ID# 8-50-006
CONTRACT NO. DACA87-95-D-0031
DELIVERY ORDER NO. 0021

September 2004

9.0 SELECTED REMEDY

Based on the results of the investigations and mini risk assessments completed for the three sites, area wide institutional controls (ICs) are proposed for SEAD-27, SEAD-64A, and SEAD-66. The objectives of ICs proposed for SEAD 27, 64A, and 66 ICs include the establishment of the following land use restrictions for the sites:

- Prohibit the development and use of property for residential housing, elementary and secondary schools, child care facilities and playgrounds.
- Prevent access to or use of the groundwater until the Class GA Groundwater Standards are met.
- In addition, at SEAD-64A only, a land use control prohibiting digging within the bounds of the site will be established.

The LUCs will continue until the concentration of hazardous substances in the soil and the groundwater beneath have been reduced to levels that allow for unlimited exposure and unrestricted use.

Land Use Control Remedial Design

In order to implement the Army's remedy, which includes the imposition of land use controls, a LUC Remedial Design for the Sites Requiring Institutional Controls in the Planned Industrial/Office or Warehousing Area ("PID Area"), will be prepared which satisfies the applicable requirements of Paragraphs (a) and (c), Environmental Conservation Law (ECL) Article 27, Section 1318: Institutional and Engineering Controls. In addition, the Army will prepare an environmental easement for the PID Area, consistent with Section 27-1318(b) and Article 71, Title 36 of ECL, in favor of the State of New York and the Army, which will be recorded at the time of the property's transfer from federal ownership.

A schedule for completion of the draft Institutional Control Remedial Design Plan will be completed within 21 days of the ROD signature consistent with Section 14.4 of the Federal Facilities Agreement (FFA).

The Army shall be responsible for implementing, inspecting, reporting on and enforcing the LUCs described in this ROD in accordance with the approved LUC remedial design. Although the Army may later transfer these procedural responsibilities to another party by contract, property transfer agreement, or through other means, the Army shall retain ultimate responsibility for remedy integrity. Should the Army transfer these procedural responsibilities, the Army shall provide timely written notice to the regulators of the transferee, which shall include the entity's name, address, and general remedial responsibility.

These land use restrictions are based on the results of the SEAD-27, SEAD-64A, and SEAD-66 mini risk assessments that are documented in the Completion Report "Decision Document, Mini Risk Assessment SEAD 9, 27, 28, 32, 33, 34, 43, 44A, 44B, 52, 56, 58, 62, 64A, 64B, 64C, 64D, 66, 68, 69, 70, and 120B, Seneca Army Depot Activity, *Final*" (Parsons, 2002), and which are summarized above. The risk assessments suggest that restricting residential activities and access/use of groundwater at SEAD 27, 64A, and 66 will ensure protection of human health and the environment by reducing the hazard indices and cancer risk to within an acceptable range.

PID Area-wide Land Use Control Implementation

The Army recommends that the land use restrictions proposed for SEAD 27, 64A, and 66, exclusive of the proposed no digging restriction proposed for SEAD-64A alone, also be imposed and maintained on all the property within the PID Area, as defined in the "Reuse Plan and Implementation Strategy for the Seneca Army Depot Activity" (RKG Associates, Inc., 1996). The proposed boundary for the land use restrictions is shown on **Figure 1-2.**

The Army's proposed establishment of an area-wide set of land use restrictions is consistent with the planned reuse of the property by the Seneca County Industrial Development Authority (SCIDA) and will simplify IC implementation by having a single set of land use restrictions for the entire PID Area. Further, the extent of the proposed land use restrictions is consistent with the area that is within the bounds of a Township of Romulus, NY ordinance that requires future developers/owners to provide details of all construction/building/renovation projects that may be performed within this area to the Army and to the town managers for review and approval. Additionally, the Army contends that the proposed boundaries for the area of the proposed ICs are consistent with existing geographic, cultural, demographic, or other historic features and are supported, to the fullest extent possible, by the available analytical data collected at identified sites that are in proximity to the proposed boundary. Generally, the area where the Army proposes to implement the institutional controls is defined by historic and existing security fence lines and roadways that exist at the site. This provides a high degree of visibility, and thus certainty, as to the extent of the proposed boundary without necessitating the installation of new identification markers. Finally, with respect to recommended groundwater use/access restriction, the proposed bounds envelop an area of the former Depot where an ample public water supply is available so that a site-wide groundwater use restriction will have a minimal adverse impact on the future land use.

Site Delineation

The Army acknowledges that portions, but not all, of the PID Area for which it is recommending that ICs be implemented as a remedial measure contains sites where hazardous wastes and materials have been used, stored, and treated or disposed. In response to this acknowledgement, the Army, under conditions of regulatory oversight, review, and approval/acceptance, has implemented numerous investigations and studies to identify areas where potential risks from exposure to environmental contaminants continue to exist. Further, as potential sites have been investigated and assessed the

FINAL
RECORD OF DECISION
FOR
Seventeen No Action/No Further Action SWMUs Requiring Land Use Controls
(SEADs 13, 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64B, 64C, 64D, 67, 122B, and 122E)

Sites

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

Prepared for:

SENECA ARMY DEPOT ACTIVITY
5786 STATE ROUTE 96
ROMULUS, NEW YORK 14541

and

UNITED STATES ARMY CORPS OF ENGINEERS
4820 UNIVERSITY SQUARE
HUNTSVILLE, ALABAMA 35816

Prepared By:

PARSONS
150 Federal St., 4th Floor
Boston, Massachusetts 02110

Contract Number: DACA87-02-D-0005
Delivery Orders: 0026
USEPA Site ID: NY0213820830; NY Site ID: 8-50-006

March 2007

1.0 DECLARATION OF THE RECORD OF DECISION

Site Names and Location

Seneca Army Depot Activity
CERCLIS ID# NY0213820830
New York Site ID# 8-50-0006
Romulus, Seneca County, New York

This Record of Decision (ROD) formalizes and documents the U.S Army's (Army's) and U.S Environmental Protection Agency's (USEPA's) selected remedy for 17 historic solid waste management units (SWMUs) at the former Seneca Army Depot Activity (SEDA). Each of the Army's selected remedies for the 17 former SWMUs requires the definition and use of Land Use Controls (LUCs). The 17 former SWMUs discussed in this ROD include:

- SEAD-13, Inhibited Red-Fuming Nitric Acid (IRFNA) Disposal Site;
- SEAD-39, Building 121 Boiler Blowdown Leach Pit;
- SEAD-40, Building 319 Boiler Blowdown Leach Pit;
- SEAD-41, Building 718 Boiler Blowdown Leaching Pit;
- SEADs-43/56/69, Building 606 – Old Missile Propellant Test Laboratory/Herbicide and Pesticide Storage/Disposal Area;
- SEAD-44A, Quality Assurance Test Laboratory;
- SEAD-44B, Quality Assurance Test Laboratory;
- SEAD-52, Buildings 608 and 612 – Ammunition Breakdown Area;
- SEAD-62, Nicotine Sulfate Disposal Area near Buildings 606 and 612;
- SEAD-64B, Garbage Disposal Area;
- SEAD-64C, Garbage Disposal Area;
- SEAD-64D, Garbage Disposal Area;
- SEAD-67, Dump Site East of Sewage Treatment Plant No. 4;
- SEAD-122B, Small Arms Range, Airfield Parcel; and
- SEAD-122E, Plane Deicing Area.

Sites

These SWMUs are also referred to below as "Areas of Concern" or "AOCs" or individually as an "Area of Concern" or "AOC."

Statement of Basis and Purpose

This decision document presents the Army's and the USEPA's selected remedy for SEADs 13, 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64B, 64C, 64D, 67, 122B, and 122E (or the AOCs), located at the Seneca Army Depot Activity (SEDA or the Depot) in the Towns of Romulus and Varick, Seneca County, New York. The decisions were developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended, 42 U.S.C. §9601 et seq., and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP),

40 CFR Part 300. The Base Realignment and Closure (BRAC) Environmental Coordinator, the Chief, Alpha Branch, Army BRAC Division, and the USEPA Region 2 have been delegated the authority to approve this Record of Decision (ROD).

This ROD is based on the Administrative Record that has been developed by the Army in accordance with Section 113(k) of CERCLA. The Administrative Record is available for public review at the Seneca Army Depot Activity, 5786 State Route 96, Building 123, Romulus, NY 14541. The Administrative Record Index identifies each of the items considered during the selection of the remedial action. This index is included in **Appendix A.**

The New York State Department of Environmental Conservation (NYSDEC) has concurred with the selected remedy. The NYSDEC Declaration of Concurrence is provided in **Appendix B** of this ROD.

Site Assessment

The response action selected for each SWMU identified in this ROD is necessary to protect human health or the environment from actual or threatened releases of hazardous substances into the environment or from actual or threatened releases of pollutants or contaminants from these SWMUs, which may present an imminent and substantial endangerment to public health or welfare.

Description of the Selected Remedy

The selected remedy for each of the 17 AOCs discussed in this ROD is either No Action (NA) or No Further Action (NFA) combined with the establishment, maintenance, and monitoring of Land Use Controls (LUCs). AOCs where the selected remedy is NA with LUCs include:

- SEAD-13, Inhibited Red-Fuming Nitric Acid (IRFNA) Disposal Site;
- SEADs-43/56/69, Building 606 – Old Missile Propellant Test Laboratory/Herbicide and Pesticide Storage/Disposal Area;
- SEAD-44B, Quality Assurance Test Laboratory;
- SEAD-52, Buildings 608 and 612 – Ammunition Breakdown Area;
- SEAD-62, Nicotine Sulfate Disposal Area near Buildings 606 and 612;
- SEAD-64C, Garbage Disposal Area; and
- SEAD-122E, Plane Deicing Area.

LUCs sites

AOCs where the Army's selected remedy is NFA with LUCs include:

- SEAD-39, Building 121 Boiler Blowdown Leach Pit;
- SEAD-40, Building 319 Boiler Blowdown Leach Pit;
- SEAD-41, Building 718 Boiler Blowdown Leaching Pit;
- SEAD-44A, Quality Assurance Test Laboratory;
- SEAD-64B, Garbage Disposal Area;
- SEAD-64D, Garbage Disposal Area;
- SEAD-67, Dump Site East of Sewage Treatment Plant No. 4; and,
- SEAD-122B, Small Arms Range, Airfield Parcel.

LUCs sites

At 12 of the AOCs (i.e., SEADs 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64C, and 67), LUCs previously documented by the Army will be imposed, monitored, and maintained until the concentrations of hazardous substances remaining at the site allow for the unlimited exposure and unrestricted use. It is also recommended that other LUCs previously not documented be imposed at five AOCs (i.e., SEADs 13, 64B, 64C, 122B and 122E) that are subject of this ROD.

The Army has previously documented and imposed LUCs within three portions of the former Depot: in the southeastern corner of the Depot where the Five Points Correctional Facility ("Prison Area") currently is located; in the east central potion of the Depot where the Planned Industrial/Office Development (PID Area) and Warehousing Area is located; and in the north-central portion (i.e., "North End Barracks" Area) of the Depot where the Hillside Children's Center is currently located. One or more of the 12 AOCs defined above (i.e., SEADs 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64C, and 67) are located within land covered by existing LUCs within these three parcels of the former Depot. Within this ROD, the Army formalizes and documents its intention to impose the existing LUCs on the AOCs located within each of these parcels under CERCLA. Land within the "Prison Area" and the area currently occupied by the Hillside Children's Center have been transferred to the community [i.e., to the people of the State of New York and Seneca County Industrial Development Agency (SCIDA), respectively] under deeds that have been recorded by the Seneca County Clerk. Land within the PID and Warehousing Area of the Depot has not yet been transferred to the community, but LUCs including a residential activity use restriction and a groundwater use/access restriction have been identified and documented within the "Final Record of Decision for Sites Requiring Institutional Controls in the Planned Industrial/Office Development or Warehousing Area, Seneca Army Depot Activity" (September 2004).

New LUCs are proposed for the remaining five AOCs (SEADs 13, 64B, 64D, 122B, and 122E) discussed within this ROD. The groundwater use/access restriction proposed for SEAD-13 and SEAD-64D, and the residential use/activity restriction proposed for SEAD-122E result from the Army's determination that potential risks to human health or the environment exist due to the presence of hazardous substances at the historic SWMUs. The Army further recommends that the residential use/activity restriction proposed for SEAD-122E be imposed throughout the area occupied by the former Sampson / Seneca Army Depot Airfield to facilitate its transfer to the SCIDA; this LUC would encompass the entire parcel known as the Airfield. The LUC proposed for implementation at SEAD-64B (no unauthorized excavation and maintenance of cover) results from historic requirements of New York State Solid Waste Management Regulations; this LUC will also be applied along with the groundwater access/use restriction at SEAD-64D.

The specific LUCs selected for each AOC are summarized in **Table 1-1** and described more completely as follows:

"Prison Area" Land Use Controls (SEADs 43/56/69, 44A, 44B, 52, 62, and 64C):

Existing Deed with Reversionary Clause

The "Prison Area" property was transferred under a public benefit conveyance. The United States used a deed with a reversionary clause, as is required under Federal implementing regulations[1], to convey land in the southeastern part of the former Depot (i.e., Prison Area, see **Figure 1-1**) to the people of the State of New York for the construction of the Five Points Correctional Facility. It includes language that requires that the "property shall be used and maintained for a correction facility in perpetuity"[2] and that "the property shall not be sold, leased, mortgaged, assigned or otherwise disposed of"[3] without the prior consent of the Federal Government. In the event that any condition of the deed is breached "as to all or any portion or portions of the described property by New York or its successors or assigns,"[4] the "title and interest to such portion or portions of the property, in its existing condition, including all improvements thereon, shall revert to, and become property of, the Government at the option of and upon demand made in writing by the General Services Administration, or its successor in function."[5] } LUC

Provisions of the deed apply to the following SWMUs, which were transferred prior to a ROD being prepared and which are currently located within the bounds of New York's Five Points Correctional Facility Parcel:

- SEAD-43: Building 606 – Old Missile Propellant Test Laboratory;
- SEAD-44A: Quality Assurance Test Laboratory;
- SEAD-44B: Quality Assurance Test Laboratory;
- SEAD-52: Buildings 608 and 612 – Ammunition Breakdown Area;
- SEAD-56: Building 606 – Herbicide and Pesticide Storage;
- SEAD-62: Nicotine Sulfate Disposal Area near Buildings 606 and 612;
- SEAD-64C: Garbage Disposal Area; and,
- SEAD-69: Building 606 – Disposal Area.

Hazardous substances may be present at one or more of the listed historic SWMUs at concentrations that do not allow for unlimited exposure and unrestricted use. However, based on the results of previous investigations, risk assessments, and/or removal actions, these sites do not pose or represent a risk or threat to human health and the environment, given consideration of the area's continuing restricted use as a state maximum security correctional facility. The deed with the reversionary clause was recorded by the Seneca County Clerk on 26 September 2000 (see Seneca County Liber 612 Page 014 through page 031). Pursuant to the terms of the deed, the prison use restriction remains in effect for these AOCs in perpetuity, or the property ownership reverts to the United States.

[1] Title 41 Code of Federal Regulations, Part 101-47 Federal Property Management Regulations, Utilization and Disposal of Real Property, Section Sec. 101-47.308-9 Property for correctional facility use.
[2] Seneca County Clerk, Waterloo, New York, Deed, United States of America to People of the State of New York, September 26, 2000, Liber 612, Page 019.
[3] Ibid.
[4] Ibid.
[5] Ibid.

"PID Area" Land Use Controls (SEADs 39, 40 and 67):

Residential Use and Groundwater Access/Use Restrictions

A ROD was signed by the Army and USEPA in 2004 for land within the Planned Industrial/Office Development (PID) and Warehousing Area (see **Figure 1-1**) of the former Depot. The PID Area encompasses numerous historic Seneca Army Depot SWMUs. The PID Area-wide land use restriction imposes LUCs that:

- Prohibit residential housing, elementary and secondary schools, childcare facilities and playgrounds activities; and,
- Prohibit access to or use of the groundwater until Class GA Groundwater Standards are met.

LUC

These LUCs are documented in the "Final, Record of Decision for Sites Requiring Institutional Controls in the Planned Industrial/Office Development or Warehousing Area, Seneca Army Depot Activity" (September 2004).

These use restrictions result from determinations made specifically for SWMUs designated as SEAD-27 (Building 360 Steam Cleaning Waste Tank), SEAD-64A (Garbage Disposal Area), and SEAD-66 (Pesticide Storage near Buildings 5 and 6) in the PID Area. These land use restrictions will now be applied to three AOCs discussed in this Record of Decision and designated as:

- SEAD-39 (Building 121 Boiler Blow Down Pit);
- SEAD-40 (Building 319 Boiler Blow Down Pit); and
- SEAD-67 (Dump Site East of Sewage Treatment Plant No. 4).

Future land owners or users of sites located in the PID Area may request a variance to the LUCs identified above on a location-by-location basis. However, the future owner/user seeking the variance will need to provide relevant data to substantiate the validity of its request. Once a request is received, the Army, USEPA, and NYSDEC will evaluate and assess waiver requests for land in the PID Area on a case-by-case basis. Otherwise, the LUCs will remain in effect until the concentrations of hazardous substances in the soil and the groundwater beneath the sites have been reduced to levels that allow for unlimited exposure and unrestricted use of the land.

"North End Barracks" Area Land Use Controls (SEAD-41):

Existing Deed with Groundwater Notification

A deed was used to document the transfer of the land currently used for the Hillside Children's Center (i.e., former "North End Barracks" Area, see **Figure 1-1**) at the north end of the former Depot to the SCIDA. In the deed, the Army notified SCIDA that groundwater contamination had been identified in the vicinity of the former Building 718. This determination was made based on the results of historic groundwater sampling data that was collected during the investigation of SEAD-41, which indicated that total petroleum hydrocarbons (TPH, 690 parts per billion [ppb]) were present in the upper aquifer of the

groundwater. The Army applied the deed notification, based on the water quality from sampling, to all property located within the "North End Barracks" parcel. A public water supply services the entire area. This includes the area of the former SWMU SEAD-41, Building 718 Boiler Blowdown Pit.

The reported level of TPH at SEAD-41 exceeds the New York State Public Water System standards for unspecified organic contamination of 100 ppb. The deed further states "The Grantee, its successors and assigns, agree that in the event they use the groundwater as a public water supply source at the Property, they will comply with all applicable laws and regulations." Under New York regulations, future owners or occupants of the area would need to confirm the quality and acceptability of the groundwater as a source of potable water before it could be used for such a purpose. It is recommended that the LUC documented in the existing deed for the "North End Barracks" parcel be continued until the concentrations of hazardous substances in groundwater have been reduced to levels that allow for unrestricted use.

Land Use Controls (SEADs 13, 64B, 64D, 122B and 122E):

Groundwater Use/Access Restriction (SEAD-13)

A groundwater use/access restriction is also proposed at the following site:

- SEAD-13: Inhibited Red-Fuming Nitric Acid (IRFNA) Disposal Site.

LUC

The proposed groundwater use/access restriction is intended to eliminate human contact with groundwater, thereby reducing risk to acceptable levels for potential human receptors. There is risk associated with the use of the groundwater at SEAD-13, driven by the concentrations of nitrate, aluminum, and manganese identified. The risk from the presence of metals is associated with the suspended solids contained in the collected groundwater samples and not from the groundwater itself. The presence of nitrate is likely related to past activities conducted in the area. The extent of the nitrate plume is defined and restricted to the area located between the historic disposal pits observed in SEAD-13-East and the Duck Pond to the west. Groundwater data from monitoring wells in the SEAD-13-West side of this AOC does not show evidence of a nitrate plume in this area of the AOC, which is downgradient of SEAD-13-East and the Duck Pond. Chemical analysis of surface water in the Duck Pond indicated that the nitrate/nitrite-nitrogen concentrations are below the levels established for drinking water sources nationally and within the State of New York.

Therefore, a LUC will be implemented over the geographic area of SEAD-13 to prohibit access to or use of the groundwater. This restriction will remain in effect until the concentrations of hazardous substances in groundwater beneath the AOC have been reduced to levels that allow for unlimited exposure and unrestricted use. Once groundwater cleanup standards are achieved, the groundwater use/access restriction may be eliminated, with USEPA approval.

Residential Activities Restriction (SEAD-122B and SEAD-122E)

The development and use of property for residential housing, elementary or secondary schools, child care facilities, and playgrounds will be prohibited in the following two AOCs:

LUC

- SEAD-122B: Small Arms Range, Airfield Parcel
- SEAD-122E: Plane Deicing Area

The proposed residential activities LUC will be implemented over the entire Airfield Parcel, which extends beyond the bounds of SEAD-122B and SEAD-122E. This LUC will be applied to all areas within the former Airfield, and will continue until such time as the concentrations of hazardous substances are reduced to levels that allow for unlimited exposure and unrestricted use. Future owners or users of land within the Airfield may request a waiver from the LUC on a location-by-location basis. At the time of the waiver request, the applicant must develop and submit sufficient data and information, subject to review and approval by the Army and the USEPA, to substantiate its request that the identified location is suitable for unlimited exposure and unrestricted use.

The boundary of the Airfield Area is defined as the boundary of the Airfield Special Events, Institutional, and Training area highlighted on **Figure 1-1.**

Unauthorized Digging Restriction (SEAD-64B)

LUC

A LUC that prohibits unauthorized digging and excavations within the bounds of the SWMU will be imposed for:

- SEAD-64B: Garbage Disposal Area.

SEAD-64B is a former solid waste disposal area that was closed by the Army prior to 1979. As a historic solid waste landfill, this SWMU is subject to requirements of the New York State's Solid Waste Regulations (6 NYCRR Part 360) in effect at the date of closure. Under New York's Solid Waste Regulations effective in 1979, a soil and vegetative cover was required to be placed on and maintained above the closed landfill. The proposed LUC would prohibit digging within the bounds of the former solid waste site. The LUC will continue at the AOC until solid wastes are removed, and concentrations of hazardous substances allow for unlimited exposure and unrestricted use.

Unauthorized Digging and Groundwater Access/Use Restriction (SEAD-64D)

LUC

LUCs that restrict unauthorized excavation and access to and use of groundwater will be imposed for the:

- SEAD-64D: Garbage Disposal Area.

Results of the mini risk assessment for this AOC indicate that ingestion of groundwater could pose a risk to future receptors. Furthermore, as a historic solid waste landfill, this SWMU is subject to requirements of the New York State's Solid Waste Regulations (6 NYCRR Part 360), as were in effect in 1979 when it was closed. Under New York's 1979 Solid Waste Regulations, a soil and vegetative cover must be placed on and maintained above the closed landfill.

The proposed groundwater use/access restriction will be implemented over the geographic area of SEAD-64D to prohibit access to or use of the groundwater until the levels of hazardous substances are reduced to levels that allow for unlimited exposure and unrestricted use. The restriction to prohibit unauthorized excavation at the SWMU will remain in effect as long as solid waste remains at the SWMU. The reduction of groundwater contamination to levels that allow for unlimited exposure and unrestricted use,

and the removal of solid waste must be completed before unlimited exposure and unrestricted use can be allowed at this SWMU.

Land Use Control Performance Objectives

The land use control (LUC) performance objectives at these 17 SWMUs, which will be (or have been) incorporated into leases and/or deeds for the parcels of real property that comprise these AOCs, as appropriate, are as follows:

- Comply with the use limitations documented and imposed in the Deed used to transfer property containing SEADs 43/56/69, 44A, 44B, 52, 62 and 64C from the U.S. Government to the people of the State of New York for the construction of a correctional facility (See Seneca County Liber 612 Page 014 through 031);
- Prohibit access to or use of groundwater at SEADs 39, 40, 41, 64D, and 67 until concentrations of hazardous substances contained are reduced to levels that allow unrestricted use;
- Prohibit residential housing, elementary and secondary schools, childcare facilities, and playgrounds activities at SEADs 39, 40, 67, 122B, and 122E until levels of hazardous substances found at the former SWMUs allow for unlimited exposure and unrestricted use; and
- Prohibit unauthorized excavation at SEADs 64B and 64D.

LUC

The Army and USEPA's selected remedy for each AOC discussed in this ROD includes LUCs. To implement the Army's selected remedy at these AOCs (i.e., SEADs 13, 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64B, 64C, 64D, 67, 122B, and 122E), a LUC Remedial Design (RD) for each LUC combination identified (e.g., reversionary deed; groundwater use/access restriction only; groundwater use/access restriction and residential activities restriction; residential activities restriction only; digging restriction only; and digging and groundwater use/access restriction) will be prepared. The LUC RD Plan will include: a site description; land use restrictions; mechanism to ensure that the land use restrictions are not violated in the future; implementation and maintenance actions, including periodic inspections; and reporting/notification requirements. In addition, the Army will prepare an environmental easement for each AOC as needed, consistent with Section 27-1318(b) and Article 71, Title 36 of ECL, in favor of the State of New York and the Army, which will be recorded at the time of transfer of the AOCs from federal ownership. A schedule for completion of the draft LUC RD covering the individual AOCs will be completed within 21 days of the ROD signature, consistent with Section 14.4 of the Federal Facilities Agreement (FFA). In accordance with the FFA and CERCLA §121(c), the remedial action (including ICs) will be reviewed no less often than every five years. After such reviews, modifications may be implemented to the remedial program, if appropriate.

The Army shall implement, inspect, maintain, report, and enforce the ICs described in this ROD in accordance with the approved LUC RD. Although the Army may later transfer these responsibilities to another party by contract, property transfer agreement, or other means, the Army shall retain ultimate responsibility for remedy integrity.

FINAL

RECORD OF DECISION

FOR

TWENTY NO ACTION SWMUs (SEADs 7, 9, 10, 18, 19, 20, 21, 22, 33, 35, 36, 37, 42, 47, 49, 51, 53, 55, 65, and 68) and EIGHT NO FURTHER ACTION SWMUs (SEADs 28, 29, 30, 31, 32, 34, 60, and 61)

SENECA ARMY DEPOT ACTIVITY

ROMULUS, NEW YORK

Prepared for:

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

and

UNITED STATES ARMY CORPS OF ENGINEERS
4820 UNIVERSITY SQUARE
HUNTSVILLE, ALABAMA

Prepared By:

PARSONS
100 Summer Street, Suite 800
Boston, Massachusetts 02110

Contract Number: DACA87-95-D-0031
Delivery Order 0021

September 2003

TABLE 1

NO ACTION (NA) AND NO FURTHER ACTION (NFA) SWMUs CONSIDERED IN THIS ROD

UNIT NUMBER	UNIT NAME	Recommendation	Basis of NA/NFA Determination [1]	Reference [2]
~~SEAD-7~~	Shale Pit	~~No Action~~	A	Parsons, 2002c
SEAD-9	Old Scrap Wood Site	No Action	D	Parsons, 2002b
~~SEAD-10~~	Present Scrap Wood Site	~~No Action~~	C	Parsons, 2002c
SEAD-18	Building 709 – Classified Document Incinerator	No Action	C	Parsons, 2002c
SEAD-19	Building 801 – Classified Document Incinerator	No Action	C	Parsons, 2002c
SEAD-20	Sewage Treatment Plant No. 4	No Action	A	Parsons, 2002c
SEAD-21	Sewage Treatment Plant No. 715	No Action	A	Parsons, 2002c
SEAD-22	Sewage Treatment Plant No. 314	No Action	A	Parsons, 2002c
SEAD-28	Building 360 – Underground Waste Oil Tanks (2)	No Further Action	C, E	Parsons, 2002b
SEAD-29	Building 732 - Underground Waste Oil Tanks (2 units)	No Further Action	E	Parsons, 2002c
SEAD-30	Building 118 – Underground Waste Oil Tank	No Further Action	E	Parsons, 2002c
SEAD-31	Building 117 – Underground Waste Oil Tank	No Further Action	E	Parsons, 2002c
SEAD-32	Building 718 – Underground Waste Oil Tanks	No Further Action	C, E	Parsons, 2002b
SEAD-33	Building 121 – Underground Waste Oil Tank	No Action	C	Parsons, 2002b
SEAD-34	Building 319 – Underground Waste Oil Tanks (2)	No Further Action	C, E	Parsons, 2002b
SEAD-35	Building 718 - Waste Oil-Burning Boilers (3 units)	No Action	A	Parsons, 2002c
SEAD-36	Building 121 - Waste Oil-Burning Boilers (2 units)	No Action	A	Parsons, 2002c
SEAD-37	Building 319 - Waste Oil-Burning Boilers (2 units)	No Action	A	Parsons, 2002c
SEAD-42	Building 106 - Preventive Medicine Laboratory	No Action	B	Parsons, 2002c
SEAD-47	Buildings 321 And 806 – Radiation Calibration Source Storage	No Action	C	Parsons, 2003
SEAD-49	Building 356 – Columbite Ore Storage	No Action	C	Parsons, 2002c
SEAD-51	Herbicide Usage Area – Perimeter of High Security Area	No Action	C	Parsons, 1994 and EPA 2003

TABLE 1 (continued)

NO ACTION (NA) AND NO FURTHER ACTION (NFA) SWMUs
CONSIDERED IN THIS ROD

UNIT NUMBER	UNIT NAME	Recommendation	Basis of NA/NFA Determination [1]	Reference [2]
SEAD-53	Munitions Storage Igloos	No Action	A	NRC, 2003
SEAD-55	Building 357 - Tannin Storage	No Action	A	Parsons, 2002c
SEAD-60	Oil Discharge Adjacent to Building 609	No Further Action	E	Parsons, 2002b
SEAD-61	Building 718 - Underground Waste Oil Tank	No Further Action	A, E	Parsons, 2002c
SEAD-65	Acid Storage Areas	No Action	A	Parsons, 2002c
SEAD-68	Building S-335 Old Pest Control Shop	No Action	D	Parsons, 2002b

Notes:

1. The SWMU was determined No Action (NA) or No Further Action (NFA) based on compliance with at least one of the following five criteria:

   A - Some sites initially listed were based on a 1980 Army report listing suspect or potential sites (USATHAMA, 1980). Subsequent evaluation of historic records and information indicate that there is no evidence or indication of petroleum product, hazardous materials or solid wastes present or released to the environment. These SWMUs would be classified as No Action (NA).

   B – Interviews or records suggested the presence of a potential site or SWMU, however no identifiable location was found. This SWMU is recommended for No Action

   C – Based on the analysis of collected sampling data, the Army has determined that there are no instances where hazardous materials have been detected; or if hazardous chemicals have been detected in specific media, the concentrations at which they have been found do not exceed promulgated regulatory criteria defined [e.g., New York Class C surface water criteria, New York GA Groundwater Standards, federal Maximum Contaminant Levels (MCLs), etc.] by the State of New York or the federal government. This SWMU is recommended for No Action.

   D - If data indicates that hazardous chemicals are present above criteria limits, the results of a human health risk assessment indicate that the land encompassed by the identified SWMU is suitable for unrestricted use (residential use). This SWMU is recommended for No Action

   E - Action on a site was taken, and the site was closed out under another regulatory program (e.g., tank removal). This SWMU is recommended for No Further Action

2. See Appendix A, Administrative Record

FINAL

RECORD OF DECISION
FOR
SITES REQUIRING INSTITUTIONAL CONTROLS IN THE PLANNED INDUSTRIAL/OFFICE DEVELOPMENT OR WAREHOUSING AREAS
SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

Prepared for:

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

and

UNITED STATES ARMY ENGINEERING & SUPPORT CENTER
4820 UNIVERSITY SQUARE
HUNTSVILLE, ALABAMA

Prepared By:

PARSONS
100 Summer St, Suite 800
Boston, Massachusetts

EPA Site ID No.: NY0213820830
NY Site ID No.: 8-50-006
DACA87-95-D-0031, Delivery Order 21
736026

July 2004

sites

1.0 DECLARATION OF THE RECORD OF DECISION

Site Name and Location

Building 360 – Steam Cleaning Waste Tank (SEAD-27), the Garbage Disposal Area (SEAD-64A), and the Pesticide Storage Area Near Building 5 and 6 (SEAD-66).

Seneca Army Depot Activity (SEDA)
CERCLIS ID# NY0213820830
NY State ID# 8-50-006
Romulus, Seneca County, New York

Statement of Basis and Purpose

This decision document presents the U.S. Army's and EPA's selected remedy for Building 360 – Steam Cleaning Waste Tank (SEAD-27), the Garbage Disposal Area (SEAD-64A), and the Pesticide Storage Area Near Building 5 and 6 (SEAD-66), located at the Seneca Army Depot Activity (SEDA) near Romulus, New York. The decision was developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended, 42 United States Code (USC) §9601 et seq. and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300. The Base Realignment and Closure (BRAC) Environmental Coordinator; the Director, National Capital Region Field Office; and the U.S. Environmental Protection Agency (USEPA) Region II have been delegated the authority to approve this Record of Decision (ROD.

This ROD is based on the Administrative Record that has been developed in accordance with Section 113(k) of CERCLA. The Administrative Record is available for public review at the Seneca Army Depot Activity, Building 123, Romulus, NY. The Administrative Record Index identifies each of the items considered during the selection of the remedial action. This index is included in **Appendix A**.

The State of New York, through NYSDEC and the New York State Department of Health (NYSDOH), has concurred with the Selected Remedy. The NYSDEC Declaration of Concurrence is provided in **Appendix B** of this ROD.

Site Assessment

The response action selected in this ROD is necessary to protect the public health and the environment from actual or threatened releases of hazardous substances into the environment or from actual or threatened releases of pollutants or contaminants from this site that may present an imminent and substantial endangerment to public health or welfare.

Description of the Selected Remedy

The Army recommends establishing institutional controls (ICs) in the form of land use controls (LUCs) at SEADs 27, 64A, and 66. The LUCs will be applied area wide. A map showing the location of SEADs 27, 64A, and 66 and the LUC boundary is provided at **Figure 1-1.** Five year reviews of this remedy will be conducted in accordance with Section 120(c) of CERCLA.

LUCs

Land Use Control Performance Objectives

The LUC performance objectives at these sites are as follows and will also be incorporated into deeds and/or leases for this property:

- Prevent residential housing, elementary and secondary schools, childcare facilities and playgrounds activities at the SEAD 27, 64a, and 66 sites.
- Prevent access to or use of the groundwater at the SEAD 27, 64a, and 66 sites until Class GA Groundwater Standards are met.
- Prevent unauthorized excavation at the SEAD 64a site.

The LUCs will continue until the concentration of hazardous substances in the soil and the groundwater beneath have been reduced to levels that allow for unlimited exposure and unrestricted use.

Land Use Control Remedial Design

In order to implement the Army's remedy, which includes the imposition of land use controls, a LUC Remedial Design for the Sites Requiring Institutional Controls in the Planned Industrial/Office or Warehousing Area ("PID Area"), will be prepared which satisfies the applicable requirements of Paragraphs (a) and (c), Environmental Conservation Law (ECL) Article 27, Section 1318: Institutional and Engineering Controls. In addition, the Army will prepare an environmental easement for the PID Area, consistent with Section 27-1318(b) and Article 71, Title 36 of ECL, in favor of the State of New York and the Army, which will be recorded at the time of the property's transfer from federal ownership.

A schedule for completion of the draft Institutional Control Remedial Design Plan will be completed within 21 days of the ROD signature consistent with Section 14.4 of the Federal Facilities Agreement (FFA).

The Army shall be responsible for implementing, inspecting, reporting on and enforcing the LUCs described in this ROD in accordance with the approved LUC remedial design. Although the Army may later transfer these responsibilities to another party by contract, property transfer agreement, or

Estimate Documentation Report

System:

RACER Version: 10.2.0
Database Location: C:\Documents and Settings\Andy W\Application Data\Earth Tech\RACER 10.2\Racer.mdb

Folder:

Folder Name: Seneca

Project:

Project ID: SEAD-9
Project Name: SEAD-9
Project Category: Multiple Locations

Location
State / Country: NEW YORK
City: SENECA ARMY DEPOT

Location Modifier	Default	User
	1.114	1.114

Options
Database: System Costs
Cost Database Date: 2009
Report Option: Fiscal

Description

Multiple Sites - these sites were grouped into sites that will proceed to a No Action ROD or No Further Action ROD after acceptance of PRAP.

Site: SEAD- 9 Old Scrap Wood Pile

1. Record of Decision for Twenty No Action SWMUs (SEADs 7, 9, 10, 18, 19, 20, 21, 22, 23, 33, 35, 36, 37, 42, 47, 49, 51, 53, 55, 65, and 68) and Eight No Further Action SWMUs (SEADs 28, 29, 30, 31, 32, 34, 60, and 61) September 2003
2. Final ROD For Seventeen SWMUs Requiring Institutional Controls, SEADs- 13, 39, 40, 43/56/69, 44A, 44B, 52, 62, 64B, 64C, 64D, 67, 122B, 122E; July 2007
3. Final PRAP Five Former SWMUs- 1, 2, 5, 24 and 48, October 2007
4. Professional judgment based on site knowledge
5. Final ROD for sites requiring Institutional Controls in Planned

Estimate Documentation Report

Industrial/Office Development or Warehousing Area, July 2004

NOTE:
1. SEAD-1 and SEAD-2 and SEAD-67 are included with this site for LTM.

RACER Assumptions:

Site Closeout Documentation (LTM)
1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years

Well abandonment (LTM)
1. Number of wells: 12
2. Depth of wells: 15 ft
3. Diameter of wells: 2"
4. Unconsolidated
5. Overdrill/removal

Land Use Controls (second LTM phase)
1. Tasks include Monitoring & Enforcement, and Modification/Termination
2. Monitoring & Enforcement parameters used are Report & Certifications annually
3. Modification/Termination parameters used are Document Evaluation, Modify LUCIP, Amend Decision Documents, and Termination Letters (all with Low complexity)
4. Land Use Control, in the form of an Institutional Control, will be applied to all sites in SEAD-9

Five Year Review (LTM #3)
1) Six five year reviews (2012, 2017, 2022, 2027, 2032, and 2037)
2) All RACER defaults for low complexity review.

Estimate Documentation Report

Site Documentation:

Site ID: SEAD-9
Site Name: Old Scrap Wood Pile (Multiple sites)
Site Type: None

Media/Waste Type
Primary: N/A
Secondary: N/A

Contaminant
Primary: None
Secondary: None

Phase Names
SI: ☐
RI/FS: ☐
RD: ☐
IRA: ☐
RA(C): ☐
RA(O): ☐
LTM: ☑
Site Closeout: ☐

Documentation
Description: SEAD- 9 Old Scrap Wood Pile .

Estimate updated to FY2009 cost database. LUC implementation deleted from FY09 estimate, and LUC operation period changed to run from 2010 through 2040. Six five year reviews also scoped.

Support Team: Stephen M. Absolom- SEDA BEC
Rany Battaglia- US Army Corps of Engineers, Project Engineer
Andrew Weinberg - Bechtel-S Corp.

References:
1. Record of Decision for Twenty No Action SWMUs (SEADs7,9,10,18,19,20,21,22,23,33,35,36,37,42,47,49,51,53,55,65, and 68) and Eight No Further Action SWMUs (SEADs 28,29,30,31,32,34,60, and 61) September 2003
2. Draft Proposed Plan No Action/No Further Action for SWMU's SEAD-13, 39, 40, 43, 44A, 44B, 56, 67, and 122B at the Seneca Army Depot Activity, March 2005
3. Draft PRAP For Seventeen SWMUs Requiring Institutional Controls, SEADs-13,39,40,43/56/69,44A,44B,52,62,64B,64C,64D,67,122B,122E; October 2005
4. Draft PRAP No Action/Further Action for SWMUs SEAD-58 and SEAD-63; October 2005
5. Professional judgment based on site knowledge

Estimator Information
Estimator Name: Andrew Weinberg
Estimator Title: Senior Geologist

Estimate Documentation Report

Agency/Org./Office:	Bechtel-S Corp.
Business Address:	203 E. Milton St. Austin, TX 78704
Telephone Number:	512-344-9657
Email Address:	aweinberg@bechtel-s.com
Estimate Prepared Date:	02/20/2009

Estimator Signature: _____ **Date:** _____

Reviewer Information

Reviewer Name:	Steve Absolom
Reviewer Title:	Installation Manager
Agency/Org./Office:	Seneca Army Depot Activity
Business Address:	.
Telephone Number:	(607) 869-1309
Email Address:	stephen.m.absolom@us.army.mil
Date Reviewed:	02/20/2009

Reviewer Signature: _____ **Date:** _____

Estimated Costs:

Phase Names	Direct Cost	Marked-up Cost
LTM #3	$63,320	$176,106
LTM #2 (LUCs)	$123,024	$338,307
LTM #1	$37,156	$79,666
Total Cost:	$223,499	$594,079

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM #3
Description: Five year reviews for SEAD-9 and associated LTM sites. Six reviews, 2012 through 2037.

Start Date: February, 2010
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate
Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
Five-Year Review	Yes	100	0

Total Marked-up Cost: $176,106

Technologies:

Estimate Documentation Report

Technology Name: **Five-Year Review (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Site Complexity		Low	n/a
Document Review		Yes	n/a
Interviews		Yes	n/a
Site Inspection		Yes	n/a
Report		Yes	n/a
Travel		No	n/a
Rebound Study		No	n/a
Start Date		February-2012	n/a
No. Reviews		6	EA
Document Review			
Required Parameters			
5-Year Review Check List		Yes	n/a
Record of Decision		Yes	n/a
Remedial Action Design & Construction		Yes	n/a
Close-Out Report		Yes	n/a
Operations & Maintenance Manuals & Reports		Yes	n/a
Consent Decree or Settlement Records		Yes	n/a
Groundwater Monitoring & Reports		Yes	n/a
Remedial Action Required		Yes	n/a
Previous 5-Year Review Reports		Yes	n/a
Interviews			
Required Parameters			
Current and Previous Staff Management		Yes	n/a
Community Groups		Yes	n/a
State Contacts		Yes	n/a
Local Government Contacts		Yes	n/a
Operations & Maintenance Contractors		Yes	n/a
PRPs		Yes	n/a
Remedial Design Consultant		Yes	n/a
Site Inspection			
Required Parameters			

Estimate Documentation Report

Technology Name: **Five-Year Review (# 1)**

Description	*Default*	*Value*	*UOM*
Site Inspection			
Required Parameters			
General Site Inspection		Yes	n/a
Containment System Inspection		Yes	n/a
Monitoring Systems Inspection		Yes	n/a
Treatment Systems Inspection		Yes	n/a
Regulatory Compliance		Yes	n/a
Site Visit Documentation (Photos, Diagrams, etc.)		Yes	n/a
Report			
Required Parameters			
Introduction		Yes	n/a
Remedial Objectives		Yes	n/a
ARARs Review		Yes	n/a
Summary of Site Visit		Yes	n/a
Areas of Non Compliance		Yes	n/a
Technology Recommendations		Yes	n/a
Statement of Protectiveness		Yes	n/a
Next Review		Yes	n/a
Implementation Requirements		Yes	n/a

Comments:

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM #2 (LUCs)
Description: Administrative Land Use Controls. LUC implementation deleted from FY09 CTC estimate since this was scoped for FY2007. LUC monitoring and enforcement dates modified to start in 2010 and run through 2040.

Start Date: September, 2010
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate
Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
ADMINISTRATIVE LAND USE CONTROLS	Yes	100	0

Total Marked-up Cost: $338,307

Technologies:

Estimate Documentation Report

Technology Name: **Administrative Land Use Controls (# 1)**
User Name: **ADMINISTRATIVE LAND USE CONTROLS**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Rename Model		ADMINISTRATIVE LAND USE CONTROLS	n/a
Planning Documents		No	n/a
Implementation		No	n/a
Monitoring & Enforcement		Yes	n/a
Monitoring & Enforcement: Start Date		2010	n/a
Modification/Termination		Yes	n/a
Modification/Termination: Start Date		2040	n/a
Type of Site		Transferring Government Installation	n/a
Monitoring & Enforcement			
Required Parameters			
Duration of Monitoring/Enforcement		30	Years
Notice Letters		No	n/a
Guard Service/Security		No	n/a
Reports & Certifications		Yes	n/a
Reports & Certifications: Frequency		Annually	n/a
Site Visits/Inspections		No	n/a
Modify/Termination			
Required Parameters			
Document Evaluation		Yes	n/a
Document Evaluation: Number		1	EA
Document Evaluation: Plan Complexity		Low	n/a
Modify LUC Documents		Yes	n/a
Modify LUC Documents: Number		1	EA
Modify LUC Documents: Plan Complexity		Low	n/a
Amend Decision Documents		Yes	n/a
Amend Decision Documents: Number		1	EA
Amend Decision Documents: Plan Complexity		Low	n/a
Termination Letters		Yes	n/a
Termination Letters: Number		1	EA
Termination Letters: Plan Complexity		Low	n/a

Estimate Documentation Report

Comments:

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM #1
Description: Site close out documentation and well abandonment.

Start Date: October, 2010
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate

Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
Site Close-Out Documentation	Yes	100	0
Well Abandonment	Yes	100	0

Total Marked-up Cost: $79,666

Technologies:

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Meetings		Yes	n/a
Work Plans and Reports		Yes	n/a
Documents		Yes	n/a
Site Close-Out Complexity		Moderate	n/a
Meetings			
Required Parameters			
Kick Off/Scoping Meetings		Yes	n/a
Kick Off/Scoping Meetings: Number of Meetings	1	2	EA
Kick Off/Scoping Meetings: Travel		Yes	n/a
Kick Off/Scoping Meetings: Travelers		2	EA
Kick Off/Scoping Meetings: Days		5	Days
Kick Off/Scoping Meetings: Air Fare		0	$
Review Meetings		Yes	n/a
Review Meetings: Number of Meetings	1	2	EA
Review Meetings: Travel		No	n/a
Regulatory Review Meetings		Yes	n/a
Regulatory Review Meetings: Number of Meetings	1	2	EA
Regulatory Review Meetings: Travel		No	n/a
Work Plans & Reports			
Required Parameters			
Work Plans		Yes	n/a
Draft Work Plan		Yes	n/a
Final Work Plan		Yes	n/a
Reports		Yes	n/a
Draft Close-Out Report		Yes	n/a
Draft Final Close-Out Report		Yes	n/a
Final Close-Out Report		Yes	n/a
Progress Reports		Yes	n/a
Project Duration	10	10	months
Documents			
Required Parameters			

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
Documents			
Required Parameters			
Draft Decision Document		Yes	n/a
Draft Final Decision Document		Yes	n/a
Final Decision Document		Yes	n/a
Long Term Document Storage		Yes	n/a
Number of Boxes		6	EA
Duration of Storage		30	Yrs

Comments:

Technology Name: **Well Abandonment (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Safety Level		D	n/a
Abandon Wells			
Required Parameters			
Technology/Group Name		Well Group	n/a
Number of Wells		12	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a

Comments:

MEMORANDUM FOR RECORD

SUBJECT: Environmental Liabilities **Date:** 13 January 2009

This memorandum serves as formal documentation of the information used to develop the Cost-To-Complete (CTC) estimate for the 2009 data call. Since this site is a Military Munitions Rule site, the total costs reported have been captured in an Ordnance and Explosives Engineering Evaluation/Cost Analysis, (OE EE/CA).

Site: SEAD-007-R-01, Rifle Grenade Range

Source:

1. Final Ordnance and Explosives Engineering Evaluation/Cost Analysis, January 2004.
2. Completion Report, Munitions Response and CERCLA Closure, SEAD-002-R-01, SEAD 57, SEAD 46, and SEAD 007-R-01, April 2007

Phase: LTM will be an Institutional Control in perpetuity. Initial duration is 30 years for a recurring review every 2 years.

Cost Summary SEAD-007-R-01

LTM	
OE Review site visits from EECA $1,719/visit for 15 visits	$25,783
Total Site Cost	**$25,783**

Cost Increase > 10% from 2008 Report? No

Prepared by: Randall Battaglia _____ 11 MAR 09
Signature Date

Reviewed by: Stephen M. Absolom _____ 11 MAR 09
Signature Date

FINAL

ORDNANCE AND EXPLOSIVES ENGINEERING EVALUATION/ COST ANALYSIS REPORT

SENECA ARMY DEPOT ROMULUS, SENECA COUNTY, NEW YORK

Prepared For:

SENECA ARMY DEPOT ACTIVITY
and
U.S. ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT
and
HUNTSVILLE CENTER

Contract No. DACA87-95-D-0018
Delivery Order No. 0052

Prepared By:

PARSONS ENGINEERING SCIENCE, INC.
100 SUMMER ST
BOSTON, MA 02110

JANUARY 2004

EXECUTIVE SUMMARY

ES1 The 10,587-acre Seneca Army Depot Activity (SEDA) facility was constructed in 1941 and has been owned by the United States Government and operated by the Department of the Army since that date. From its inception in 1941 until 1995, SEDA's primary mission was the receipt, storage, maintenance, and supply of military items, including munitions and equipment. The Depot's mission changed in early 1995 when the Department of Defense (DOD) recommended closure of the Seneca Army Depot under its Base Realignment and Closure (BRAC) process. This recommendation to close Seneca Army Depot Activity was approved by Congress on September 28, 1995 and the Depot was officially closed in July 2000.

ES2 In accordance with the requirements of the BRAC process, the Seneca County Board of Supervisors established the Seneca Army Depot Local Redevelopment Authority (LRA) in October 1995. The primary responsibility assigned to the LRA was to plan and oversee the redevelopment of the Depot. The Reuse Plan and Implementation Strategy for Seneca Army Depot was adopted by the LRA and approved by the Seneca County Board of Supervisors on October 22, 1996. Under this plan and subsequent amendment, areas within the Depot were classified as to their most likely future use. These areas included: housing, institutional, industrial, an area for the existing navigational LORAN transmitter, recreational/conservation, and an area designated for a future prison.

ES3 In July of 1998, the U.S. Army Corps of Engineers (USACE) conducted a site visit and historical data collection effort. The findings are documented in the Archives Search Report (ASR). The ASR initially subdivided the depot into 27 Areas of Interest (AOIs) for ordnance contamination based on physical attributes, homogeneity, and current and historical land use. The ASR evaluated each AOI to determine whether the area should or should not be investigated for ordnance and explosives/ unexploded ordnance (OE/UXO). Each AOI was classified as requiring further investigation or not requiring further investigation based on a review of historical documents, aerial photography, and employee interviews. Most of the AOIs were also visited by USACE to determine whether any traces of OE were readily apparent.

ES4 The ASR classified 15 of the areas as uncontaminated. Subsequently, one of the areas recommended for further investigation, SEAD-43, was classified as a no further action site after a geophysical and intrusive investigation in 1999. The remaining 11 AOIs discussed in the ASR were classified as sites where OE might present a safety risk. This Engineering Evaluation and Cost Assessment project was undertaken in order to determine the nature and extent of possible OE contamination at these sites.

ES5 The EE/CA fieldwork used geophysical survey techniques and intrusive investigations to estimate the density of the ordnance in different areas, which was then compared with the current and future activities and anticipated users. Data collected from this characterization project were also used to develop alternatives designed to reduce the risk of possible exposure to UXO within AOIs. These alternatives were then evaluated to determine their effectiveness, implementability, and cost.

ES6 Results of this comparison indicate that there are portions of SEDA where alternatives requiring removal of UXO will be necessary to ensure public safety. The results also indicate that implementation of site-wide institutional controls will be necessary to manage residual risk. Several AOIs within SEDA will not require any OE removal operations to make the property safe for the proposed future uses.

ES7 OE response action alternatives were evaluated for each of the 11 AOIs at SEDA that were investigated during this EE/CA investigation. Each potential alternative was initially screened against the general evaluation criteria of effectiveness, implementability, and cost. The screening of alternatives was used to identify candidate OE response alternatives for further qualitative evaluation. Each of the alternatives remaining after this screening were then compared to each other as far as effectiveness, implementability, and cost. Once the remaining alternatives at each AOI had been compared, one alternative was chosen as the most appropriate response to the existing OE hazard.

ES8 The following response actions have been chosen for the AOIs investigated during the Seneca OE EE/CA:

- NFA – SEAD-53 (Igloo Area) ditches, Demo Range, Indian Creek Burial Area. These sites are no longer under consideration as ordnance sites
- Institutional Controls – Base wide, no individual areas
- Clearance to Depth of 6" – SEADs-16 and –17 (Deactivation Furnaces), EOD Area #2
- Clearance to Depth of Instrument Detection – EOD Area #3, SEAD-44A (QA Function Test Area), SEAD-46 (3.5" Rocket Range), Grenade Range
- Clearance to Depth by Means of Excavation and Mechanical Sorting – SEAD-45 (Open Detonation Area), SEAD-57 (Former EOD Range)

Complete descriptions of each of these alternatives are contained in Section 7.

Table G-23
SEAD-4 (3.5" Rocket Range)
Cost Estimate for Alternative 3:
Clearance to 6"

This estimate assumes:
Clearance to 6" of 370 acres in SEAD-45
A 700' x 700' fence surrounding the demo berm in SEAD-57

Item	Unit	Unit Cost	Amount	Initial Cost	Life Cycle Cost (30 yrs)	Total Cost
UXO Clearence to 6"[1]	acre	$3,400	370	$1,258,000	$0	$1,258,000
UXO Sweep Contractor[2]	linear feet	$2	5,700	$11,400	$0	$11,400
Fencing Installed[3]	linear feet	$10	5,700	$57,000	$171,000	$228,000
Signs Installed	1 sign (per 500' of fence)	$93	11	$1,060	$6,840	$7,900
A-E Field Oversight		15% of UXO Clearance/IC		$199,119	$0	$199,119
A-E Project Management		8% of UXO Clearance/IC		$106,197	$0	$106,197
Moderate Brush Cutting[4]	acre	$426	185	$78,810	0	$78,810
Heavy Brush Cutting[4]	acre	$603	185	$111,555	0	$111,555
			Subtotal:	$1,711,586	$177,840	$1,889,426
CEHNC Oversite		15% of subtotal		$256,738	$0	$256,738
					Total Cost Estimate:	$2,146,164
					Contingency (25%):	$536,541
						$2,682,705
					Cost per. Acre =	*$6,464*

Assumptions
[1]Cost for UXO clearance includes all ODC and mobilization costs, and equipment
[2]Estimate includes surface sweep of area to be performed prior to having fence installed
[3]Cost to install fencing is $10 per linear foot of 8 foot chain link with three strands of barbed wire
[4]Brush cutting costs taken from ECHOS 1996 and adjusted for inflation using Engineering News Record Construction Cost Index History

Table G-24
Seneca Army Depot Activity
Costs for Recurring Reviews
30 Year Period

Reviews
30 yr duration
Every 2 yrs for all sites

This estimate assumes:
Recurring review Depot wide every 2 years
2 man crew on site for 4 days
Report to be files upon completion of review

Item	Unit	Unit Cost	Amount	Per Review Cost	Total Cost	(30 yrs)[1]
Mob/Demob		$1,500	2	$3,000		$18,427
Per Diem	day	$124	8	$992		$6,093
Reviewers (2)	hour	$65	100	$6,500		$39,924
A-E Field Oversight		15% of UXO Clearance/IC		$1,574		$9,667
A-E Project Management		8% of UXO Clearance/IC		$839		$5,155
			Subtotal:	$12,905		$79,266
CEHNC Oversite		15% of subtotal		$1,936		$11,890
					Total Cost Estimate:	$91,156
					Contingency (25%):	$22,789
						$113,944

$113,944 F.Y. 04 Cost
1.1314 ESCALATION FACTOR
128,916 F.Y. 09 Cost

$128,916 / 5 sites = $25,783/site

$25,783 / 15 site visits = $1,719 per site visit
Every 2 years for 30 years.

Assumptions
[1]30 Year costs assume present value costs with a discount factor of 7%

COMPLETION REPORT

MUNITIONS RESPONSE

SEAD 002-R-01, SEAD 57, SEAD 46 AND SEAD 007-R-01

SENECA ARMY DEPOT ACTIVITY,
ROMULUS, NEW YORK

April 2007

Prepared by:

PARSONS
150 Federal Street
Boston, MA 02110

TABLES OF CONTENTS

3.0 ORDNANCE AND EXPLOSIVES DEMILITARIZATION AND DISPOSAL

All MD and scrap metal items collected by UXO technicians on a daily basis were transferred to a staging area, inspected by both the SUXOS and UXO QC Supervisor, and placed into a locked storage area for temporary storage. Additional inspections were performed by the Senior UXO Supervisor (SUXOS), and again by the Senior QC (UXOQCS) Supervisor prior to being transferred to drums where a 1348-1A form was issued, Section 3.2 describes the final disposal procedures for all explosives and MD scrap metal

3.1 INTENTIONAL DETONATIONS

Demolition operations for MPPEH were conducted at the Open Detonation Hill (OD) to the north of the former Open Burning Grounds (OBG). In accordance with "Procedures for Demolition of Multiple Rounds (Consolidate Shots) on UXO Sites", dated August 1998 and approved by DDESB on 27 October 1998. Explosives Consumption Records are included in Appendix D. A table showing the suspected MPPEH items and the date they were vented is included as Table 2-2. Venting with a shape charge was used to distinguish MEC from MD.

All demolition explosives were transferred from the Army to Parsons/USA Environmental and kept in a secure storage bunker provided by the Army. All explosives were inspected weekly while in storage and transported in accordance with the State of New York's Department of Labor, Industrial Rule 39 and the Department of Treasury, Bureau of Alcohol, Tobacco, and Firearms (ATF) regulations.

3.2 OTHER DEMILITARIZATION PROCEDURES

All projectiles and intact MD were demilitarized by either explosive venting or by the removal/deformation of the rotating bands and fuse wells following inspections.

Following venting of all MPPEH items, thermal treatment of small arms, and/or physical demilitarization procedures, all items were disposed of off-site. A total of 4,180 pounds of cultural debris scrap metal, 618 pounds of aluminum MD and 2,689 pounds of ferrous MD scrap metal was disposed off-site. A 1348-1A form, chain of custody form, and certificate of destruction for this material is included in Appendix D.

Demobilization

Demobilization occurred in November 2006 following completion of the 10% QC inspection for all six sites.

3.3 CONCLUSIONS

Between May 2006 and November 2006, Parsons performed munitions removal operations in accordance with the ESS requirements. In general, the results of the munitions removal project performed at Seneca Amy Depot for SEAD 46, SEAD 57, SEAD 007-R-01 and SEAD 002-R-01 indicate that all MPPEH has been cleared from these sites. A total of two of the 11,739 identified anomalies which were investigated were found to be MEC. This indicates that these sites were free of MEC with the exception of an area north of SEAD 57 buffer area and not part of this project. The

Army believes that no additional munitions response activities are required at these sites. The conclusions from each individual site are provided below.

SEAD 57 (Former EOD Range) and the SEAD-57 Buffer Area

The only MEC items encountered during this project were found north of SEAD 57 including one fused unfired 37mm projectile in Grid 57 K-16 and one MKII grenade located in 57K-18 as shown on Figure 1-4c. Most ferrous MD items at SEAD 57 were found north of Building T011 and were not found within the high density 1,000 foot kick out radius from the SEAD 57 berm. Figure 1-4c identifies all ferrous and aluminum MD items that were recovered as part of the SEAD 57 investigation. The ferrous MD items are shown in this figure. The pattern of the aluminum MD clearly radiates out from the center of the SEAD 57 berm in a circular pattern. The 43 other MPPEH items (listed on Table 2-2) found at SEAD 57 were all determined to be MD upon venting of the items during the disposal process. SEAD 57 is considered cleared of MPPEH.

SEAD 46 (Former 3.5-inch Rocket Range)

During the investigation of SEAD 46, 22 MPPEH items were found from the 1,611 geophysical anomalies investigated. All 22 items were found to be MD after they were vented. No MEC items were found at SEAD 46. The locations of the MD suggest that the SEAD 46 berm was not used as a target for anything other than small arms practice. The MD items are actually found in areas located away from the berm. Based on the discovery of inert landmines and a sign that identifies the area as a practice minefield for EOD and military training exercises, this was most likely the use of the site. There is no evidence that it was used as a rocket range as previously identified. Based on the results of the past three investigations SEAD 46 is considered cleared of MPPEH.

SEAD 002-R-01 (EOD Areas 2 and 3)

Two MPPEH items (an electric Squibb) were found at EOD Area 2 and it was later determined to be expended. The second item, a M16 APERS, was found by the survey team conducting a boundary survey of the pond low water mark. This item was found without a fuse but due to the mud and debris that filled the case, the item was vented to dispose of any explosive residue that may have remained. It was determined to be inert. At EOD Area 3, no MPPEH items were found during the geophysical anomaly investigation or the expanded handheld investigation of the unmapped area. SEAD 002-R-01 is considered cleared of MPPEH.

SEAD 007-R-01 (Grenade Range)

During the anomaly investigation of the Grenade Range, a total of 221 MPPEH items were found. All MPPEH were related to the M73 Practice LAW Rocket. The 40mm practice grenade found at this site has an inertia driven expelling system with no explosive material. The M73 Practice LAW Rocket has a 1.5 gram spotting charge. The 1.5 gram spotting charge is designed to produce only a flash, smoke, and noise at the time of impact initiated by an inertia driven firing pin. Of the 221 M73 Sub-caliber rounds found, none were found to have the rocket motor intact, all had been functioned previously. Based on these reasons, all of the MPPEH items were reclassified as MD. All 221 of

these rounds were brought to the demolition area and disposed of by detonation. SEAD 007-R-01 is considered cleared of MPPEH.

Local Training Areas

Six individual MD items were found in the Local Training Areas B through L. The items were 37mm and 57mm TPT (target practice) rounds that contained no explosives. The remaining MD items were all small arms ammunition (50 cal.) both ball and incendiary ammunition that were thermally treated before disposal. The Local Training Areas B-7 through L-7are considered free of MPPEH.

MEMORANDUM FOR RECORD

SUBJECT: Environmental Liabilities **Date:** 12 January 2009

This memorandum serves as formal documentation of the information used to develop the Cost-To-Complete (CTC) estimate for the 2009 data call. A Performance Based contract was procured to take this site to Response Complete. All planned costs for groundwater monitoring for 5 years and one Five Year Review have been captured in the PBC contract. No further monitoring or review costs beyond that are anticipated. The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of the Site Closeout.

Site: SEAD-4 (Munitions Washout Facility) and SEAD-38 (Boiler Blowdown Pit). NOTE: Sead-38 is now included with SEAD-4 project. The boiler house and blowdown pit are located within the Munitions Washout Facility complex at Building 2079 and will be addressed with the PBC remediation contract for this site.

Source:
1. Record of Decision Munitions Washout Facility (SEAD-4) and Building 2079 Boiler Blowdown Pit (SEAD-38) August 2008
2. Contract FA8903-04-D-8675. 20 Jun 2006
3. Corps of Engineers S&A letter dated 13 March 2008
4. RACER estimate for Site Closeout based on professional judgment and site knowledge
5. Corps of Engineers email, John Nohrstedt, Subject: Contracting Cost

RACER Assumptions:

Site Closeout Documentation (LTM):
1. Site Closeout is moderate complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports—all default values
4. Documents will be stored for 30 years.

Well Abandonment (LTM phase):
1. Number of wells: 13
2. Depth of wells: 15 feet
3. Diameter of wells: 2"
4. Unconsolidated
5. Overdrill/removal

Cost Summary **SEAD-4**

LTM

Site Closeout & Well Abandonment (RACER)	$78,252
Corps of Engineers oversight: (78,252 x 0.058)	4,539
Corps of Engineers Support:	
Contracting Procurement	3,000
Contract Monitoring	5,000
Contract Closeout	500
Total Site Cost	**$91,291**

Cost Difference > 10% from 2008 Report? Yes

Reason: RACER Update and Procurement Cost added.

Prepared by: Randall Battaglia _____ 11 MAR 09
Signature Date

Reviewed by: Stephen M. Absolom _____ 11 MAR 09
Signature Date

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

CERM-P (37)

13 MAR 2008

MEMORANDUM FOR MAJOR SUBORDINATE COMMANDS (MSC)

SUBJECT: Fiscal Year (FY) 2008 Supervision and Administration (S&A) Rate Changes

1. References:

a. CERM-P memorandum, 27 July 2005, Subject: S&A Accounting Procedures for Modularity Projects.

b. CERM-P memorandum, 20 September 2006, Subject: FY 2006 S&A Rate Changes.

2. Effective 1 April 2008 the Operation and Maintenance (O&M) and the Defense Environmental Restoration Program (DERP) S&A rate for the Continental United States (CONUS) is reduced for new Fiscal Year 2008 (FY08) contract awards from six and one-half percent to five and eight-tenths percent. The intent of this change is to adjust the S&A rate to match the current expense and income activity; the level of service or effort should remain unchanged. Any O&M losses to your S&A checkbook that result from the rate change will be reimbursed from the national S&A account. The Major Subordinate Command (MSC) maximum checkbook carryover will be increased to three months' expense and reflected in the next update to the consolidated command guidance.

NEW S&A RATE

3. The one percent furniture rate in reference "a" was not intended to be restricted to modularity projects. It may be used for any MILCON or O&M project. This change in the O&M rate does not affect modularity/relocatable projects as they continue to be charged the MILCON rate per reference "a".

CERM-P (37)
SUBJECT: FY 2008 Supervision and Administration (S&A) Rate Changes

4. Since these changes significantly affect S&A schedules the FY08 S&A performance will be measured against your mid-year schedules due 25 April 2008. Special instructions are provided in the enclosed standing operating procedures to assist in implementation of these changes. These changes will be codified in the next update to the consolidated command guidance.

5. Point of contact for this action is Mr. Philip Blount, CERM-P, (202) 761-8908.

FOR THE COMMANDER:

Encl

Wesley C. Miller
Director of Resource Management

Absolom, Stephen M Mr CIV USA

From: Nohrstedt, John HNC [John.Nohrstedt@usace.army.mil]
Sent: Monday, January 12, 2009 4:18 PM
To: Absolom, Stephen M Mr CIV USA
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Cost per year for contracting to monitor a contractor:
5 hrs/month X 12 months = 60 hrs
Approximately $5,000 to $7,000

Contract Monitoring

Cost for contracting Task Order Close out:
Firm Fixed Price - 5 to 10 hrs - Approx. $500 to $1000
Cost Plus - 10 to 25 hrs - Approx. $1000 to $2,500

Contract Close out

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA [mailto:stephen.m.absolom@us.army.mil]
Sent: Monday, January 12, 2009 8:07 AM
To: Nohrstedt, John HNC; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,
What will the cost per year be to monitor the TO if it is a multiple year task order.
Also need to a cost for TO Close out.
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362
-----Original Message-----
From: Nohrstedt, John HNC [mailto:John.Nohrstedt@usace.army.mil]
Sent: Friday, January 09, 2009 12:35 PM
To: Absolom, Stephen M Mr CIV USA; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Below are the man-hours to prepare and issue a simple task order:

Prepare SOW and IGE	- 6 to 10 hrs
Review	- 0.5 to 2 hr
Issue RFP	- 2 to 3 hrs
Review Proposal	- 2 to 4 hrs
Tech Evaluation	- 4 to 8 hrs
Negotiation	- 2 to 4 hrs
Review Revised Proposal	- 2 to 3 hrs
Tech Eval. of revised	- 0.5 to 2 hrs
Issue Award	- 4 to 6 hrs

TOTAL - 23 to 42 hours

The cost would be approximately $3,000 to $5,000. Procurement Cost

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA
[mailto:stephen.m.absolom@us.army.mil]
Sent: Friday, January 09, 2009 9:14 AM
To: Battaglia, Randy W NAN02; Nohrstedt, John HNC
Subject: Contracting Cost

Steve,
I am starting to update my CTC for this year. One area not preivously included in the costing is the establishment of a new Task/Delivery order. Can you give me a Cost to be included in my CTC for the COE to prepare and issue a task order? Please note that your email will be included in the CTC file so it needs to be accurate as possible.

Thanks
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362

RECORD OF DECISION

FOR

THE MUNITIONS WASHOUT FACILITY (SEAD-4) AND THE BUILDING 2079 BOILER BLOWDOWN PIT (SEAD-38)

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

Prepared for:

SENECA ARMY DEPOT ACTIVITY
5786 STATE ROUTE 96
ROMULUS, NEW YORK 14541

and

AIR FORCE CENTER FOR ENGINEERING AND THE ENVIRONMENT
3300 SIDNEY BROOKS, BUILDING 532
BROOKS CITY-BASE, TX 78235-5122

Prepared By:

PARSONS
150 Federal St., 4th Floor
Boston, Massachusetts 02110

Contract Number: FA8903-04-D-8675
Task Order: 0031
CDRL: A001C
EPA Site ID: NY0213820830
NY Site ID: 8-50-006

August 2008

1.0 DECLARATION OF THE RECORD OF DECISION

Name and Location of Areas of Concern (AOCs)

The Munitions Washout Facility (SEAD-4) and the Building 2079 Boiler Blowdown Pit (SEAD-38)
Seneca Army Depot Activity
5786 State Route 96
Romulus, New York 14541
EPA Site ID: NY0213820830; NY Site ID: 8-50-006

Statement of Basis and Purpose

This Record of Decision (ROD) documents the U.S. Army's (Army's) and the U.S. Environmental Protection Agency's (EPA's) selection of a remedy for the Munitions Washout Facility (SEAD-4) and the Building 2079 Boiler Blowdown Pit (SEAD-38) located in the Seneca Army Depot Activity (SEDA), Romulus, New York. The remedies selected for the two Areas of Concern were chosen in accordance with the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA), 42 U.S.C. Section 9601, *et seq.* and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300. The Base Realignment and Closure (BRAC) Environmental Coordinator, the Chief of the Consolidations Branch, BRAC Division, and the Director of Emergency and Remedial Response Division of EPA Region II have been delegated the authority to approve this ROD.

This ROD is based on the Administrative Record that has been developed in accordance with Section 113(k) of CERCLA. The Administrative Record is available for public review at the Seneca Army Depot Activity, 5786 State Route 96, Building 123, Romulus, NY 14541. The Administrative Record Index identifies each of the items considered during the selection of the remedial actions. This index is included in **Appendix A**.

The New York State Department of Environmental Conservation (NYSDEC) was consulted on the planned remedies in accordance with CERCLA Section 121(f), 42 U.S.C. Section 9621(f) and concurred with the selected remedial action. The NYSDEC concurrence letter is included in **Appendix B**.

AOC Assessment

The response actions selected in this ROD are necessary to protect human health and the environment from actual or threatened releases of hazardous substances into the environment from SEAD-4 and SEAD-38 (hereafter referred to as SEAD-4/38), or from actual or threatened releases of pollutants or contaminants, which may present an imminent and substantial endangerment to public health or welfare.

Description of the Selected Remedy

The selected remedy for SEAD-4 addresses contaminated soil, ditch soil, and lagoon soil. The selected remedy would result in the elimination of soil, ditch soil, and lagoon soil as media of concern for potential receptors. The selected remedy for SEAD-4 includes the following components:

- Excavating ditch soil until the cleanup goal (60 mg/kg) for total chromium (hereafter referred to as chromium) is reached;
- Excavating surface and subsurface soils until the cleanup goals for lead and chromium (167 mg/kg and 60 mg/kg, respectively) are achieved;
- Dewatering the man-made lagoon and allowing water to drain into the existing drainage ditches outside the excavation areas;
- Once the lagoon is empty, excavating soil from the man-made lagoon until the chromium cleanup goal of 60 mg/kg is achieved;
- Removing the temporary berm at the end of the lagoon and allowing the man-made lagoon to return to its natural condition;
- Stabilizing soils, ditch soil, and lagoon soil exceeding the waste characterization criteria listed in 40CFR261.21 through 40CFR261.24;
- Disposing the excavated soils in an off-site licensed landfill;
- Backfilling excavation areas that cannot be graded to promote positive drainage and excavation areas deeper than 4 feet near the road or buildings as necessary with clean backfill that meets the cleanup goals for chromium and lead, the residual metal concentrations at SEAD-4 for other metals, and the NYSDEC Unrestricted Use Soil Cleanup Objectives (SCOs) for SVOCs; and
- Submitting a Completion Report once the remedial action is completed.

The following actions were previously identified as part of the proposed remedy in the Proposed Plan, but have now been completed as a result of interim actions that have already been undertaken at SEAD-4:

- Removing, characterizing, and disposing of debris located in vacant Buildings 2073, 2076, 2078, 2084, and 2085, and sweeping and vacuuming building floors; and
- Demolishing Building 2079.

These above-referenced actions have been successfully completed at SEAD-4 and the detailed discussion of what was done and the results of the interim actions are presented in Section 3 and Section 6, respectively.

The selected remedy for SEAD-38 is excavation of the hot spot soil SD4-28 with vanadium concentrations greater than 150 mg/kg.

At the completion of the selected remedies for SEAD-4 and SEAD-38, the AOCs would be suitable for unrestricted uses and unlimited exposures.

State Concurrence

NYSDEC forwarded to EPA a letter of concurrence regarding the selected remedies for SEAD-4 and SEAD-38. This letter of concurrence has been placed in **Appendix B.**

µg/kg. The 95% UCLs for benzo(a)pyrene and dibenz(a,h)anthracene are above the Region IX Residential PRGs but are below the NYSDEC Unrestricted Use SCOs. The above compounds with NYSDEC Unrestricted Use SCO exceedances or EPA Region IX Residential PRG exceedances do not pose significant risks to either human health (including potential residents) or the environment.

Subsurface soil is generally less contaminated compared with surface soil. As shown in **Table 4**, with the exception of the polycyclic aromatic hydrocarbons (PAHs), the 95% UCLs for total soil are generally less than the 95% UCLs for surface soil. The 95% UCLs of PAHs in total soil are all below the NYSDEC Unrestricted SCOs.

2004 SEAD-4 Test Pitting Results

A total of 11 samples were collected from SEAD-4 during the 2004 test pitting activity to verify the presence/absence of a PCB source area around MW4-10. All samples were analyzed for PCBs and one sample (TP4-4-04) was also analyzed for VOCs, SVOCs, pesticides, and metals.

PCBs were not detected in any of the samples collected. Several PAHs were detected above the NYSDEC Unrestricted Use SCOs or/and EPA Region IX Residential PRGs; the observed concentrations were generally consistent with the concentrations observed in soil at other SEAD-4 locations.

Drainage Ditch Soil Investigation

The ditch soil results are summarized in **Table 5**. A total of 50 ditch soil samples were collected at the depth intervals of 0-2 or 0-6 inches bgs. from the drainage ditches at SEAD-4/38. Each of the ditch soil samples was analyzed for VOCs, SVOCs, pesticides, PCBs, explosives, and metals. Six ditch soil samples were also analyzed for herbicides. The 95% UCLs for limited compounds were above the NYSDEC Unrestricted SCOs or/and the EPA Region IX Residential PRGs; with the exception of chromium, none of these compounds pose significant risks to human health or the environment.

The highest ditch soil concentrations of PAHs and metals such as iron and vanadium were detected in the samples collected from locations within the drainage ditch at the northern edge of the AOCs. The maximum chromium concentration (4,800 mg/kg) was detected in the drainage ditch located to the southwest of Building T30.

Groundwater

13 WELLS to CLOSE

Groundwater samples were collected from thirteen monitoring wells during the ESI, RI, and 2004 sampling events at SEAD-4. The maximum concentrations were compared to federal and state criteria including New York State Class GA Groundwater Standards and federal Maximum Contaminant Levels (MCLs). The groundwater results from the ESI (1994) and RI (1999) investigations at SEAD-4 are presented in **Tables 6A** and **6B**, respectively.

The extent of SEAD-38 is comparatively small, and it is fully surrounded by land and activities that comprise SEAD-4. There are no groundwater wells located within the bounds of SEAD-38; the closest upgradient and downgradient wells are roughly 200 to 400 feet beyond the bounds of SEAD-38 and within the bounds of SEAD-4. Based on the soil data collected within SEAD-38 bounds, the nature of the

SEAD-38 operations (boiler blowdown), and the groundwater results from the adjacent wells, it is concluded that SEAD-38 groundwater is not impacted.

SEAD-4 groundwater results are discussed in detail below.

ESI and RI Results

Nine metals (i.e., antimony, beryllium, cadmium, chromium, iron, manganese, selenium, sodium and thallium) were detected in at least one groundwater sample at concentrations that exceeded their respective NYSDEC Class GA Ambient Water Quality Standards (AWQSs) or federal MCL values. Antimony results from three samples, collected from three different wells exceeded the State's GA standard, but none of these exceedances were repeated during subsequent sampling events at the same well. Similarly, vanadium results for three samples collected during the March/April RI sampling event exceeded the State's GA vanadium standard, but these exceedances were not confirmed during the July 1999 RI sampling event. For beryllium and cadmium, there was only one exceedance, which was observed at MW4-3 during the ESI; beryllium or cadmium was not detected in this same well (i.e., MW4-3) during the two rounds conducted in 1999. The maximum chromium concentration (260 µg/L) was observed at MW4-9 in March 1999; the chromium concentration detected at this same well in July 1999 was below the NYSDEC GA Standard (21.8 µg/L vs. 50 µg/L). The chromium concentrations detected in all the other wells at SEAD-4 were below the GA Standard.

Concentrations of benzene, ethylbenzene, 4-nitrotoluene, and nitrobenzene exceeded their respective NYSDEC GA Standards during the RI sampling event. However, these compounds were only detected in one monitoring well (i.e., MW4-10) during one round of sampling (March 1999). None of these SVOCs were detected in MW4-10 or any other groundwater monitoring wells during the second round of groundwater sampling in July 1999 or during the ESI sampling event. Further, the concentrations of these compounds in SEAD-4 groundwater do not pose significant risk to potential receptors.

Aroclor-1260 was detected in July 1999 at 0.079 µg/L in MW4-10. The detected concentration was lower than the NYSDEC GA Standard, which is 0.09 µg/L for the sum of PCBs.

2004 Additional Investigation Groundwater Results

The 2004 analytical results indicated that PCBs were not present in the well MW4-10, where Aroclor-1260 was detected in July 1999 at 0.079 µg/L. Based on these results, Aroclor-1260 is not considered present in groundwater at SEAD-4/38.

Surface Water

Table 7A and **Table 7B** summarize comparison of the SEAD-4/38 surface water concentrations and the NYSDEC AWQSs values for Class C surface water for the 1993 ESI sampling event and 1998 RI sampling event, respectively.

Benzo(a)pyrene was detected during the RI in a single surface water sample collected from location SW4-13, which was within the east-west trending drainage ditch located near the northern boundary of SEAD-4/38. The detected concentration was above the NYSDEC guidance value of 0.0012 µg/L, which is based

Estimate Documentation Report

System:

RACER Version: 10.2.0
Database Location: C:\Documents and Settings\Andy W\Application Data\Earth Tech\RACER 10.2\Racer.mdb

Folder:

Folder Name: Seneca

Project:

Project ID: SEAD-4
Project Name: SEAD-4
Project Category: Training Area

Location
State / Country: NEW YORK
City: SENECA ARMY DEPOT

Location Modifier	Default	User
	1.114	1.114

Options
Database: System Costs
Cost Database Date: 2009
Report Option: Fiscal

Description

Munitions Washout Facility- Location where munition items were disassembled in addition to other munitions maintenance operations.

Site: SEAD-4, Munitions Washout Facility and SEAD-38 (Boiler Blowdown Pit). NOTE: SEAD-38 is now included with SEAD-4 project. The boiler house and blowdown pit are located within the Munitions Washout Facility complex at Building 2079 and will be addressed with the upcoming PBC remediation contract for this site. As with the other Boiler Blowdown Pits, NFA at SEAD-38 will be proposed following the remediation.

Source:
1. Final Feasibility Study at the Munitions Washout Facility, March 2005
2. RACER estimate for Site Closeout based on professional judgment and on site knowledge.

Estimate Documentation Report

Groundwater Monitoring Assumptions:
Groundwater monitoring cost was calculated based on the cost per year noted in the FS. Duration is for five years of data for the five year review period.

RACER Assumptions:

Site Closeout Documentation (LTM):
1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years
5. Well abandonment includes sub-contractor costs for fieldwork

Estimate Documentation Report

Site Documentation:

Site ID: SEAD-4
Site Name: Munitions Washout Facility
Site Type: None

Media/Waste Type
Primary: Soil
Secondary: N/A

Contaminant
Primary: Metals
Secondary: None

Phase Names
SI: ☐
RI/FS: ☐
RD: ☐
IRA: ☐
RA(C): ☐
RA(O): ☐
LTM: ☑
Site Closeout: ☐

Documentation
Description: SEAD-4 Munitions Washout Facility
SEAD-38- Boiler Blowdown Pits at SEAD-4.
Support Team: Stephen M. Absolom- SEDA BEC
Janet R. Fallo- US Army Coprs of Engineers, Project Engineer

Estimate updated to FY09 Cost Basis, 20 Jan 2009
References: Source:
1. Draft Record of Decision Munitions Washout Facility (SEAD-4) and Building 2079 Boiler Blowdown Pit (SEAD-38) August 2007
2. RACER estimate for Site Closeout based on professional judgment and on site knowledge.

Estimator Information
Estimator Name: Andrew Weinberg
Estimator Title: Senior Geologist
Agency/Org./Office: Bechtel-S Corp.
Business Address: 203 E. Milton St.
Austin, TX 78704
Telephone Number: 512-344-9657
Email Address: aweinberg@bechtel-s.com
Estimate Prepared Date: 01/20/2009

Estimator Signature: _____ **Date:** _____

Estimate Documentation Report

Reviewer Information

Reviewer Name: Steve Absolom
Reviewer Title: Installation Manager
Agency/Org./Office: Seneca Army Depot Activity
Business Address: .
Telephone Number: (607) 869-1309
Email Address: stephen.m.absolom@us.army.mil
Date Reviewed: 02/09/2007

Reviewer Signature: _____ **Date:** _____

Estimated Costs:

Phase Names		Direct Cost	Marked-up Cost
LTM		$35,798	$78,252
	Total Cost:	$35,798	$78,252

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM
Description: Site Close-out documentation and well abandonment in last year of LTM

Start Date: October, 2012
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate
Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
Site Close-Out Documentation	Yes	100	0
Well Abandonment	Yes	100	0

Total Marked-up Cost: $78,252

Technologies:

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Meetings		Yes	n/a
Work Plans and Reports		Yes	n/a
Documents		Yes	n/a
Site Close-Out Complexity		Moderate	n/a
Meetings			
Required Parameters			
Kick Off/Scoping Meetings		Yes	n/a
Kick Off/Scoping Meetings: Number of Meetings	1	1	EA
Kick Off/Scoping Meetings: Travel		Yes	n/a
Kick Off/Scoping Meetings: Travelers		2	EA
Kick Off/Scoping Meetings: Days		5	Days
Kick Off/Scoping Meetings: Air Fare		0	$
Review Meetings		Yes	n/a
Review Meetings: Number of Meetings	1	1	EA
Review Meetings: Travel		No	n/a
Regulatory Review Meetings		Yes	n/a
Regulatory Review Meetings: Number of Meetings	1	1	EA
Regulatory Review Meetings: Travel		No	n/a
Work Plans & Reports			
Required Parameters			
Work Plans		Yes	n/a
Draft Work Plan		Yes	n/a
Final Work Plan		Yes	n/a
Reports		Yes	n/a
Draft Close-Out Report		Yes	n/a
Draft Final Close-Out Report		Yes	n/a
Final Close-Out Report		Yes	n/a
Progress Reports		Yes	n/a
Project Duration	10	10	months
Documents			
Required Parameters			

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
Documents			
Required Parameters			
Draft Decision Document		Yes	n/a
Draft Final Decision Document		Yes	n/a
Final Decision Document		Yes	n/a
Long Term Document Storage		Yes	n/a
Number of Boxes		2	EA
Duration of Storage		30	Yrs

Comments:

Technology Name: **Well Abandonment (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Safety Level		D	n/a
Abandon Wells			
Required Parameters			
Technology/Group Name		Well Group	n/a
Number of Wells		13	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a

Comments:

MEMORANDUM FOR RECORD

SUBJECT: Environmental Liabilities **Date:** 13 January 2009

This memorandum serves as formal documentation of the information used to develop the Cost-To-Complete (CTC) estimate for the 2009 data call. The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of 5-year reviews, site close out, and LUCs. Groundwater monitoring cost obtained from the Performance Based Contract. The LTM phase began 200705 and LTM is in year 3 of 10 year commitment. Seven years remain. Groundwater monitoring at SEAD 26 was concluded in March 2007. Corps of Engineer Support will be needed for Contracting and Oversight of G.W. monitoring requirement. There will be two contracting events for the effort.

Site: SEAD-25, Fire Training Area

Source:
1. Final Record of Decision, Fire Training and Demonstration Pad (SEAD 25) and the Fire Training Pit and Area (September 2004)
2. Performance Based Contract SOW Contract #: FA8903-04-D-8675, January 2005
3. Professional judgment based on site knowledge.
4. Final Remedial Design Work Plan and Design Report for SED-25 and SEAD-26, October 2005
5. Work Authorization Document FY08, FY09. (Funding 2nd and 3rd years.)
6. Contract DACA87-02-D-0005, DO 36, August 22, 2007.
7. Copy of Engineer Memo, 13 March 2008, S&A rate.
8. Copy of Engineer email, John Nohrstedt, 12 January 2009, Contracting Cost.

RACER Assumptions:

Five-Year Review (LTM):
1. 4 review cycles
2. Reviews cycle begins June 2006 with first review in 2011
3. Low complexity
4. Tasks include Document Review, Interviews and Site Inspections
5. Report for Five Year Review to include all default parameters

Site Closeout Documentation (LTM):
1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports-- all default values
4. Documents will be stored for 30 years

Well Abandonment (LTM):

1. Number of wells: 30
2. Depth of wells: 15 feet
3. Diameter of wells: 2"
4. Unconsolidated
5. Overdrill/removal

Land Use Controls (second LTM phase)

1. Tasks include Implementation, Monitoring & Enforcement, and Modification/Termination
2. Implementation parameters used are Deed Notification and Restrictive Covenants (all with Low complexity)
3. Monitoring & Enforcement parameters used are Report & Certifications annually
4. Modification/Termination parameters used are Document Evaluation, Modify LUCIP, Amend Decision Documents, and Termination Letters (all with Low complexity)

Cost Summary SEAD-25

LTM			
GW Monitoring (Actual Contract Cost)			$395,570
GW semi-annual monitoring- $23,478/event x 2 events/yr x 7 years= $328,692			
Annual Report- 9,554 /yr x 7 years = $66,878			
5-Year Reviews (RACER)			117,404
$25,788/review for 4 reviews			
Site Closeout (RACER)	Closeout documentation		38,340
	Well abandonment		52,542
Land Use Controls from RACER in perpetuity			318,660
costed for 30 years			
COE Support:			
Contract Procurement		$18,000	
6 events x 3,000/event			
Contract Monitoring		$150,000	
30 years x 5,000/year			
Contract Closeout		$6,000	
6 events x 1,000/event			
			$174,000

S&A

0.058 (GW Cost & Annual Report+ 5 year review + Site Close + Well Abandonment + LUC)

0.058(395,570 + 117,404 + 90,846+318,660) =
0.058 x 1,096,516 = $63,658

Total Site Cost **$1,160,114**

Cost Difference > 10% from 2008 Report? Yes

Reason: RACER update and Corps of Engineer Support added.

Prepared by: Randall Battaglia _____ 11 MAR 09
Signature Date

Reviewed by: Stephen M. Absolom _____ 11 MAR 09
Signature Date

Contract 1

ORDER FOR SUPPLIES OR SERVICES

1. CONTRACT/PURCH. ORDER/ AGREEMENT NO.	2. DELIVERY ORDER/ CALL NO.	3. DATE OF ORDER/CALL (YYYYMMMDD)	4. REQ./ PURCH. REQUEST NO.	5. PRIORITY
DACA87-02-D-0005	0036	2007 Aug 22	W31RYO71375791	

6. ISSUED BY CODE W912DY
US ARMY ENGINEERING & SUPPORT CENTER
CEHNC-CT
4820 UNIVERSITY SQUARE
HUNTSVILLE AL 35816-1822

7. ADMINISTERED BY *(if other than 6)* CODE W912DY
CT-P/ACQUISITION SUPPORT TEAM
ATTN: DEMETRA HILL
256-895-1165
HUNTSVILLE AL

8. DELIVERY FOB
[X] DESTINATION
[ ] OTHER
(See Schedule if other)

9. CONTRACTOR CODE 1BVK6 FACILITY
NAME AND ADDRESS
PARSONS INFRASTRUCTURE & TECHNOLOGY GROU
CHARLES TERHUNE
100 W WALNUT STREET
PASADENA CA 91124

10. DELIVER TO FOB POINT BY (Date) *(YYYYMMMDD)*
SEE SCHEDULE

11. MARK IF BUSINESS IS
[ ] SMALL
[ ] SMALL DISADVANTAGED
[ ] WOMEN-OWNED

12. DISCOUNT TERMS

13. MAIL INVOICES TO THE ADDRESS IN BLOCK
See Item 15

14. SHIP TO CODE W912DY
US ARMY ENGINEERING & SUPPORT CENTER
NO CONTACT SPECIFIED
CEHNC-CT
4820 UNIVERSITY SQUARE
HUNTSVILLE AL 35816-1822

15. PAYMENT WILL BE MADE BY CODE 964145
US ARMY ENG & SUP CENTER - FINANCE OFFIC
US ARMY CORPS OF ENGRS FINANCE CTR
5722 INTEGRITY DRIVE
MILLINGTON TN 38054-5005

MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.

16. TYPE OF ORDER			
	DELIVERY/ CALL	X	This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.
	PURCHASE		Reference your quote dated Furnish the following on terms specified herein. REF:

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR	SIGNATURE	TYPED NAME AND TITLE	DATE SIGNED (YYYYMMMDD)

[X] If this box is marked, supplier must sign Acceptance and return the following number of copies: 1

17. ACCOUNTING AND APPROPRIATION DATA/ LOCAL USE
See Schedule

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/ SERVICES	20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT
	SEE SCHEDULE				

* *If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.*

24. UNITED STATES OF AMERICA
TEL: 256-895-1163
EMAIL: K
BY: KATHERINE.H.ATKINS@hnd01.usace.army.mil
Katherine H. Atkins
CONTRACTING / ORDERING OFFICER

25. TOTAL $116,181.00
26. DIFFERENCES

27a. QUANTITY IN COLUMN 20 HAS BEEN
[ ] INSPECTED [ ] RECEIVED [ ] ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE	c. DATE (YYYYMMMDD)	d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE	28. SHIP NO.	29. DO VOUCHER NO.	30. INITIALS
	[ ] PARTIAL [ ] FINAL	32. PAID BY	33. AMOUNT VERIFIED CORRECT FOR
f. TELEPHONE NUMBER / g. E-MAIL ADDRESS	31. PAYMENT [ ] COMPLETE [ ] PARTIAL [ ] FINAL		34. CHECK NUMBER
36. I certify this account is correct and proper for payment.			35. BILL OF LADING NO.
a. DATE (YYYYMMMDD) / b. SIGNATURE AND TITLE OF CERTIFYING OFFICER			

37. RECEIVED AT	38. RECEIVED BY	39. DATE RECEIVED (YYYYMMMDD)	40. TOTAL CONTAINERS	41. S/R ACCOUNT NO	42. S/R VOUCHER NO.

Long Term Monitoring at the OB Grounds

3.1.3.2.3 (Task 5.0) Third Quarterly Groundwater Monitoring Event.....$16,908

- 3.1.3.2.3.1 (Task 5.1) Water Level Monitoring
- 3.1.3.2.3.2 Task 5.2) Water Quality Monitoring
- 3.1.3.2.3.3 (Task 5.3) Preparation of Quarterly Reports

Long Term Monitoring at the Fire Training Areas

3.2.1.3 (Task 9.0) Second Quarterly Groundwater Monitoring Event.....$23,474

- 3.2.1.3.1 (Task 9.1) Water Level Monitoring
- 3.2.1.3.2 (Task 9.2) Water Quality Monitoring
- 3.2.1.3.3 (Task 9.3) Preparation of Quarterly Reports

OPTION 3 TOTAL	$40,382

OPTION 4

Long Term Monitoring at the OB Grounds

3.1.3.4 (Task 6.0) Third Quarterly Groundwater Monitoring Event.....$16,908

- 3.1.3.4.1 (Task 6.1) Water Level Monitoring
- 3.1.3.4.2 Task 6.2) Water Quality Monitoring
- 3.1.3.4.3 (Task 63) Preparation of Quarterly Reports

Long Term Monitoring at the Fire Training Areas

3.2.1.4 (Task 9.0) Second Quarterly Groundwater Monitoring Event.....$23,474

- 3.2.1.4.1 (Task 9.1) Water Level Monitoring
- 3.2.1.4.2 (Task 9.2) Water Quality Monitoring
- 3.2.1.4.3 (Task 9.3) Preparation of Quarterly Reports

3.3 (Task 11) Preparation of the Annual Report.....$19,107

OPTION 4 TOTAL	$59,489

Site Event cost

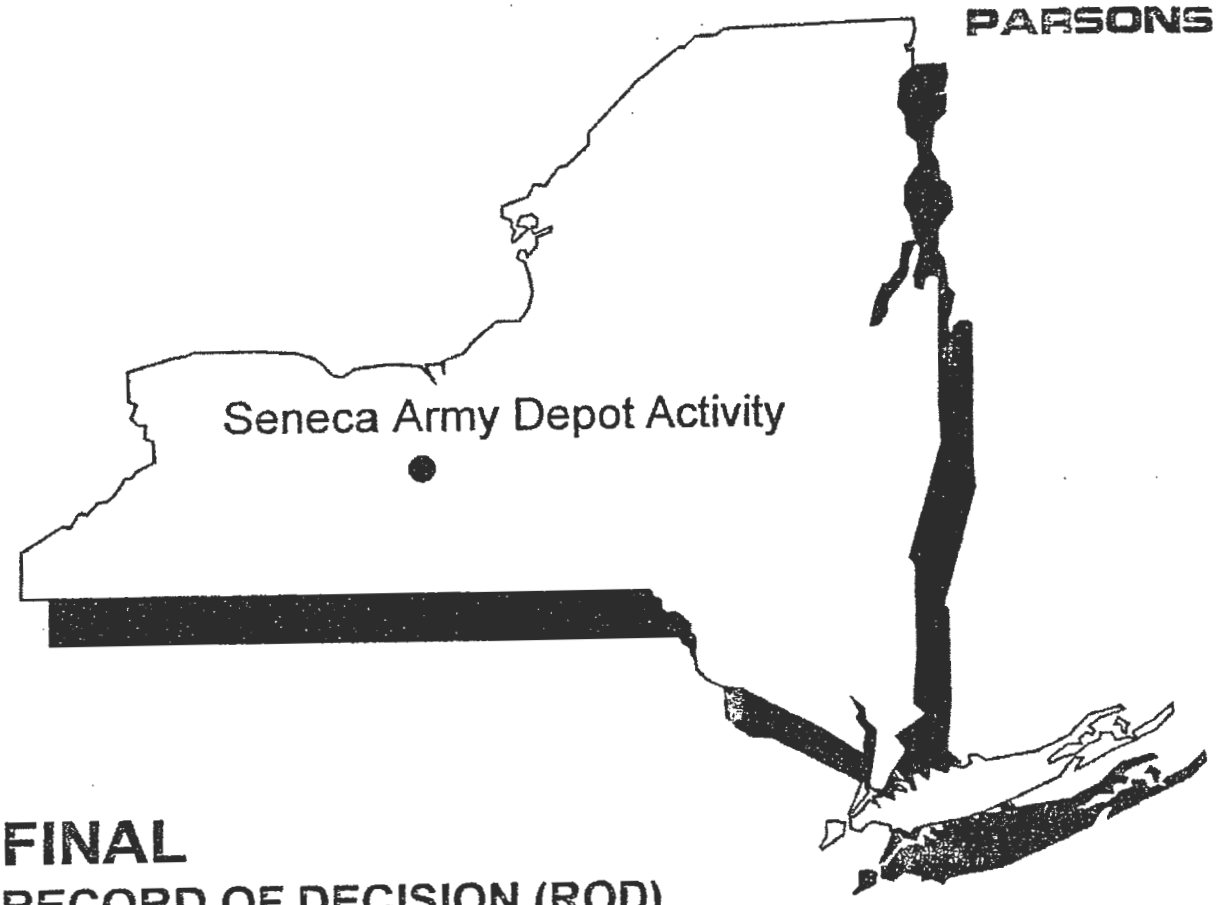
Annual Report 2 sites cost per site split in half.

GRAND TOTAL	$256,433

US Army, Engineering & Support Center
Huntsville, AL

Seneca Army Depot Activity
Romulus, NY

PARSONS



FINAL

RECORD OF DECISION (ROD)
THE FIRE TRAINING AND DEMONSTRATION PAD (SEAD 25) AND THE FIRE TRAINING PIT AND AREA (SEAD 26)

SENECA ARMY DEPOT ACTIVITY

EPA Site ID# NY0213820830
NY Site ID# 8-50-006
CONTRACT NO. DACA87-95-D-0031
DELIVERY ORDER NO. 0029

September 2004

1.0 DECLARATION OF THE RECORD OF DECISION

Site Name and Location

SITE

The Fire Training and Demonstration Pad (SEAD-25) and the Fire Training Pit and Area (SEAD-26)
Seneca Army Depot Activity
CERCLIS ID# NY0213820830
Romulus, Seneca County, New York

Statement of Basis and Purpose

This decision document presents the U.S. Army's and EPA's selected remedy for soil and groundwater at SEAD-25 and SEAD-26, located at the Seneca Army Depot Activity (SEDA) near Romulus, New York. The decision was developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended, 42 U.S.C. §9601 et seq. and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300. The Base Realignment and Closure (BRAC) Environmental Coordinator; the Director of the National Capital Region Field Office, and the U.S. Environmental Protection Agency (USEPA) Region II have been delegated the authority to approve this Record of Decision (ROD); New York State Department of Environmental Conservation (NYSDEC) has concurred with the selected remedial action.

This ROD is based on the Administrative Record that has been developed in accordance with Section 113(k) of CERCLA. The Administrative Record is available for public review at the Seneca Army Depot Activity, Building 123, Romulus, NY. The Administrative Record Index identifies each of the items considered during the selection of the remedial action. This index is included in **Appendix A.**

The State of New York, through the NYSDEC and the New York State Department of Health (NYSDOH), has concurred with the Selected Remedy. The NYSDEC Declaration of Concurrence is provided in **Appendix B** of this ROD.

Site Assessment

The response action selected in this ROD is necessary to protect the public welfare and the environment from actual or threatened releases of hazardous substances into the environment or from actual or threatened releases of pollutants or contaminants from this site that may present an imminent and substantial endangerment to public health or welfare.

11.0 SELECTED REMEDY

SEAD-25

While the goal of the remedial action is to have no residual contamination in soils above TAGM levels, remedial action success will be achieved when soils have been remediated to the level that eliminates an unacceptable risk to human health. Based on the evaluation of the various options, the U.S. Army recommends Alternative RA25-4R (Source Removal, Off-site Disposal, Long-Term Monitoring of Plume, and Sediment Removal) (**Figures 6-1** and **6-2**). The elements that compose the remedy include:

- Excavate soil at the source in an area approximately 60 feet by 100 feet to a depth of 6 feet (approximately 1,350 CY), as depicted in **Figure 6-2**;
- Excavate a volume of sediment approximately 780 feet long, 3 feet wide and 2 feet deep (approximately 175 CY) from the northwest ditch, as depicted in **Figure 6-2**;
- Dispose of excavated soils in an appropriate off-site facility;
- Dewater the excavation pit;
- Treat groundwater that is recovered during excavation and during dewatering of excavation pit with an on-site air stripper;
- Replace excavated soil with clean backfill and establish a ground cover to avoid soil erosion;
- Conduct groundwater monitoring of the plume until NYSDEC Class GA groundwater standards are achieved (approximately 10 years);
- Establish and maintain land use controls to prevent access to or use of groundwater until cleanup standards are met;
- Complete a review of the selected remedy every five-years (at minimum), in accordance with Section 121(c) of the CERCLA;
- Prepare a contingency plan that may include additional monitoring and air sparging of the plume, as necessary; and
- Once groundwater cleanup standards are achieved, the groundwater use restriction may be eliminated.

The frequency of long-term monitoring will be detailed in the RD plan. The cleanup standards for groundwater at the site are NYSDEC Class GA groundwater standards, presented in **Table 1-1B**. Until the contaminant levels in the groundwater meet the cleanup standards, a land use control (or institutional control) in the form of a groundwater use restriction will be a part of the remedy, as specified in the discussion of the remedy for SEAD-25.

A summary of the SEAD-25 and SEAD-26 Land Use Controls is provided below.

The present worth cost of this alternative is $922,200. The capital cost and the O&M cost of RA25-4R are $701,000 and $221,200, respectively.

Site

DRAFT

ANNUAL REPORT, YEAR 2
FOR THE FIRE TRAINING AND DEMONSTRATION PAD (SEAD-25)
SENECA ARMY DEPOT ACTIVITY, ROMULUS, NEW YORK

Prepared for:

U.S. Army, Engineering & Support Center, Huntsville
4820 University Square
Huntsville, AL 35816

and

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

Prepared by:

PARSONS
150 Federal Street
Boston, MA 02110

Contract Number DACA87-02-D-0005
Task Order No. 0036
EPA Site ID# NY0213820830
NY Site ID# 8-50-006

JUNE 2008

process and the removal of the source material. The remedy of soil removal has been effective at SEAD-25.

The remedy for SEAD-25 requires the implementation and maintenance of land use controls (LUCs) at the two sites. The LUC requirements are detailed in the "Land Use Control Remedial Design for SEAD 27, 66, 64A, *Final*" (2006). The selected LUCs for SEAD-25 are as follows:

- Prevent residential housing, elementary and secondary schools, childcare facilities and playground activities, and
- Prevent access to or use of the groundwater until NYS Class GA Groundwater Standards are met.

As part of the LTM program, the Army inspected SEAD-25 to determine that the LUCs are being maintained. While performing the groundwater sampling, it was confirmed that no prohibited facilities have been constructed and no access to or use of groundwater was evident.

5 LONG-TERM MONITORING CONCLUSIONS AND RECOMMENDATIONS

5.2 Conclusions

- The concentrations of BTEX in the groundwater at SEAD-25 have decreased by up to three orders of magnitude since 1994;
- Chlorinated VOCs were not detected above cleanup goals;
- The VOC plumes at SEAD-25 are attenuating to levels close to or lower than all applicable groundwater standards;
- The soil excavation remedy at SEAD-25 has been effective; and
- Land and groundwater restrictions imposed at SEAD-25 continue to be maintained, and there are signs of unauthorized use or access.

5.3 Recommendations

Based on the historical data and the results of the Year 2 rounds of semi-annual LTM at SEAD-25, the Army recommends the following:

- Groundwater monitoring will continue on a semi-annual basis at SEAD-25 for 2008. At that time, the LTM program will be re-evaluated.

Monitoring Frequency

WORK AUTHORIZATION DIRECTIVE (WAD)
BASE REALIGNMENT AND CLOSURE (BRAC) ENVIRONMENTAL RESTORATION
AND FUNDS RELEASE DOCUMENT

CEMP-NAD 22 December 2008

DIRECTIVE NO. BR-SEN-09-05

ISSUED THRU: CENAD-PD-IIS-S (LOPEZ)
TO: CENAN-PP-E (BATTAGLIA)

ISSUED FOR: BRAC ER at Seneca AD, NY.

1. Reference DA FAD, 17 December 2008, advice number # 09-0002-01533.

2. You are authorized Base Closure Account (BCA) environmental restoration funds to execute the following project(s).

BRAC ROUND: 97		increase X /decrease__ reprog_
APPRN: 97 X/2014 0510.40O1 2009 BCA	**DIV/DIST:** NAN	**ASN:** 8011
PROJECT	AMSCO	+/- ALLOCATION
FTAS Sites 25 and 26	61366R29	+ $46,000.00
POC at CENAN-PP-E is Randy Battaglia, 607-869-1523. POC at CEMP-NAD is Dave Koran, 202-761-0076.		

FUNDS RC'D FY09

3. These funds are for the above specified projects only. The funds may not be transferred to other projects without approval and authorization of this office.

4. These funds must be obligated within 30 days of receipt. If these funds cannot be obligated in 30 days this office is to be notified immediately.

5. Accounting and Reporting Instructions:
   a. Report all financial data on a monthly basis via the Integrated Command Accounting and Reporting (ICAR) System.
   b. Report excess funds to CEMP-NAD as soon as they are identified.
   c. Provide a copy of this WAD to your Resource Management Office.

CF: LOPEZ (NAD)

WORK AUTHORIZATION DIRECTIVE (WAD)
BASE REALIGNMENT AND CLOSURE (BRAC) ENVIRONMENTAL RESTORATION
AND FUNDS RELEASE DOCUMENT

CEMP-NAD 27 Nov 2007

DIRECTIVE NO. BR-SEN-08-01

ISSUED THRU: CENAD-PD-IIS-S (TUMMINELLO)
TO: CENAN-PP-E (BATTAGLIA)

ISSUED FOR: BRAC ER at Seneca AD, NY.

1. Reference DA FAD, 19, Nov 2007, advice number # 08-0002-00841.

2. You are authorized Base Closure Account (BCA) environmental restoration funds to execute the following project(s).

BRAC ROUND: 97		increase X /decrease__ reprog_
APPRN: 97 X/2013 0510.40N1 2008 BCA	**DIV/DIST:** NAN	**ASN:** 8011
PROJECT	AMSCO	+/- ALLOCATION
FTAS SEAD 25 and 26	61366R29	+ 68,000.00
POC at CENAN-PP-E is Randy Battaglia, 607-869-1523. POC at CEMP-NAD is Dave Koran, 202-761-0076.		

FUNDS RCD FY 08

3. These funds are for the above specified projects only. The funds may not be transferred to other projects without approval and authorization of this office.

4. These funds must be obligated within 30 days of receipt. If these funds cannot be obligated in 30 days this office is to be notified immediately.

5. Accounting and Reporting Instructions:
   a. Report all financial data on a monthly basis via the Integrated Command Accounting and Reporting (ICAR) System.
   b. Report excess funds to CEMP-NAD as soon as they are identified.
   c. Provide a copy of this WAD to your Resource Management Office.

Absolom, Stephen M Mr CIV USA

From: Nohrstedt, John HNC [John.Nohrstedt@usace.army.mil]
Sent: Monday, January 12, 2009 4:18 PM
To: Absolom, Stephen M Mr CIV USA
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Cost per year for contracting to monitor a contractor:
5 hrs/month X 12 months = 60 hrs
Approximately $5,000 to $7,000

Contract Monitoring

Cost for contracting Task Order Close out:
Firm Fixed Price - 5 to 10 hrs - Approx. $500 to $1000
Cost Plus - 10 to 25 hrs - Approx. $1000 to $2,500

Closeout Cost

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA [mailto:stephen.m.absolom@us.army.mil]
Sent: Monday, January 12, 2009 8:07 AM
To: Nohrstedt, John HNC; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,
What will the cost per year be to monitor the TO if it is a multiple year task order.
Also need to a cost for TO Close out.
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362
-----Original Message-----
From: Nohrstedt, John HNC [mailto:John.Nohrstedt@usace.army.mil]
Sent: Friday, January 09, 2009 12:35 PM
To: Absolom, Stephen M Mr CIV USA; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Below are the man-hours to prepare and issue a simple task order:

Prepare SOW and IGE	- 6 to 10 hrs
Review	- 0.5 to 2 hr
Issue RFP	- 2 to 3 hrs
Review Proposal	- 2 to 4 hrs
Tech Evaluation	- 4 to 8 hrs
Negotiation	- 2 to 4 hrs
Review Revised Proposal	- 2 to 3 hrs
Tech Eval. of revised	- 0.5 to 2 hrs
Issue Award	- 4 to 6 hrs

TOTAL - 23 to 42 hours

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

CERM-P (37)

13 MAR 2008

MEMORANDUM FOR MAJOR SUBORDINATE COMMANDS (MSC)

SUBJECT: Fiscal Year (FY) 2008 Supervision and Administration (S&A) Rate Changes

1. References:

a. CERM-P memorandum, 27 July 2005, Subject: S&A Accounting Procedures for Modularity Projects.

b. CERM-P memorandum, 20 September 2006, Subject: FY 2006 S&A Rate Changes.

S:A RATE

2. Effective 1 April 2008 the Operation and Maintenance (O&M) and the Defense Environmental Restoration Program (DERP) S&A rate for the Continental United States (CONUS) is reduced for new Fiscal Year 2008 (FY08) contract awards from six and one-half percent to five and eight-tenths percent. The intent of this change is to adjust the S&A rate to match the current expense and income activity; the level of service or effort should remain unchanged. Any O&M losses to your S&A checkbook that result from the rate change will be reimbursed from the national S&A account. The Major Subordinate Command (MSC) maximum checkbook carryover will be increased to three months' expense and reflected in the next update to the consolidated command guidance.

3. The one percent furniture rate in reference "a" was not intended to be restricted to modularity projects. It may be used for any MILCON or O&M project. This change in the O&M rate does not affect modularity/relocatable projects as they continue to be charged the MILCON rate per reference "a".

CERM-P (37)
SUBJECT: FY 2008 Supervision and Administration (S&A) Rate Changes

4. Since these changes significantly affect S&A schedules the FY08 S&A performance will be measured against your mid-year schedules due 25 April 2008. Special instructions are provided in the enclosed standing operating procedures to assist in implementation of these changes. These changes will be codified in the next update to the consolidated command guidance.

5. Point of contact for this action is Mr. Philip Blount, CERM-P, (202) 761-8908.

FOR THE COMMANDER:

Encl

Wesley C. Miller
Director of Resource Management

STATEMENT OF WORK
IMPLEMENTATION OF THE LONG-TERM MANAGEMENT PLAN
FOR THE OPEN BURNING (OB) GROUNDS AND
FIRE TRAINING AREAS
SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

8 Mar 2007

1.0 BACKGROUND AND GENERAL STATEMENT OF WORK: Following remediation of the OB Grounds and Fire Training Area sites, long-term monitoring is required to verify the success of the remedial efforts.

1.1 GENERAL DESCRIPTION. SEDA is a US Army facility located in Seneca County, New York. SEDA occupies approximately 10,600 acres. It is bounded on the west by State Route 96A and on the east by State Route 96. The cities of Geneva and Rochester are located to the northwest (14 and 50 miles, respectively); Syracuse is 53 miles to the northeast and Ithaca is 31 miles to the south. The surrounding area is generally used for farming. The OB Grounds is an approximately 30-acre site located in the northwestern section of the installation. The Fire Training and Demonstration Pad (SEAD-25) and Fire Training Pit and Area (SEAD-26) are located in the east-central and southeastern portions of the installation, respectively.

1.2 REGULATORY STATUS. The Installation was included on the Federal Facilities National Priorities List on 13 July 1989. Consequently, all work to be performed under this contract shall be performed according to Comprehensive Environmental Response Compensation and Liability Act (CERCLA) guidance as put forth in the EPA Interim Final "Guidance for Conducting Remedial Investigations/ Feasibility Studies under CERCLA", the "Federal Facility Agreement under CERCLA Section 120 in the matter of Seneca Army Depot, Romulus, New York", the Final, "Long Term Monitoring Plan for the Open Burning (OB) Grounds, Seneca Army Depot Activity" (Reference 6.11) and the "SEAD-25 and SEAD-26 Annual Report".

1.3 SECURITY REQUIREMENTS. Compliance with SEDA security requirements is mandated.

2.0 OBJECTIVES:
The A-E shall implement the approved plan for long-term monitoring at the OB Grounds and Fire Training Areas for a period of one year. Following that year of performance, the A-E shall report annual results and provide recommendations for future Long Term Management needs. All work shall be completed in accordance with (IAW) the approved Long Term Monitoring Plans. All field activities shall be performed IAW the approved Accident Prevention Plan for the Seneca program.

3.0 DESCRIPTION OF SERVICES:
3.1 Long Term Monitoring at the OB Grounds.
3.1.1 (Task 1) Vegetative Cap and Drainage Swale Inspections. (OPTION 1) The Contractor shall inspect the vegetative cap and drainage swales on the site. Inspection shall include observations pertinent to the integrity of the soil and vegetative covering and the condition of run-off channels, infiltration galleries and swales.

3.1.2 (Task 2) Perform Monitoring Well Installation (OPTION 1) The Contractor shall provide the labor and equipment necessary to install 6 monitoring wells as laid out in the approved plan. Installation shall include initial well development.

3.1.3 Quarterly Groundwater Monitoring.
3.1.3.1 (Task 3) Initial Quarterly Groundwater Monitoring Event. (OPTION 1) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.1.3.1.1 (Task 3.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.1.3.1.2 (Task 3.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.1.3.1.3 (Task 3.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.1.3.2 (Task 4.0) Second Quarterly Groundwater Monitoring Event. (OPTION 2) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.1.3.2.1 (Task 4.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.1.3.2.2 (Task 4.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.1.3.2.3 (Task 4.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.1.3.2.3 (Task 5.0) Third Quarterly Groundwater Monitoring Event. (OPTION 3) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.1.3.2.3.1 (Task 5.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.1.3.2.3.2 (Task 5.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.1.3.2.3.3 (Task 5.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.1.3.4 (Task 6.0) Fourth Quarterly Groundwater Monitoring Event. (OPTION 4) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.1.3.4.1 (Task 6.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.1.3.4.2 (Task 6.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.1.3.4.3 (Task 6.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.2 Long Term Monitoring at the Fire Training Areas.

3.2.1 Quarterly Groundwater Monitoring.

3.2.1.1 (Task 7) Initial Quarterly Groundwater Monitoring Event. (OPTION 1) Note: One year of groundwater monitoring was completed previously by another Government entity as part of their remediation effort. Consequently, the initial monitoring event under this SOW is actually the fifth monitoring event, overall. Upon direction from the KO, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.2.1.1.1 (Task 7.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.2.1.1.2 (Task 7.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.2.1.1.3 (Task 7.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.2.1.2 (Task 8.0) Second Quarterly Groundwater Monitoring Event. (OPTION 2) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.2.1.2.1 (Task 8.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.2.1.2.2 (Task 8.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.2.1.2.3 (Task 8.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.2.1.3 (Task 9.0) Third Quarterly Groundwater Monitoring Event. (OPTION 3) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.2.1.3.1 (Task 9.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.2.1.3.2 (Task 9.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.2.1.3.3 (Task 9.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.2.1.4 (Task 10.0) Fourth Quarterly Groundwater Monitoring Event. (OPTION 4) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.2.1.4.1 (Task 10.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.2.1.4.2 (Task 10.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.2.1.4.3 (Task 10.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.3 (Task 11) Preparation of the Annual Report. (OPTION 4) Following completion of the first year of quarterly groundwater monitoring events, the Contractor shall prepare and submit an annual report which summarizes and analyzes the data collected and observations made over the year's effort. Presentation shall include:

- Complete tabulations, including maximum and minimum levels, of all groundwater elevation data developed.
- Trend plots of groundwater elevation data for each of the monitoring wells.
- A potentiometric map of site groundwater.
- Complete tabulations of all chemical concentration data developed to date.
- Complete tabulations of all indicator parameter data developed to date.
- Summary presentations (e.g. Sample population, maximums, minimums, median, mean, standard deviation, coefficient of variation, etc) of all chemical concentration data developed to date for downgradient and background wells versus the regulatory criteria values.
- Trend plots for all chemical concentration data developed for each of the monitoring ells.
- Trend plots for all key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.
- A recommendation of any changes (e.g. changing frequency of data collection to semi annual or annual, development of a sediment monitoring program, etc.) that are proposed for implementation for the OB Grounds LTM Plan.

3.4 (Task 12) PROJECT MANAGEMENT (OPTION 1) - The A-E shall manage the delivery order in accordance with the basic contract statement of work. All project management associated with the delivery order, with the exception of the direct technical oversight of the work described in the preceding tasks, shall be accounted for in this task.

4.0 SUBMITTALS: The contractor shall furnish copies of all documents to the addressees listed below. One copy of the final documents shall be sent to the CEHNC Project Manager on 3.5-inch computer disk or CD ROM in an acceptable format in addition to the number of hard copies identified below. The contractor shall use express mail services for delivering these documents. Following each submission, comments generated as a result of their review shall be incorporated.

4.1 ADDRESSEES

US Army Engineering and Support Center, Huntsville
ATTN: CEHNC-CT-P (***Ms. Atkins***)
4820 University Square,
Huntsville, Alabama, 35816

US Army Engineering and Support Center, Huntsville
ATTN: CEHNC-ED-CS-P (***Mr. Steve Nohrstedt***)
4820 University Square
Huntsville, Alabama, 35816

Commander's Representative
Seneca ADA
ATTN: SMASE-CO (Bld.123, Mr. Absolom)
5786 State Route 96, P.O. Box 9,
Romulus, New York 14541-5001

Commander
USACHPPM (PROV)
ATTN: MCHB-ME-R (Mr. Hoddinott)
Building E1677
Aberdeen Proving Ground, MD, 21010-5422

Commander
US Army Engineer District, New York
Seneca Office for Project Management
ATTN: Mr. R. Battaglia, Bld.125
P.O. Box 9
5786 State Route 96
Romulus, New York, 14541-5001

Commander
U.S. Army Environmental Center,
ATTN: Mr. Chris Boes
Aberdeen Proving Ground, MD, 21010-5422

4.1.2 Document and Submittal List

	Copies
CEHND-CT	2
SMASE-CO	2
CENAN	2
USACHPPM	2
USAEC/Versar	2

4.2 **SUBMITTALS AND DUE DATES:**

4.2.1 Proposed Schedule. The proposed schedule for the Implementation of the Long-Term Management Plan work is given below. All work and services under this Task Order shall be completed by 1 April 2008.

Submittal	Due Date
NTP	0
Pre-Draft LTM Plan	NTP + 45 days
Comments Due to A-E	NTP + 60 days
Draft LTM Plan	NTP + 75 days
Comments Due to A-E	NTP + 120 days
Draft-Final LTM Plan	NTP + 150 days
Comments to A-E	NTP + 180 days
Final LTM Plan	NTP + 210 days

5.0 PUBLIC AFFAIRS: The A-E shall not conduct Public Affairs activities at the installation. All agencies and/or individuals requesting information concerning the conduct of the project shall be referred to the Seneca Army Depot Activity, Public Affairs Office (PAO) or the U.S. Army Engineering and Support Center, Huntsville, PAO.

6.0 REFERENCES:

6.1 Interim Final, "Guidance for or Conducting Remedial Investigations/Feasibility studies Under CERCLA", U.S. EPA, Office of Solid Waste and Emergency Response, October 1988.

6.2 "Federal Facility Agreement under CERCLA Section 120 in the matter of Seneca Army Depot, Romulus, New York", Docket No. II-CERCLA-FFA-00202, USEPA, U.S. Department of the Army, and the New York State Department of Environmental Conservation, November 1990.

6.3 Final, "Remedial Investigation Report at the Open Burning (OB) Grounds at Seneca Army Depot Activity", dated September 1994.

6.4 Final, "Feasibility Study Report at the Open Burning (OB) Grounds at Seneca Army Depot Activity", dated June 1996.

6.5 Final, "Proposed Remedial Action Plan (PRAP) for the Open Burning (OB) at the Seneca Army Depot Activity (SEDA)", dated January 1997.

6.6 Final, "Record of Decision (ROD) for Seneca Army Depot Activity, Open Burning (OB) Grounds", dated December 1998.

6.7 Final, "Generic Site-Wide Sampling and Analysis Plan, Seneca Army Depot Activity, Romulus, New York", Parsons, December 2005.

6.8 Final, "Long Term Monitoring Plan for the Open Burning Grounds, Seneca Army Depot Activity", Parsons, January 2007.

6.9 Final, "Long Term Monitoring Plan for the Fire Training Areas (SEAD-25 and SEAD-26), Seneca Army Depot Activity", Parsons.

6.10 Draft, "SEAD-25 and SEAD-26 Annual Report", Parsons, January 2007.

6.11 Final, "Generic Site-Wide Sampling and Analysis Plan, Seneca ADA", Parsons, December 2005.

ADDENDUM

IMPLEMENTATION OF THE LONG-TERM MANAGEMENT PLAN
FOR THE OPEN BURNING (OB) GROUNDS AND
FIRE TRAINING AREAS
SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

FUNDING OPTIONS SUMMARY

OPTION 1

3.1 Long Term Monitoring at the OB Grounds
- 3.1.1 (Task 1) Vegetative Cap and Drainage Swale Inspections.....$2,729
- 3.1.2 (Task 2) Perform Monitoring Well Installation.....$24,864
- 3.1.3 Quarterly Groundwater Monitoring
  - 3.1.3.1 (Task 3) Initial Quarterly Groundwater Monitoring Event.$16,908
    - 3.1.3.1.1 (Task 3.1) Water Level Monitoring
    - 3.1.3.1.2 (Task 3.2) Water Quality Monitoring
    - 3.1.3.1.3 (Task 3.3) Preparation of Quarterly Reports

3.2 Long Term Monitoring at the Fire Training Areas
- 3.2.1 Quarterly Groundwater Monitoring
  - 3.2.1.1 (Task 7) Initial Quarterly Groundwater Monitoring Event...$23,474
    - 3.2.1.1.1 (Task 7.1) Water Level Monitoring
    - 3.2.1.1.2 (Task 7.2) Water Quality Monitoring
    - 3.2.1.1.3 (Task 7.3) Preparation of Quarterly Reports

3.4 (Task 12) PROJECT MANAGEMENT.....$48,206

OPTION 1 TOTAL	$116,181

OPTION 2

Long Term Monitoring at the OB Grounds
- 3.1.3.2 (Task 4.0) Second Quarterly Groundwater Monitoring Event.....$16,908
  - 3.1.3.2.1 (Task 4.1) Water Level Monitoring
  - 3.1.3.2.2 (Task 4.2) Water Quality Monitoring
  - 3.1.3.2.3 (Task 4.3) Preparation of Quarterly Reports

Long Term Monitoring at the Fire Training Areas
- 3.2.1.2 (Task 8.0) Second Quarterly Groundwater Monitoring Event.....$23,474
  - 3.2.1.2.1 (Task 8.1) Water Level Monitoring
  - 3.2.1.2.2 (Task 8.2) Water Quality Monitoring
  - 3.2.1.2.3 (Task 8.3) Preparation of Quarterly Reports

OPTION 2 TOTAL	$40,382

OPTION 3

Long Term Monitoring at the OB Grounds
- 3.1.3.2.3 (Task 5.0) Third Quarterly Groundwater Monitoring Event.....$16,908
  - 3.1.3.2.3.1 (Task 5.1) Water Level Monitoring
  - 3.1.3.2.3.2 Task 5.2) Water Quality Monitoring

3.1.3.2.3.3 (Task 5.3) Preparation of Quarterly Reports

Long Term Monitoring at the Fire Training Areas

3.2.1.3 (Task 9.0) Second Quarterly Groundwater Monitoring Event.....$23,474

3.2.1.3.1 (Task 9.1) Water Level Monitoring

3.2.1.3.2 (Task 9.2) Water Quality Monitoring

3.2.1.3.3 (Task 9.3) Preparation of Quarterly Reports

OPTION 3 TOTAL	$40,382

OPTION 4

Long Term Monitoring at the OB Grounds

3.1.3.4 (Task 6.0) Third Quarterly Groundwater Monitoring Event.....$16,908

3.1.3.4.1 (Task 6.1) Water Level Monitoring

3.1.3.4.2 Task 6.2) Water Quality Monitoring

3.1.3.4.3 (Task 63) Preparation of Quarterly Reports

Long Term Monitoring at the Fire Training Areas

3.2.1.4 (Task 9.0) Second Quarterly Groundwater Monitoring Event.....$23,474

3.2.1.4.1 (Task 9.1) Water Level Monitoring

3.2.1.4.2 (Task 9.2) Water Quality Monitoring

3.2.1.4.3 (Task 9.3) Preparation of Quarterly Reports

3.3 (Task 11) Preparation of the Annual Report.....$19,107

OPTION 4 TOTAL	$59,489

GRAND TOTAL $256,433

Section C - Descriptions and Specifications

SOW

ADDENDUM

IMPLEMENTATION OF THE LONG-TERM MANAGEMENT PLANFOR THE OPEN BURNING (OB) GROUNDS AND FIRE TRAINING AREASSENECA ARMY DEPOT ACTIVITY ROMULUS, NEW YORK

FUNDING OPTIONS SUMMARY

OPTION 1

3.1 Long Term Monitoring at the OB Grounds
- 3.1.1 (Task 1) Vegetative Cap and Drainage Swale Inspections.....$2,729
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    - 3.1.3.1.2 (Task 3.2) Water Quality Monitoring
    - 3.1.3.1.3 (Task 3.3) Preparation of Quarterly Reports

3.2 Long Term Monitoring at the Fire Training Areas
- 3.2.1 Quarterly Groundwater Monitoring
  - 3.2.1.1 (Task 7) Initial Quarterly Groundwater Monitoring Event...$23,474
    - 3.2.1.1.1 (Task 7.1) Water Level Monitoring
    - 3.2.1.1.2 (Task 7.2) Water Quality Monitoring
    - 3.2.1.1.3 (Task 7.3) Preparation of Quarterly Reports

3.4 (Task 12) PROJECT MANAGEMENT.....$48,206

OPTION 1 TOTAL	$116,181

OPTION 2

Long Term Monitoring at the OB Grounds

3.1.3.2 (Task 4.0) Second Quarterly Groundwater Monitoring Event.....$16,908
- 3.1.3.2.1 (Task 4.1) Water Level Monitoring
- 3.1.3.2.2 (Task 4.2) Water Quality Monitoring
- 3.1.3.2.3 (Task 4.3) Preparation of Quarterly Reports

Long Term Monitoring at the Fire Training Areas

3.2.1.2 (Task 8.0) Second Quarterly Groundwater Monitoring Event.....$23,474
- 3.2.1.2.1 (Task 8.1) Water Level Monitoring
- 3.2.1.2.2 (Task 8.2) Water Quality Monitoring
- 3.2.1.2.3 (Task 8.3) Preparation of Quarterly Reports

OPTION 2 TOTAL	$40,382

OPTION 3

Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
0001		UNDEFINED	Dollars, U.S.	UNDEFINED	UNDEFINED

SENECA ARMY DEPOT

CPFF

CONTRACTOR SHALL PROVIDE SERVICES IN ACCORDANCE WITH THE ATTACHED STATEMENT OF WORK, ENTITLED, "IMPLEMENTATION OF THE LONG-TERM MANAGEMENT PLAN FOR THE OPEN BURNING (OB) GROUNDS AND FIRE TRAINING AREAS, SENECA ARMY DEPOT ACTIVITY, ROMULUS, NEW YORK, AND ADDENDUM, FUNDING OPTIONS SUMMARY, DATED 8 MARCH 2007".

CONTRACTOR SHALL PROVIDE SERVICES FOR OPTION 1. TASK 3.1 LONG TERM MONITORING AT THE OB GROUNDS AND TASK 3.2 LONG TERM MONITORING AT THE FIRE TRAINING AREAS IN ACCORDANCE WITH THE ATTACHED ADDENDUM, FUNDING OPTIONS SUMMARY. OPTION 1 IS FUNDED AT $109,993.00 (COST) PLUS $6,188.00 (FEE) FOR A TOTAL AMOUNT OF $116,181.

THE PERIOD OF PERFORMANCE FOR THIS TASK ORDER IS 31 JULY 2007.

FOB: Destination

MILSTRIP: W31RYO71375791

PURCHASE REQUEST NUMBER: W31RYO71375791

MAX COST	$109,993.00
FIXED FEE	$6,188.00
TOTAL MAX COST + FEE	$116,181.00
	$116,181.00

ACRN AA

CIN: W31RYO713757910001

Contract: DACA87-02-D-0005-0036;

Summary Sheet Supporting Data Format

Project: Long-Term Mgmt Plan for OB/FTA, SEI

Printed:

TASK		AMOUNT	SUBCONTRACTOR	AMT W/O SUBCONTRACTOR
Task 1	Vegetative Cap and Drainage	$2,574	$0	$2,574
Task 2	Perform Monitoring Well Installation	$23,766	$10,934	$12,832
Task 3	OB Grounds Q1 GW Monit. Event	$15,954	$128	$15,826
Task 4	OB Grounds Q2 GW Monit. Event	$15,954	$128	$15,826
Task 5	OB Grounds Q3 GW Monit. Event	$15,954	$128	$15,826
Task 6	OB Grounds Q4 GW Monit. Event	$15,954	$128	$15,826
Task 7	SEAD-25 Q1 GW Monit. Event	$22,221	$2,654	$19,567
Task 8	SEAD-25 Q2 GW Monit. Event	$22,221	$2,654	$19,567
Task 9	SEAD-25 Q3 GW Monit. Event	$22,221	$2,654	$19,567
Task 10	SEAD-25 Q4 GW Monit. Event	$22,221	$2,654	$19,567
Task 11	Prep. Of Annual Report	$18,025	$0	$18,025
Task 12	Project Management	$45,478	$0	$45,478
TOTAL		$242,542	$22,062	$220,480

PROJECT TOTAL

STATEMENT OF WORKIMPLEMENTATION OF THE LONG-TERM MANAGEMENT PLANFOR THE OPEN BURNING (OB) GROUNDS AND FIRE TRAINING AREASSENECA ARMY DEPOT ACTIVITY ROMULUS, NEW YORK 8 Mar 2007

1.0 BACKGROUND AND GENERAL STATEMENT OF WORK: Following remediation of the OB Grounds and Fire Training Area sites, long-term monitoring is required to verify the success of the remedial efforts. **1.1 GENERAL DESCRIPTION.** SEDA is a US Army facility located in Seneca County, New York. SEDA occupies approximately 10,600 acres. It is bounded on the west by State Route 96A and on the east by State Route 96. The cities of Geneva and Rochester are located to the northwest (14 and 50 miles, respectively); Syracuse is 53 miles to the northeast and Ithaca is 31 miles to the south. The surrounding area is generally used for farming. The OB Grounds is an approximately 30-acre site located in the northwestern section of the installation. The Fire Training and Demonstration Pad (SEAD-25) and Fire Training Pit and Area (SEAD-26) are located in the east-central and southeastern portions of the installation, respectively.

1.2 REGULATORY STATUS. The Installation was included on the Federal Facilities National Priorities List on 13 July 1989. Consequently, all work to be performed under this contract shall be performed according to Comprehensive Environmental Response Compensation and Liability Act (CERCLA) guidance as put forth in the EPA Interim Final "Guidance for Conducting Remedial Investigations/ Feasibility Studies under CERCLA", the "Federal Facility Agreement under CERCLA Section 120 in the matter of Seneca Army Depot, Romulus, New York", the Final, "Long Term Monitoring Plan for the Open Burning (OB) Grounds, Seneca Army Depot Activity" (Reference 6.11) and the "SEAD-25 and SEAD-26 Annual Report". **1.3 SECURITY REQUIREMENTS.** Compliance with SEDA security requirements is mandated. **2.0 OBJECTIVES:**
The A-E shall implement the approved plan for long-term monitoring at the OB Grounds and Fire Training Areas for a period of one year. Following that year of performance, the A-E shall report annual results and provide recommendations for future Long Term Management needs. All work shall be completed in accordance with (IAW) the approved Long Term Monitoring Plans. All field activities shall be performed IAW the approved Accident Prevention Plan for the Seneca program.

3.0 DESCRIPTION OF SERVICES:3.1 Long Term Monitoring at the OB Grounds.

3.1.1 (Task 1) Vegetative Cap and Drainage Swale Inspections. (OPTION 1) The Contractor shall inspect the vegetative cap and drainage swales on the site. Inspection shall include observations pertinent to the integrity of the soil and vegetative covering and the condition of run-off channels, infiltration galleries and swales.

3.1.2 (Task 2) Perform Monitoring Well Installation (OPTION 1) The Contractor shall provide the labor and equipment necessary to install 6 monitoring wells as laid out in the approved plan. Installation shall include initial well development.

3.1.3 Quarterly Groundwater Monitoring.

3.1.3.1 (Task 3) Initial Quarterly Groundwater Monitoring Event. (OPTION 1) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.1.3.1.1 (Task 3.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.1.3.1.2 (Task 3.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.1.3.1.3 (Task 3.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.1.3.2 (Task 4.0) Second Quarterly Groundwater Monitoring Event. (OPTION 2) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.1.3.2.1 (Task 4.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.1.3.2.2 (Task 4.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.1.3.2.3 (Task 4.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.1.3.2.3 (Task 5.0) Third Quarterly Groundwater Monitoring Event. (OPTION 3) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.1.3.2.3.1 (Task 5.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.1.3.2.3.2 (Task 5.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.1.3.2.3.3 (Task 5.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.1.3.4 (Task 6.0) Fourth Quarterly Groundwater Monitoring Event. (OPTION 4) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.1.3.4.1 (Task 6.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.1.3.4.2 (Task 6.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.1.3.4.3 (Task 6.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.2 Long Term Monitoring at the Fire Training Areas.

3.2.1 Quarterly Groundwater Monitoring.

3.2.1.1 (Task 7) Initial Quarterly Groundwater Monitoring Event. (OPTION 1) Note: One year of groundwater monitoring was completed previously by another Government entity as part of their remediation effort. Consequently, the initial monitoring event under this SOW is actually the fifth monitoring event, overall. Upon direction from the KO, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.2.1.1.1 (Task 7.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.2.1.1.2 (Task 7.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.2.1.1.3 (Task 7.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.2.1.2 (Task 8.0) Second Quarterly Groundwater Monitoring Event. (OPTION 2) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.2.1.2.1 (Task 8.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.2.1.2.2 (Task 8.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.2.1.2.3 (Task 8.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.2.1.3 (Task 9.0) Third Quarterly Groundwater Monitoring Event. (OPTION 3) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.2.1.3.1 (Task 9.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.2.1.3.2 (Task 9.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.2.1.3.3 (Task 9.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.2.1.4 (Task 10.0) Fourth Quarterly Groundwater Monitoring Event. (OPTION 4) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.2.1.4.1 (Task 10.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.2.1.4.2 (Task 10.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.2.1.4.3 (Task 10.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.3 (Task 11) Preparation of the Annual Report. (OPTION 4) Following completion of the first year of quarterly groundwater monitoring events, the Contractor shall prepare and submit an annual report which summarizes and analyzes the data collected and observations made over the year's effort. Presentation shall include:

- Complete tabulations, including maximum and minimum levels, of all groundwater elevation data developed.
- Trend plots of groundwater elevation data for each of the monitoring wells.
- A potentiometric map of site groundwater.
- Complete tabulations of all chemical concentration data developed to date.
- Complete tabulations of all indicator parameter data developed to date.
- Summary presentations (e.g. Sample population, maximums, minimums, median, mean, standard deviation, coefficient of variation, etc) of all chemical concentration data developed to date for downgradient and background wells versus the regulatory criteria values.
- Trend plots for all chemical concentration data developed for each of the monitoring ells.
- Trend plots for all key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

- A recommendation of any changes (e.g. changing frequency of data collection to semi annual or annual, development of a sediment monitoring program, etc.) that are proposed for implementation for the OB Grounds LTM Plan.

3.4 (Task 12) PROJECT MANAGEMENT (OPTION 1) - The A-E shall manage the delivery order in accordance with the basic contract statement of work. All project management associated with the delivery order, with the exception of the direct technical oversight of the work described in the preceding tasks, shall be accounted for in this task.

4.0 SUBMITTALS: The contractor shall furnish copies of all documents to the addressees listed below. One copy of the final documents shall be sent to the CEHNC Project Manager on 3.5-inch computer disk or CD ROM in an acceptable format in addition to the number of hard copies identified below. The contractor shall use express mail services for delivering these documents. Following each submission, comments generated as a result of their review shall be incorporated.

4.1 ADDRESSEES

US Army Engineering and Support Center, Huntsville ATTN: CEHNC-CT-P (***Ms. Atkins***)4820 University Square,
Huntsville, Alabama, 35816
US Army Engineering and Support Center, Huntsville ATTN: CEHNC-ED-CS-P (***Mr. Steve Nohrstedt***)4820 University Square
Huntsville, Alabama, 35816

Commander's Representative
Seneca ADA
ATTN: SMASE-CO (Bld.123, Mr. Absolom)
5786 State Route 96, P.O. Box 9,
Romulus, New York 14541-5001

Commander
USACHPPM (PROV)
ATTN: MCHB-ME-R (Mr. Hoddinott)
Building E1677
Aberdeen Proving Ground, MD, 21010-5422

Commander
US Army Engineer District, New York
Seneca Office for Project Management
ATTN: Mr. R. Battaglia, Bld.125
P.O. Box 9
5786 State Route 96
Romulus, New York, 14541-5001

Commander
U.S. Army Environmental Center,
ATTN: Mr. Chris Boes
Aberdeen Proving Ground, MD, 21010-5422

4.1.2 Document and Submittal List

	Copies
CEHND-CT	2
SMASE-CO	2
CENAN	2
USACHPPM	2
USAEC/Versar	2

4.2 **SUBMITTALS AND DUE DATES:**
4.2.1 Proposed Schedule. The proposed schedule for the Implementation of the Long-Term Management Plan work is given below. All work and services under this Task Order shall be completed by 1 April 2008.

Submittal	Due Date
NTP	0
Pre-Draft LTM Plan	NTP + 45 days
Comments Due to A-E	NTP + 60 daysDraft LTM Plan
NTP + 75 daysComments Due to A-E	NTP + 120 days
Draft-Final LTM Plan	NTP + 150 days
Comments to A-E	NTP + 180 days
Final LTM Plan	NTP + 210 days

5.0 PUBLIC AFFAIRS: The A-E shall not conduct Public Affairs activities at the installation. All agencies and/or individuals requesting information concerning the conduct of the project shall be referred to the Seneca Army Depot Activity, Public Affairs Office (PAO) or the U.S. Army Engineering and Support Center, Huntsville, PAO.**6.0 REFERENCES: 6.1** Interim Final, "Guidance for or Conducting Remedial Investigations/Feasibility studies Under CERCLA", U.S. EPA, Office of Solid Waste and Emergency Response, October 1988.

6.2 "Federal Facility Agreement under CERCLA Section 120 in the matter of Seneca Army Depot, Romulus, New York", Docket No. II-CERCLA-FFA-00202, USEPA, U.S. Department of the Army, and the New York State Department of Environmental Conservation, November 1990.

6.3 Final, "Remedial Investigation Report at the Open Burning (OB) Grounds at Seneca Army Depot Activity", dated September 1994.
6.4 Final, "Feasibility Study Report at the Open Burning (OB) Grounds at Seneca Army Depot Activity", dated June 1996.

6.5 Final, "Proposed Remedial Action Plan (PRAP) for the Open Burning (OB) at the Seneca Army Depot Activity (SEDA)", dated January 1997.**6.6** Final, "Record of Decision (ROD) for Seneca Army Depot Activity, Open Burning (OB) Grounds", dated December 1998.

6.7 Final, "Generic Site-Wide Sampling and Analysis Plan, Seneca Army Depot Activity, Romulus, New York", Parsons, December 2005.

6.8 Final, "Long Term Monitoring Plan for the Open Burning Grounds, Seneca Army Depot Activity", Parsons, January 2007.

6.9 Final, "Long Term Monitoring Plan for the Fire Training Areas (SEAD-25 and SEAD-26), Seneca Army Depot Activity", Parsons.

6.10 Draft, "SEAD-25 and SEAD-26 Annual Report", Parsons, January 2007.

6.11 Final, "Generic Site-Wide Sampling and Analysis Plan, Seneca ADA", Parsons, December 2005.

Section E - Inspection and Acceptance

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0001	N/A	N/A	N/A	N/A

Section F - Deliveries or Performance

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
0001	31-JUL-2007		US ARMY ENGINEERING & SUPPORT CENTER NO CONTACT SPECIFIED CEHNC-CT 4820 UNIVERSITY SQUARE HUNTSVILLE AL 35816-1822 SEE "ADMINISTERED BY" FOB: Destination	W912DY

Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

AA: 21720500000 088130 323002B7FK70000000000 E314 01110
AMOUNT: $116,181.00
CIN W31RYO713757910001: $116,181.00

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
U	1 | 2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO.(If applicable)
01	14-Sep-2007	W31RYO71375791	

6. ISSUED BY	CODE	7. ADMINISTERED BY (If other than item 6)	CODE
US ARMY ENGINEERING & SUPPORT CENTER CEHNC-CT 4820 UNIVERSITY SQUARE HUNTSVILLE AL 35816-1822	W912DY	CT-P/ACQUISITION SUPPORT TEAM ATTN: DEMETRA HILL 256-895-1165 HUNTSVILLE AL	W912DY

8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)		9A. AMENDMENT OF SOLICITATION NO.
PARSONS INFRASTRUCTURE & TECHNOLOGY GROU CHARLES TERHUNE 100 W WALNUT STREET PASADENA CA 91124		9B. DATED (SEE ITEM 11)
	X	10A. MOD. OF CONTRACT/ORDER NO. DACA87-02-D-0005-0036
CODE 1BVK6 FACILITY CODE	X	10B. DATED (SEE ITEM 13) 22-Aug-2007

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer ☐ is extended, ☐ is not extended.

Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS.
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

☐ A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

☐ B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).

X C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
FAR 52.243-3

☐ D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)
Modification Control Number: a0ispwke072697

A. This modification is to correct the Period of Performance from 31 July 2007 to 01 April 2008.

B. As a result of this modification there is no additional cost to the Government. Total task order amount of $116,181.00 remains the same.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) LYNDA BONDS / ADDED BY SUMI TEL: EMAIL: Lynda.Bonds@hnd01.usace.army.mil	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY Lynda Bonds (Signature of Contracting Officer)	16C. DATE SIGNED 17-Sep-2007

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

SECTION F - DELIVERIES OR PERFORMANCE

The following Delivery Schedule Item has been deleted from CLIN 0001:

DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
31-JUL-2007		US ARMY ENGINEERING & SUPPORT CENTER NO CONTACT SPECIFIED CEHNC-CT 4820 UNIVERSITY SQUARE HUNTSVILLE AL 35816-1822 SEE "ADMINISTERED BY" FOB: Destination	W912DY

The following Delivery Schedule item has been added to CLIN 0001:

DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
POP 22-AUG-2007 TO 01-APR-2008	N/A	US ARMY ENGINEERING & SUPPORT CENTER NO CONTACT SPECIFIED CEHNC-CT 4820 UNIVERSITY SQUARE HUNTSVILLE AL 35816-1822 SEE "ADMINISTERED BY" FOB: Destination	W912DY

(End of Summary of Changes)

ORDER FOR SUPPLIES OR SERVICES

1. CONTRACT/PURCH ORDER/AGREEMENT NO.	2. DELIVERY ORDER/ CALL NO.	3. DATE OF ORDER/CALL (YYYYMMMDD)	4. REQUISITION/PURCH REQUEST NO.	5. PRIORITY
FA8903-04-D-8675	0012	06 APR 2005	SEE SCHEDULE	N

6. ISSUED BY HSW/PKV-W — CODE FA8903
AIR FORCE MATERIEL COMMAND
311TH HUMAN SYSTEMS WING/PKV-W
3300 SIDNEY BROOKS
BROOKS CITY BASE TX 78235-5112
EDWIN CUSTODIO (210)536-4493
Edwin.Custodio@hqafcee.brooks.af.mil

7. ADMINISTERED BY (If Other than 6) — CODE S0512A
DCMA LOS ANGELES
16111 PLUMMER STREET
BLDG. 10, 2ND FLOOR
SEPULVEDA CA 91343
DCMALOSANGELES@DCMA.MIL

SCD: C PAS: (NONE)

8. DELIVERY FOB
X DESTINATION
OTHER (See Schedule if other)

9. CONTRACTOR — CODE 1BVK6 — FACILITY
NAME AND ADDRESS
PARSONS INFRASTRUCTURE & TECHNOLOGY GROUP INC.
100 WEST WALNUT STREET
PASADENA CA 91124-0001
(626) 440-6165

ORIGINAL

10. DELIVER TO FOB POINT BY (Date)
(YYYYMMMDD) SEE SCHEDULE

11. X IF BUSINESS IS
SMALL
SMALL DISADVANTAGED
WOMEN-OWNED

12. DISCOUNT ITEMS
N

13. MAIL INVOICES TO ADDRESS IN BLOCK
See Field 15 (Payment Office) and Section G

14. SHIP TO — CODE
SEE SCHEDULE

15. PAYMENT WILL BE MADE BY — CODE HQ0339
DFAS COLUMBUS CENTER
DFAS-CO/WEST ENTITLEMENT OPS
P.O. BOX 182381
COLUMBUS OH 43218-2381

EFT:T

MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.

16. TYPE OF ORDER
DELIVERY/CALL [X] — This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.
PURCHASE [ ] — Reference your _____ furnish the following on items specified herein.

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR _____ SIGNATURE _____ TYPED NAME AND TITLE _____ DATE SIGNED(YYYYMMMDD) _____

[ ] If this box is marked, supplier must sign Acceptance and return the following number of copies:

17. ACCOUNTING AND APPROPRIATION DATA/LOCAL USE
SEE SCHEDULE

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/SERVICES	20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT

*If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.

24. UNITED STATES OF AMERICA
BY: EDWIN CUSTODIO CONTRACTING/ORDERING OFFICER

25. TOTAL $3,906,958.00

26. DIFFERENCES

26. QUANTITY IN COLUMN 20 HAS BEEN
[ ] INSPECTED [ ] RECEIVED [ ] ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

DATE _____ SIGNATURE AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE _____

27. SHIP NO. [ ] PARTIAL [ ] FINAL

28. D.O. VOUCHER NO.

30. INITIALS

32. PAID BY

33. AMOUNT VERIFIED CORRECT FOR

32. PAYMENT [ ] COMPLETE [ ] PARTIAL [ ] FINAL

34. CHECK NUMBER

36. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT.
DATE _____ SIGNATURE AND TITLE OF CERTIFYING OFFICER _____

35. BILL OF LADING

37. RECEIVED AT	38. RECEIVED BY (Print)	39. DATE RECEIVED (YYYYMMMDD)	40. TOTAL CONTAINERS	41. S/R ACCOUNT NO.	42. S/R VOUCHER NO.

Do Not Use

ORDER FOR SUPPLIES OR SERVICES

1. CONTRACT/PURCH ORDER/AGREEMENT NO.	2. DELIVERY ORDER/ CALL NO.	3. DATE OF ORDER/CALL (YYYYMMMDD)	4. REQUISITION/PURCH REQUEST NO.	5. PRIORITY
FA8903-04-D-8675	0012	06 APR 2005	SEE SCHEDULE	N

6. ISSUED BY HSW/PKV-W CODE FA8903
AIR FORCE MATERIEL COMMAND
311TH HUMAN SYSTEMS WING/PKV-W
3300 SIDNEY BROOKS
BROOKS CITY BASE TX 78235-5112
EDWIN CUSTODIO (210)536-4493
Edwin.Custodio@hqafcee.brooks.af.mil

7. ADMINISTERED BY *(If Other than 6)* CODE S0512A
DCMA LOS ANGELES
16111 PLUMMER STREET
BLDG. 10, 2ND FLOOR
SEPULVEDA CA 91343
DCMALOSANGELES@DCMA.MIL

SCD: C PAS: (NONE)

8. DELIVERY FOB
X DESTINATION
OTHER *(See Schedule if other)*

9. CONTRACTOR CODE 1BVK6 FACILITY
NAME AND ADDRESS
PARSONS INFRASTRUCTURE & TECHNOLOGY GROUP INC.
100 WEST WALNUT STREET
PASADENA CA 91124-0001
(626) 440-6165

10. DELIVER TO FOB POINT BY *(Date)*
(YYYYMMMDD) SEE SCHEDULE

11. X IF BUSINESS IS
SMALL
SMALL DISAD-VANTAGED
WOMEN-OWNED

12. DISCOUNT ITEMS
N

13. MAIL INVOICES TO ADDRESS IN BLOCK
See Field 15 (Payment Office) and Section G

14. SHIP TO CODE
SEE SCHEDULE

15. PAYMENT WILL BE MADE BY CODE HQ0339
DFAS COLUMBUS CENTER
DFAS-CO/WEST ENTITLEMENT OPS
P.O. BOX 182381
COLUMBUS OH 43218-2381

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16. TYPE OF ORDER
DELIVERY/ CALL X — This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.
PURCHASE — Reference your furnish the following on items specified herein.

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR | SIGNATURE | TYPED NAME AND TITLE | DATE SIGNED(YYYYMMMDD)

☐ If this box is marked, supplier must sign Acceptance and return the following number of copies:

17. ACCOUNTING AND APPROPRIATION DATA/LOCAL USE
SEE SCHEDULE

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/SERVICES	20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT

*If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.

24. UNITED STATES OF AMERICA
//signed//
BY: EDWIN CUSTODIO 06 APR 2005
CONTRACTING/ORDERING OFFICER

25. TOTAL $3,906,958.00
29. DIFFERENCES

26. QUANTITY IN COLUMN 20 HAS BEEN
☐ INSPECTED ☐ RECEIVED ☐ ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

DATE SIGNATURE AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

36. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT.
DATE SIGNATURE AND TITLE OF CERTIFYING OFFICER

27. SHIP NO. | **28. D.O. VOUCHER NO.** | **30. INITIALS**

32. PAYMENT ☐ PARTIAL ☐ FINAL
32. PAID BY
33. AMOUNT VERIFIED CORRECT FOR
34. CHECK NUMBER
35. BILL OF LADING
32. PAYMENT ☐ COMPLETE ☐ PARTIAL ☐ FINAL

37. RECEIVED AT	38. RECEIVED BY *(Print)*	39. DATE RECEIVED *(YYYYMMMDD)*	40. TOTAL CONTAINERS	41. S/R ACCOUNT NO.	42. S/R VOUCHER NO.

1. In accordance with the provisions and the authority of FAR Clause 52.216-18 "Ordering (OCT 1995)" of the Basic Contract FA8903-04-D-8675 and this Task Order 0012, the Contractor shall accomplish the effort described in the Statement of Work(SOW) dated 20 January 2005, Attachment 1 hereto, at a total Firm Fixed Price **(FFP)** of $3,906,958.00.

2. SECTION B - SUPPLIES OR SERVICES AND PRICE/COSTS:

B028 CONTRACT TYPE: FIRM FIXED PRICE (FEB 1997)

TOTAL PRICE: $3,906,958.00

Applicable to the following Line Items: CLIN 0001 and 0002

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
0001		1 Lot	$3,906,958.00 $3,906,958.00
	Noun:	ENVIRONMENTAL REMEDIATION AND CONSTRUCTION EFFORTS	
	ACRN:	9	
	NSN:	N - Not Applicable	
	Contract type:	J - FIRM FIXED PRICE	
	Inspection:	DESTINATION	
	Acceptance:	DESTINATION	
	FOB:	DESTINATION	
	Descriptive Data:		
	The Contractor shall provide the necessary effort for environmental remediation and construction efforts as set forth in the attached Statement of Work (SOW) dated 20 January 2005, Attachment 1, and attached to Section J.		
000101			
	Noun:	Funding Info Only	
	ACRN:	AA $1,008,632.49	
	PR/MIPR:	FY7624-04-08470	$1,008,632.49
	Descriptive Data:		
	Project # SEN 04-1		
000102			
	Noun:	Funding Info Only	
	ACRN:	AB $994,055.59	
	PR/MIPR:	FY7624-04-08470	$994,055.59
	Descriptive Data:		
	Project # SEN 04-1		

STATEMENT OF WORK

REMEDIATION OF THE SENECA ARMY DEPOT ACTIVITY

CONTRACT: FA8903-04-D-8675
TASK ORDER: 0012
Project Number: SEN 04-1

20 January 2005

The following provides a description of the sites identified in this SOW. It is the responsibility of the Contractor to schedule a site visit, research, investigate, and reach their own conclusions regarding site conditions.

All work under this contract will be conducted under the FFA, as provided.

SEAD 25:

The Fire Training and Demonstration Pad (SEAD 25) was in use from the late 1960s to the late 1980s. The pad was used for fire control training. During the 1980s, the pad was used twice for fire fighting demonstrations, once in 1982 or 1983 and in 1987. The soil and groundwater is contaminated with volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs). The future intended use of the site is industrial.

The selected remedy for this site as detailed in the ROD includes the following components:

- Excavate soil at the source in an area approximately 60 feet by 100 feet by 6 feet deep (approximately 1,350 cy).
- Excavate sediment from an area 780 feet by 3 feet by 2 feet deep (175 cy) from the northwest ditch.
- Dewater the excavation pit.
- Treat groundwater recovered from the pit.
- Backfill the excavations.
- Conduct semi-annual groundwater monitoring.
- Evaluate effectiveness of land use controls for one year.
- Complete a one-year review of the selected remedy.
- Prepare a contingency plan that may include additional monitoring and air sparging of the plume, if necessary.

SEAD 26:

The Fire Training Pit and Area (SEAD 26) was in use from 1977 to 1994. The pit is approximately 75 feet in diameter and approximately 3 feet deep. A bentonite liner was installed in the pit in 1982 or 1983. This pit was used one to four times a year for fire fighting training during which time various flammable materials were floated on water, ignited, and extinguished. Prior to 1977, the fire training area surrounding the pit may also have been used for fire demonstrations. Groundwater has been impacted by VOCs and soils have been impacted by VOCs and SVOCs.

The selected remedy for this site as detailed in the ROD includes the following components:

- Excavate surface soils with total carcinogenic PAH concentrations above 10 ppm (approximately 1,050 cy).

- Backfill the excavation.
- Conduct semi-annual groundwater monitoring.
- Evaluate effectiveness of land use controls for one year.
- Complete a one-year review of the selected remedy.
- Prepare a contingency plan that may include additional monitoring and air sparging of the plume, if necessary.

Ash Landfill Operable Unit

The Ash Landfill Operable Unit contains the following solid waste management units (SWMUs):

- SEAD 3: Incinerator Cooling Water Pond
- SEAD 6: Ash Landfill
- SEAD 8: Non-Combustible Fill Landfill (NCFL)
- SEAD 14: Refuse Burning Pits including the Debris Piles
- SEAD 15: Abandoned Solid Waste Incinerator Building

The Ash Landfill site was initially estimated to encompass an area of approximately 130 acres. This larger area was investigated to ensure that no previously unknown waste disposal areas were overlooked. Following the remedial investigation, the area of the Ash Landfill site was refocused to an area of approximately 23 acres. This area is comprised of the five SWMUs presented above.

The Incinerator Cooling Water Pond is a circular-bermed area approximately 50 feet in diameter. The Ash Landfill is a kidney-shaped landfill approximately 550 feet by 300 feet (4 acres) in area. The groundwater plume associated with the Ash Landfill is approximately 18 acres and contains elevated concentrations of chlorinated solvents extending the property line. The NCFL is an area approximately 400 feet by 400 feet (3 acres) in area. The Refuse Burning Pits were approximately 15 feet in diameter and 20 feet deep, where trash was open burned. The Debris Piles were discovered near this side of the Ash Landfill area and contamination was found in the Debris Piles. The Abandoned Incinerator Building is approximately 25 feet by 40 feet. The area that comprises the remainder of the 130 acres of the Ash Landfill site is a grassy shrub-covered area.

The selected remedy for the Ash Landfill Operable Unit is the following:

- Excavation and offsite disposal of Debris Piles, and establishment and maintenance of a vegetative soil cover for the Ash Landfill and the Non-Combustible Fill Landfill (NCFL) for source control.
- Installation of three in-situ permeable reactive barrier walls filled with 100% zero valence iron, and maintenance of the proposed walls and the migration wall for migration control of the groundwater plume.
- Backfilling and re-grading the Incinerator Cooling Water Pond during excavation of the Debris Piles.

- A Contingency Plan will be developed to include one of the following options; provision of an alternative water supply for potential down gradient receptors (farmhouse) or air sparging of the plume in the event that groundwater conditions down gradient of the recommended walls described above exceed the trigger values.
- Evaluate effectiveness of land use controls for one year.
- Complete a one-year review of the selected remedy.

The objectives and standards for this SOW are outlined in Table 1.

Objective	Standards
SEAD 25 – Fire Training and Demonstration Pad • Achieve Remedy in Place (RIP) at SEAD-25. **SEAD 26 – Fire Training Pit and Area** • Achieve RIP at SEAD-26. **SEADs 3, 6, 8, 14 and 15 – Ash Landfill Operable Unit** • Achieve Response Complete (RC) for SEAD 3. • Achieve RIP for SEADs 6, 8, 14 and 15.	• Compliance with existing RODs, the FFA, and associated schedules. • Army approval *(e.g., receipt of documentation confirming RIP or RC)* and Regulator approval or concurrence *(e.g., receipt of documentation confirming remedies are "operational and functional," "operating properly and successfully," or meeting other appropriate criteria).*
Perform long-term monitoring (LTM) at all sites identified in this SOW, as required after achievement of RIP, for a period of one year.	Army approval and Regulator approval or concurrence *(e.g., final acceptance of monitoring reports with no violations).*
Develop and implement and exit or ramp-down strategy for LTM/LTO efforts at all sites identified in this SOW.	Army approval and Regulator approval or concurrence *(e.g., documentation formally adopting the decision rules for ramp down and/or exit strategies).*
Complete the first year of the CERCLA 121(c) five-year review required for the sites identified in this SOW, and correction of any deficiencies noted.	Army approval and Regulator approval or concurrence *(e.g., formal documentation accepting the reviews).*

RIP or RC will be attained upon the finalization of appropriate written documentation certifying that site remediation has met all of the identified response objectives and no further action is necessary, subject to any requirement for long-term monitoring and/or operations. The Contractor should note that if monitoring and/or operations are necessary as a result of the Contractor's proposed and approved or constructed remedy at a site, the Contractor will be responsible for the following:

- Performing the required monitoring and/or operations at that site for (1) year following achievement of RIP.
- Performing the first year of the CERCLA 121(c) five-year review required at that site.

Tom
Here are the assumptions for the LTM at the Ash landfill and 25/26 from the proposal by Parsons.
Steve

SM Absolom
SEDA Installation Manager
Ph. (607) 869-1309
Fax (607) 869-1362
Cell (315) 406-4737
----- Original Message -----
From: Heino, Todd
To: Stephen Absolom
Sent: Tuesday, March 14, 2006 1:07 PM
Subject: Annual Monitoring Assumptions

Steve,

Here are the assumptions:

2.3 WBS 60000 – FIRST YEAR GROUNDWATER MONITORING

Parsons will implement the Post-Closure Monitoring Plan for the Ash Landfill and the Post-Closure Monitoring Plan for SEADs 25 and 26 for the first year after remedial action implementation. Four rounds of monitoring will be conducted at the Ash Landfill and two rounds of monitoring will be conducted at SEADs 25 and 26 as required in the respective RODs.

Approximately 27 wells will be sampled each quarter at the Ash Landfill to monitor the performance of the reactive walls and show that performance criteria are not being exceeded at MW-56. The samples will be submitted for the analysis of VOCs, ethene, ethane, methane, nitrate, nitrite, chloride, sulfate, iron, manganese, volatile fatty acids, alkalinity, hydrogen, sulfide and total organic carbon (TOC). Following sampling and analysis of the wells, a quarterly sampling report will be prepared and submitted to the regulators for information. At the end of the first year, an annual report will be submitted to the regulators for approval.

number of wells semi annualy first year locations

Approximately 25 wells will be sampled twice during the first year at SEADs 25 and 26 to show that natural attenuation of BTEX is continuing at the two sites. The samples will be submitted for the analysis of VOCs, SVOCs, methane, ethane, ethene, nitrate, nitrite, chloride, sulfate, DOC, dissolved hydrogen and total inorganic carbon. Following sampling and analysis of the wells, a semi-annual sampling report will be prepared and submitted to the regulators for information. At the end of the first year, an annual report will be submitted to the regulators for approval.

In addition, at the end of the first year of monitoring Parsons will perform vegetable oil injection into the six reactive trenches to enhance the biodegradation. A total of 520 gallons will be injected into the six trenches.

The cost for future years of monitoring at the Ash Landfill will be best determined after the post-closure monitoring plan has been approved. Until then, it's just a guess.

Please let me know if this is sufficient.

Thanks,

Todd

Todd Heino
Program Manager
PARSONS
150 Federal Street
Boston, Massachusetts 02110-1713
617-449-1405 (tel.)
339-206-7413 (cell)
617-946-9777 (fax.)
todd.heino@parsons.com

PARSONS
Safety-Make it Personal

Using this version of the budget form, you enter hours, direct labor cost, and billable labor amount.

ENTER NUMBERS IN PINK-SHADED FIELDS.

PARSONS INFRASTRUCTURE & TECHNOLOGY GROUP, INC.
WORK BREAKDOWN STRUCTURE

Job number ______________________

Screen 937, option 21 WBS 60000 Date entered ______________________

(Accounting Department)

SITE: SEAD-25 and 26 →

cost for 1 year

			Date	Labor				ODCs		Subs				
WBS No.	Description	Mgr Emp No	Start / Complete	Avg Rate / Hours	Direct / Burden	Lbr Mult	Billable Lbr / Lbr Cost	ODC Mult	Billable ODC / ODC Cost	Subs Mult	Billable subs / Sub cost	Total Value / Total Cost	Labor GP / ODC/Subs GP	Rev No
60100	Ash Landfill Monitoring and Report	91466	1/1/2007	$30.00	$55,556	2.16	$120,000	1.00	$15,000	1.00	$48,000	$183,000	$38,610	
			1/1/2008	1,852.0	$25,834		$81,390		$15,000		$48,000	$144,390	$0	
60200	SEAD 25/26 Monitoring and Report	91466	1/1/2007	$29.99	$34,906	2.16	$75,398	1.00	$7,519	1.00	$22,554	$105,471	$24,261	
			1/1/2008	1,164.0	$16,231		$51,137		$7,519		$22,554	$81,210	$0	
60300	First Year Review	91466	1/1/2008	$30.01	$18,519	2.16	$40,000	1.00	$2,000	1.00	$2,000	$44,000	$12,870	
			3/31/2008	617.0	$8,611		$27,130		$2,000		$2,000	$31,130	$0	
				#DIV/0!		#DIV/0!		1.00	$0	1.00	$0	$0	$0	
					$0		$0					$0	$0	
				#DIV/0!		#DIV/0!		1.00	$0	1.00	$0	$0	$0	
					$0		$0					$0	$0	
				#DIV/0!		#DIV/0!		1.00	$0	1.00	$0	$0	$0	
					$0		$0					$0	$0	
				#DIV/0!		#DIV/0!		1.00	$0	1.00	$0	$0	$0	
					$0		$0					$0	$0	
				#DIV/0!		#DIV/0!		1.00	$0	1.00	$0	$0	$0	
					$0		$0					$0	$0	
				#DIV/0!		#DIV/0!		1.00	$0	1.00	$0	$0	$0	
					$0		$0					$0	$0	
				#DIV/0!		#DIV/0!		1.00	$0	1.00	$0	$0	$0	
					$0		$0					$0	$0	
				#DIV/0!		#DIV/0!		1.00	$0	1.00	$0	$0	$0	
					$0		$0					$0	$0	
				#DIV/0!		#DIV/0!		1.00	$0	1.00	$0	$0	$0	
					$0		$0					$0	$0	
Job				$30.00	$108,981	2.16	$235,398	1.00	$24,519	1.00	$72,554	$332,471	$75,741	
Total				3,633.0	$50,676		$159,657		$24,519		$72,554	$256,730		

DRAFT REMEDIAL DESIGN WORK PLAN AND DESIGN REPORT FOR THE FIRE TRAINING AND DEMONSTRATION PAD (SEAD-25) AND THE FIRE TRAINING PIT AND AREA (SEAD-26)

SENECA ARMY DEPOT ACTIVITY, ROMULUS, NEW YORK

Prepared for:

AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE
BROOKS CITY-BASE, TEXAS

and

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

Prepared by:

PARSONS
150 Federal Street
Boston, MA 02110

Contract Number FA8903-04-D-8675
Task Order No. 0012
CDRL A001G, A004 and A013
EPA SITE ID# NY0213820830
NY SITE ID# 8-50-006

June 2005

TABLE 6-2

Monitoring Well Sampling Summary

SEAD-25 and SEAD-26 Remedial Design Work Plan and Design Report

Seneca Army Depot Activity

Well ID	Groundwater Field Parameters	Frequency[1]	Monitoring Purpose
SEAD-25			
MW25-2 MW25-3 MW25-9	VOCs, SVOCs, natural attenuation parameters	Semi-annual	Plume wells: monitors plume concentrations and natural attenuation at SEAD-25
MW25-8 MW25-10 MW25-13 MW25-15 MW25-17 MW25-18	VOCs, SVOCs, natural attenuation parameters	Semi-annual	Sentinel wells – monitors groundwater quality to ensure no off-site migration of plume, as well as background parameters to evaluate natural attenuation
SEAD-26			
MW26-7	VOCs	Semi-annual	Monitors VOC concentrations and natural attenuation at SEAD-26
MW26-1	VOCs	Semi-annual	Upgradient/background well – monitors background parameters to evaluate natural attenuation
MW26-2 MW26-3 MW26-4	VOCs	Semi-annual	Downgradient wells – monitors downgradient groundwater quality and background parameters to evaluate natural attenuation

9 wells

5 wells

Notes:

1. Semi-annual sampling will be conducted for the first year. The sampling frequency will be reviewed and reassessed in the monitoring report after one year.
2. Natural attenuation parameters include nitrate, nitrite, chloride, sodium, sulfate, iron, pH, redox potential, and dissolved oxygen.

DRAFT ANNUAL REPORT

FOR THE FIRE TRAINING AND DEMONSTRATION PAD (SEAD-25) AND THE FIRE TRAINING PIT AND AREA (SEAD-26)

SENECA ARMY DEPOT ACTIVITY, ROMULUS, NEW YORK

Prepared for:

AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE
BROOKS CITY-BASE, TEXAS

and

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

Prepared by:

PARSONS
150 Federal Street
Boston, MA 02110

Contract Number FA8903-04-D-8675
Task Order No. 0012
CDRL A001H
EPA SITE ID# NY0213820830
NY SITE ID# 8-50-006

February 2007

5.2 Recommendations

Based on the historical data and the results of the two rounds of semiannual LTM at SEAD-25 and SEAD-26, the Army recommends the following:

- The SEAD-25 monitoring wells should be sampled and analyzed for VOCs only, since no SVOCs of concern have been detected above groundwater standards at SEAD-25 for three consecutive rounds;

- Five monitoring wells at SEAD-25 should be removed from the LTM program. The wells should be removed since no COCs have been detected above detection limits at those wells at any time, and the concentrations in the source area wells (MW25-2, MW25-3, and MW25-9) have decreased to levels near the groundwater standards. The table below indicates which wells should be removed or retained in the program. **Figure 9** shows the location of the wells that will be retained.

Well ID	Included in LTM Program	Rationale
MW25-2	**Include**	Source well with detections of BTEX exceeding standards
MW25-3	**Include**	Historic detections of COCs
MW25-8	Eliminate	No COCs detected historically
MW25-9	**Include**	BTEX has been detected
MW25-10	**Include**	Chlorinated organics were detected
MW25-13	**Include**	Located downgradient of source well
MW25-15	Eliminate	No COCs detected since 1996
MW25-17	Eliminate	No COCs detected historically
MW25-18	Eliminate	No COCs detected historically
MW25-19	Eliminate	No COCs detected historically

- Groundwater monitoring will continue on a semiannual basis at SEAD-25 for 2007, and the frequency and number of wells included in the LTM program will be reevaluated as part of the 2007 annual report. If all COCs meet the cleanup goals in the next year of LTM, the monitoring program will be discontinued.

- At SEAD-26, the Army recommends that no further groundwater monitoring be performed. LTM is no longer needed since no COCs have been detected above the cleanup goals in the last two rounds of semiannual sampling. There is no evidence of contamination of the groundwater at SEAD-26 and further monitoring is not required.

END SEAD 26 LTM

This alternative was selected as the preferred alternative since it eliminates source soils from further impacting groundwater at the site, eliminates sediments that contribute to human health risk, and effectively treats the most highly impacted groundwater at the site. This alternative does not require any treatability or pilot studies as other alternatives do, and does not require any long-term operating system, while maintaining its effectiveness. In addition, the U.S. Army believes that in selecting this alternative, property transfer at this site may be expedited since the time to implement this remedy is relatively short. The removal of soils and sediments from the site so that the source of contamination no longer exists ranked as one of the highest remedies for effectiveness and implementability among the other alternatives considered in the FS. While it is not the most cost-effective solution, it will provide an effective and efficient solution requiring the least amount of operation and maintenance and restores the land for unrestricted use, thereby reducing the long-term costs associated with maintaining and enforcing land use controls.

SEAD-26

Based on the evaluation of the various options, the U.S. Army recommends Alternative RA26-2 (Soil Removal, Off-site Disposal, and Monitoring of Plume) (**Figure 11-1**). The preferred remedy consists of the following elements:

- Excavate surface soils with total carcinogenic PAH concentrations above 10 ppm, for an estimated total of 1050 CY;
- Dispose of excavated soils in an appropriate off-site facility;
- Conduct groundwater monitoring until the groundwater cleanup standards are met (approximately 20 years) in order to ensure that the VOCs present do not migrate off-site;
- Establish and maintain groundwater use controls to restrict groundwater access and use until cleanup standards are achieved;
- Complete a review of the selected remedy every five-years (at minimum), in accordance with Section 121(c) of the CERCLA;
- Prepare a contingency plan that may include additional monitoring and air sparging of the plume, as necessary, which would protect against VOC contamination migrating off-site; and
- Remove groundwater use restrictions once groundwater cleanup standards are achieved.

The cleanup goal for the PAHs is a value of 10 ppm for total carcinogenic PAHs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene] at each sample location. It should be noted that a review of the available site data suggests that the highest concentrations of the greatest contributors to carcinogenic risk (benzo(a)pyrene and dibenz(a,h)anthracene) that would remain on-site following a removal action with 10 ppm as a cleanup goal would be 1200 µg/Kg and 410 µg/Kg, respectively.

The frequency of long-term monitoring will be detailed in the RD plan. The cleanup standards for groundwater at the site are NYSDEC Class GA groundwater standards, presented in Table 1-1B.

ORDER FOR SUPPLIES OR SERVICES

PAGE 1 OF 14

1. CONTRACT/PURCH. ORDER/ AGREEMENT NO.	2. DELIVERY ORDER/ CALL NO.	3. DATE OF ORDER/CALL (YYYYMMMDD)	4. REQ./ PURCH. REQUEST NO.	5. PRIORITY
DACA87-02-D-0005	0036	2007 Aug 22	W31RYO71375791	

6. ISSUED BY CODE W912DY
US ARMY ENGINEERING & SUPPORT CENTER
CEHNC-CT
4820 UNIVERSITY SQUARE
HUNTSVILLE AL 35816-1822

7. ADMINISTERED BY *(if other than 6)* CODE W912DY
CT-P/ACQUISITION SUPPORT TEAM
ATTN: DEMETRA HILL
256-895-1165
HUNTSVILLE AL

8. DELIVERY FOB
[X] DESTINATION
[ ] OTHER
(See Schedule if other)

9. CONTRACTOR CODE 1BVK6 FACILITY
NAME AND ADDRESS
PARSONS INFRASTRUCTURE & TECHNOLOGY GROU
CHARLES TERHUNE
100 W WALNUT STREET
PASADENA CA 91124

10. DELIVER TO FOB POINT BY (Date) *(YYYYMMMDD)*
SEE SCHEDULE

11. MARK IF BUSINESS IS
[ ] SMALL
[ ] SMALL DISADVANTAGED
[ ] WOMEN-OWNED

12. DISCOUNT TERMS

13. MAIL INVOICES TO THE ADDRESS IN BLOCK
See Item 15

14. SHIP TO CODE W912DY
US ARMY ENGINEERING & SUPPORT CENTER
NO CONTACT SPECIFIED
CEHNC-CT
4820 UNIVERSITY SQUARE
HUNTSVILLE AL 35816-1822

15. PAYMENT WILL BE MADE BY CODE 964145
US ARMY ENG & SUP CENTER - FINANCE OFFIC
US ARMY CORPS OF ENGRS FINANCE CTR
5722 INTEGRITY DR
MILLINGTON TN

MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.

16. TYPE OF ORDER
DELIVERY/CALL [X] This delivery order/call is issued ... ith and subject to terms and conditions of above numbered contract.
PURCHASE [ ] Reference your quote dated ...
Furnish the following on ter...

EXTRA COPY

ACCEPTANCE. THE CO... REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PRE..., SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET F... SAME.

NAME OF CONTRACTOR ... TYPED NAME AND TITLE DATE SIGNED *(YYYYMMMDD)*

[X] If this box is marked, supplier must sign Acceptance and ... ng number of copies: 1

17. ACCOUNTING AND APPROPRIATION DATA/ LOCAL ...
See Schedule

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/ SERVICES	20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT
	SEE SCHEDULE				

* *If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.*

24. UNITED STATES OF AMERICA
TEL: 256-895-1163
EMAIL: K...
BY: KATHERINE H. ATKINS
Katherine H. Atkins
CONTRACTING / ORDERING OFFICER

25. TOTAL $116,181.00
26. DIFFERENCES

27a. QUANTITY IN COLUMN 20 HAS BEEN
[ ] INSPECTED [ ] RECEIVED [ ] ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE | c. DATE *(YYYYMMMDD)* | d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE

28. SHIP NO. | 29. DO VOUCHER NO. | 30. INITIALS

f. TELEPHONE NUMBER | g. E-MAIL ADDRESS

[ ] PARTIAL [ ] FINAL

32. PAID BY

33. AMOUNT VERIFIED CORRECT FOR

36. I certify this account is correct and proper for payment.

a. DATE *(YYYYMMMDD)* | b. SIGNATURE AND TITLE OF CERTIFYING OFFICER

31. PAYMENT
[ ] COMPLETE [ ] PARTIAL [ ] FINAL

34. CHECK NUMBER

35. BILL OF LADING NO.

37. RECEIVED AT	38. RECEIVED BY	39. DATE RECEIVED *(YYYYMMMDD)*	40. TOTAL CONTAINERS	41. S/R ACCOUNT NO.	42. S/R VOUCHER NO.

Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
0001		UNDEFINED	Dollars, U.S.	UNDEFINED	UNDEFINED

SENECA ARMY DEPOT

CPFF

CONTRACTOR SHALL PROVIDE SERVICES IN ACCORDANCE WITH THE ATTACHED STATEMENT OF WORK, ENTITLED, "IMPLEMENTATION OF THE LONG-TERM MANAGEMENT PLAN FOR THE OPEN BURNING (OB) GROUNDS AND FIRE TRAINING AREAS, SENECA ARMY DEPOT ACTIVITY, ROMULUS, NEW YORK, AND ADDENDUM, FUNDING OPTIONS SUMMARY, DATED 8 MARCH 2007".

CONTRACTOR SHALL PROVIDE SERVICES FOR OPTION 1. TASK 3.1 LONG TERM MONITORING AT THE OB GROUNDS AND TASK 3.2 LONG TERM MONITORING AT THE FIRE TRAINING AREAS IN ACCORDANCE WITH THE ATTACHED ADDENDUM, FUNDING OPTIONS SUMMARY. OPTION 1 IS FUNDED AT $109,993.00 (COST) PLUS $6,188.00 (FEE) FOR A TOTAL AMOUNT OF $116,181.

THE PERIOD OF PERFORMANCE FOR THIS TASK ORDER IS 31 JULY 2007.

FOB: Destination

MILSTRIP: W31RYO71375791

PURCHASE REQUEST NUMBER: W31RYO71375791

MAX COST	$109,993.00
FIXED FEE	$6,188.00
TOTAL MAX COST + FEE	$116,181.00

ACRN AA $116,181.00

CIN: W31RYO713757910001

Section C - Descriptions and Specifications

SOW

ADDENDUM

IMPLEMENTATION OF THE LONG-TERM MANAGEMENT PLANFOR THE OPEN BURNING (OB) GROUNDS AND FIRE TRAINING AREASSENECA ARMY DEPOT ACTIVITY ROMULUS, NEW YORK

FUNDING OPTIONS SUMMARY

OPTION 1

3.1 Long Term Monitoring at the OB Grounds
- 3.1.1 (Task 1) Vegetative Cap and Drainage Swale Inspections.....$2,729
- 3.1.2 (Task 2) Perform Monitoring Well Installation.....$24,864
- 3.1.3 Quarterly Groundwater Monitoring
  - 3.1.3.1 (Task 3) Initial Quarterly Groundwater Monitoring Event.$16,908
    - 3.1.3.1.1 (Task 3.1) Water Level Monitoring
    - 3.1.3.1.2 (Task 3.2) Water Quality Monitoring
    - 3.1.3.1.3 (Task 3.3) Preparation of Quarterly Reports

3.2 Long Term Monitoring at the Fire Training Areas
- 3.2.1 Quarterly Groundwater Monitoring
  - 3.2.1.1 (Task 7) Initial Quarterly Groundwater Monitoring Event...$23,474
    - 3.2.1.1.1 (Task 7.1) Water Level Monitoring
    - 3.2.1.1.2 (Task 7.2) Water Quality Monitoring
    - 3.2.1.1.3 (Task 7.3) Preparation of Quarterly Reports

3.4 (Task 12) PROJECT MANAGEMENT.....$48,206

OPTION 1 TOTAL	$116,181

OPTION 2

Long Term Monitoring at the OB Grounds

3.1.3.2 (Task 4.0) Second Quarterly Groundwater Monitoring Event.....$16,908
- 3.1.3.2.1 (Task 4.1) Water Level Monitoring
- 3.1.3.2.2 (Task 4.2) Water Quality Monitoring
- 3.1.3.2.3 (Task 4.3) Preparation of Quarterly Reports

Long Term Monitoring at the Fire Training Areas

3.2.1.2 (Task 8.0) Second Quarterly Groundwater Monitoring Event.....$23,474
- 3.2.1.2.1 (Task 8.1) Water Level Monitoring
- 3.2.1.2.2 (Task 8.2) Water Quality Monitoring
- 3.2.1.2.3 (Task 8.3) Preparation of Quarterly Reports

OPTION 2 TOTAL	$40,382

OPTION 3

Long Term Monitoring at the OB Grounds

3.1.3.2.3 (Task 5.0) Third Quarterly Groundwater Monitoring Event.....$16,908

- 3.1.3.2.3.1 (Task 5.1) Water Level Monitoring
- 3.1.3.2.3.2 Task 5.2) Water Quality Monitoring
- 3.1.3.2.3.3 (Task 5.3) Preparation of Quarterly Reports

Long Term Monitoring at the Fire Training Areas

3.2.1.3 (Task 9.0) Second Quarterly Groundwater Monitoring Event.....$23,474

- 3.2.1.3.1 (Task 9.1) Water Level Monitoring
- 3.2.1.3.2 (Task 9.2) Water Quality Monitoring
- 3.2.1.3.3 (Task 9.3) Preparation of Quarterly Reports

OPTION 3 TOTAL	$40,382

OPTION 4

Long Term Monitoring at the OB Grounds

3.1.3.4 (Task 6.0) Third Quarterly Groundwater Monitoring Event.....$16,908

- 3.1.3.4.1 (Task 6.1) Water Level Monitoring
- 3.1.3.4.2 Task 6.2) Water Quality Monitoring
- 3.1.3.4.3 (Task 63) Preparation of Quarterly Reports

Long Term Monitoring at the Fire Training Areas

3.2.1.4 (Task 9.0) Second Quarterly Groundwater Monitoring Event.....$23,474

- 3.2.1.4.1 (Task 9.1) Water Level Monitoring
- 3.2.1.4.2 (Task 9.2) Water Quality Monitoring
- 3.2.1.4.3 (Task 9.3) Preparation of Quarterly Reports

3.3 (Task 11) Preparation of the Annual Report.....$19,107

OPTION 4 TOTAL	$59,489

GRAND TOTAL $256,433

Contract: DACA87-02-D-0005-0036;

Summary Sheet Supporting Data Format

Project: Long-Term Mgmt Plan for OB/FTA, SEI

Printed:

TASK		AMOUNT	SUBCONTRACTOR	AMT W/O SUBCONTRACTOR
Task 1	Vegetative Cap and Drainage	$2,574	$0	$2,574
Task 2	Perform Monitoring Well Installation	$23,766	$10,934	$12,832
Task 3	OB Grounds Q1 GW Monit. Event	$15,954	$128	$15,826
Task 4	OB Grounds Q2 GW Monit. Event	$15,954	$128	$15,826
Task 5	OB Grounds Q3 GW Monit. Event	$15,954	$128	$15,826
Task 6	OB Grounds Q4 GW Monit. Event	$15,954	$128	$15,826
Task 7	SEAD-25 Q1 GW Monit. Event	$22,221	$2,654	$19,567
Task 8	SEAD-25 Q2 GW Monit. Event	$22,221	$2,654	$19,567
Task 9	SEAD-25 Q3 GW Monit. Event	$22,221	$2,654	$19,567
Task 10	SEAD-25 Q4 GW Monit. Event	$22,221	$2,654	$19,567
Task 11	Prep. Of Annual Report	$18,025	$0	$18,025
Task 12	Project Management	$45,478	$0	$45,478
TOTAL		$242,542	$22,062	$220,480

PROJECT TOTAL

STATEMENT OF WORKIMPLEMENTATION OF THE LONG-TERM MANAGEMENT PLANFOR THE OPEN BURNING (OB) GROUNDS AND FIRE TRAINING AREASSENECA ARMY DEPOT ACTIVITY ROMULUS, NEW YORK
8 Mar 2007

1.0 BACKGROUND AND GENERAL STATEMENT OF WORK: Following remediation of the OB Grounds and Fire Training Area sites, long-term monitoring is required to verify the success of the remedial efforts. **1.1 GENERAL DESCRIPTION.** SEDA is a US Army facility located in Seneca County, New York. SEDA occupies approximately 10,600 acres. It is bounded on the west by State Route 96A and on the east by State Route 96. The cities of Geneva and Rochester are located to the northwest (14 and 50 miles, respectively); Syracuse is 53 miles to the northeast and Ithaca is 31 miles to the south. The surrounding area is generally used for farming. The OB Grounds is an approximately 30-acre site located in the northwestern section of the installation. The Fire Training and Demonstration Pad (SEAD-25) and Fire Training Pit and Area (SEAD-26) are located in the east-central and southeastern portions of the installation, respectively.

1.2 REGULATORY STATUS. The Installation was included on the Federal Facilities National Priorities List on 13 July 1989. Consequently, all work to be performed under this contract shall be performed according to Comprehensive Environmental Response Compensation and Liability Act (CERCLA) guidance as put forth in the EPA Interim Final "Guidance for Conducting Remedial Investigations/ Feasibility Studies under CERCLA", the "Federal Facility Agreement under CERCLA Section 120 in the matter of Seneca Army Depot, Romulus, New York", the Final, "Long Term Monitoring Plan for the Open Burning (OB) Grounds, Seneca Army Depot Activity" (Reference 6.11) and the "SEAD-25 and SEAD-26 Annual Report". **1.3 SECURITY REQUIREMENTS.** Compliance with SEDA security requirements is mandated. **2.0 OBJECTIVES:**
The A-E shall implement the approved plan for long-term monitoring at the OB Grounds and Fire Training Areas for a period of one year. Following that year of performance, the A-E shall report annual results and provide recommendations for future Long Term Management needs. All work shall be completed in accordance with (IAW) the approved Long Term Monitoring Plans. All field activities shall be performed IAW the approved Accident Prevention Plan for the Seneca program.

3.0 DESCRIPTION OF SERVICES:3.1 Long Term Monitoring at the OB Grounds.

3.1.1 (Task 1) Vegetative Cap and Drainage Swale Inspections. (OPTION 1) The Contractor shall inspect the vegetative cap and drainage swales on the site. Inspection shall include observations pertinent to the integrity of the soil and vegetative covering and the condition of run-off channels, infiltration galleries and swales.

3.1.2 (Task 2) Perform Monitoring Well Installation (OPTION 1) The Contractor shall provide the labor and equipment necessary to install 6 monitoring wells as laid out in the approved plan. Installation shall include initial well development.

3.1.3 Quarterly Groundwater Monitoring.

3.1.3.1 (Task 3) Initial Quarterly Groundwater Monitoring Event. (OPTION 1) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.1.3.1.1 (Task 3.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.1.3.1.2 (Task 3.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.1.3.1.3 (Task 3.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.1.3.2 (Task 4.0) Second Quarterly Groundwater Monitoring Event. (OPTION 2) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.1.3.2.1 (Task 4.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.1.3.2.2 (Task 4.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.1.3.2.3 (Task 4.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.1.3.2.3 (Task 5.0) Third Quarterly Groundwater Monitoring Event. (OPTION 3) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.1.3.2.3.1 (Task 5.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.1.3.2.3.2 (Task 5.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.1.3.2.3.3 (Task 5.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.1.3.4 (Task 6.0) Fourth Quarterly Groundwater Monitoring Event. (OPTION 4) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.1.3.4.1 (Task 6.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.1.3.4.2 (Task 6.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.1.3.4.3 (Task 6.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.2 Long Term Monitoring at the Fire Training Areas.

3.2.1 Quarterly Groundwater Monitoring.

3.2.1.1 (Task 7) Initial Quarterly Groundwater Monitoring Event. (OPTION 1) Note: One year of groundwater monitoring was completed previously by another Government entity as part of their remediation effort. Consequently, the initial monitoring event under this SOW is actually the fifth monitoring event, overall. Upon direction from the KO, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.2.1.1.1 (Task 7.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.2.1.1.2 (Task 7.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.2.1.1.3 (Task 7.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.2.1.2 (Task 8.0) Second Quarterly Groundwater Monitoring Event. (OPTION 2) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.2.1.2.1 (Task 8.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.2.1.2.2 (Task 8.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.2.1.2.3 (Task 8.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.2.1.3 (Task 9.0) Third Quarterly Groundwater Monitoring Event. (OPTION 3) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.2.1.3.1 (Task 9.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.2.1.3.2 (Task 9.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.2.1.3.3 (Task 9.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.2.1.4 (Task 10.0) Fourth Quarterly Groundwater Monitoring Event. (OPTION 4) Following well installation and initial development, the Contractor shall commence the initial quarterly groundwater monitoring event.

3.2.1.4.1 (Task 10.1) Water Level Monitoring. The Contractor shall measure water levels from all wells at the site in order to generate potentiometric maps as part of the analysis and reporting phases.

3.2.1.4.2 (Task 10.2) Water Quality Monitoring. The Contractor shall sample and analyze the water quality at all wells as described in the approved plan. This effort shall include required indicator parameters. All sampling and analysis shall be performed IAW the programmatic Sampling and Analysis Plan (Reference 6.11).

3.2.1.4.3 (Task 10.3) Preparation of Quarterly Reports. Following completion of each quarterly Groundwater Monitoring Event, the Contractor shall prepare and submit a quarterly report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.3 (Task 11) Preparation of the Annual Report. **(OPTION 4)** Following completion of the first year of quarterly groundwater monitoring events, the Contractor shall prepare and submit an annual report which summarizes and analyzes the data collected and observations made over the year's effort. Presentation shall include:

- Complete tabulations, including maximum and minimum levels, of all groundwater elevation data developed.
- Trend plots of groundwater elevation data for each of the monitoring wells.
- A potentiometric map of site groundwater.
- Complete tabulations of all chemical concentration data developed to date.
- Complete tabulations of all indicator parameter data developed to date.
- Summary presentations (e.g. Sample population, maximums, minimums, median, mean, standard deviation, coefficient of variation, etc) of all chemical concentration data developed to date for downgradient and background wells versus the regulatory criteria values.
- Trend plots for all chemical concentration data developed for each of the monitoring ells.
- Trend plots for all key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

- A recommendation of any changes (e.g. changing frequency of data collection to semi annual or annual, development of a sediment monitoring program, etc.) that are proposed for implementation for the OB Grounds LTM Plan.

3.4 (Task 12) PROJECT MANAGEMENT (OPTION 1) - The A-E shall manage the delivery order in accordance with the basic contract statement of work. All project management associated with the delivery order, with the exception of the direct technical oversight of the work described in the preceding tasks, shall be accounted for in this task.

4.0 SUBMITTALS: The contractor shall furnish copies of all documents to the addressees listed below. One copy of the final documents shall be sent to the CEHNC Project Manager on 3.5-inch computer disk or CD ROM in an acceptable format in addition to the number of hard copies identified below. The contractor shall use express mail services for delivering these documents. Following each submission, comments generated as a result of their review shall be incorporated.

4.1 ADDRESSEES

US Army Engineering and Support Center, Huntsville ATTN: CEHNC-CT-P (***Ms. Atkins***)4820 University Square,
Huntsville, Alabama, 35816
US Army Engineering and Support Center, Huntsville ATTN: CEHNC-ED-CS-P (***Mr. Steve Nohrstedt***)4820 University Square
Huntsville, Alabama, 35816

Commander's Representative
Seneca ADA
ATTN: SMASE-CO (Bld.123, Mr. Absolom)
5786 State Route 96, P.O. Box 9,
Romulus, New York 14541-5001

Commander
USACHPPM (PROV)
ATTN: MCHB-ME-R (Mr. Hoddinott)
Building E1677
Aberdeen Proving Ground, MD, 21010-5422

Commander
US Army Engineer District, New York
Seneca Office for Project Management
ATTN: Mr. R. Battaglia, Bld.125
P.O. Box 9
5786 State Route 96
Romulus, New York, 14541-5001

Commander
U.S. Army Environmental Center,
ATTN: Mr. Chris Boes
Aberdeen Proving Ground, MD, 21010-5422

4.1.2 Document and Submittal List

	Copies
CEHND-CT	2
SMASE-CO	2
CENAN	2
USACHPPM	2
USAEC/Versar	2

4.2 **SUBMITTALS AND DUE DATES:**
4.2.1 Proposed Schedule. The proposed schedule for the Implementation of the Long-Term Management Plan work is given below. All work and services under this Task Order shall be completed by 1 April 2008.

Submittal	Due Date
NTP	0
Pre-Draft LTM Plan	NTP + 45 days
Comments Due to A-E	NTP + 60 daysDraft LTM Plan
NTP + 75 daysComments Due to A-E	NTP + 120 days
Draft-Final LTM Plan	NTP + 150 days
Comments to A-E	NTP + 180 days
Final LTM Plan	NTP + 210 days

5.0 PUBLIC AFFAIRS: The A-E shall not conduct Public Affairs activities at the installation. All agencies and/or individuals requesting information concerning the conduct of the project shall be referred to the Seneca Army Depot Activity, Public Affairs Office (PAO) or the U.S. Army Engineering and Support Center, Huntsville, PAO.**6.0 REFERENCES: 6.1** Interim Final, "Guidance for or Conducting Remedial Investigations/Feasibility studies Under CERCLA", U.S. EPA, Office of Solid Waste and Emergency Response, October 1988.

6.2 "Federal Facility Agreement under CERCLA Section 120 in the matter of Seneca Army Depot, Romulus, New York", Docket No. II-CERCLA-FFA-00202, USEPA, U.S. Department of the Army, and the New York State Department of Environmental Conservation, November 1990.

6.3 Final, "Remedial Investigation Report at the Open Burning (OB) Grounds at Seneca Army Depot Activity", dated September 1994.
6.4 Final, "Feasibility Study Report at the Open Burning (OB) Grounds at Seneca Army Depot Activity", dated June 1996.

6.5 Final, "Proposed Remedial Action Plan (PRAP) for the Open Burning (OB) at the Seneca Army Depot Activity (SEDA)", dated January 1997.**6.6** Final, "Record of Decision (ROD) for Seneca Army Depot Activity, Open Burning (OB) Grounds", dated December 1998.

6.7 Final, "Generic Site-Wide Sampling and Analysis Plan, Seneca Army Depot Activity, Romulus, New York", Parsons, December 2005.

6.8 Final, "Long Term Monitoring Plan for the Open Burning Grounds, Seneca Army Depot Activity", Parsons, January 2007.

6.9 Final, "Long Term Monitoring Plan for the Fire Training Areas (SEAD-25 and SEAD-26), Seneca Army Depot Activity", Parsons.

6.10 Draft, "SEAD-25 and SEAD-26 Annual Report", Parsons, January 2007.

6.11 Final, "Generic Site-Wide Sampling and Analysis Plan, Seneca ADA", Parsons, December 2005.

Section E - Inspection and Acceptance

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0001	N/A	N/A	N/A	N/A

Section F - Deliveries or Performance

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
0001	31-JUL-2007		US ARMY ENGINEERING & SUPPORT CENTER NO CONTACT SPECIFIED CEHNC-CT 4820 UNIVERSITY SQUARE HUNTSVILLE AL 35816-1822 SEE "ADMINISTERED BY" FOB: Destination	W912DY

Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

AA: 21720500000 088130 323002B7FK70000000000 E314 01110
AMOUNT: $116,181.00
CIN W31RYO713757910001: $116,181.00

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
U	1 | 2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO.(If applicable)
01	14-Sep-2007	W31RYO71375791	

6. ISSUED BY	CODE	7. ADMINISTERED BY (If other than item 6)	CODE
US ARMY ENGINEERING & SUPPORT CENTER CEHNC-CT 4820 UNIVERSITY SQUARE HUNTSVILLE AL 35816-1822	W912DY	CT-P/ACQUISITION SUPPORT TEAM ATTN: DEMETRA HILL 256-895-1165 HUNTSVILLE AL	W912DY

8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)		
PARSONS INFRASTRUCTURE & TECHNOLOGY GROU CHARLES TERHUNE 100 W WALNUT STREET PASADENA CA 91124		9A. AMENDMENT OF SOLICITATION NO.
		9B. DATED (SEE ITEM 11)
	X	10A. MOD. OF CONTRACT/ORDER NO. DACA87-02-D-0005-0036
CODE 1BVK6 FACILITY CODE	X	10B. DATED (SEE ITEM 13) 22-Aug-2007

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer ☐ is extended, ☐ is not extended.

Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

☐ A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

☐ B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).

X C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
FAR 52.243-3

☐ D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)
Modification Control Number: a0ispwke072697

A. This modification is to correct the Period of Performance from 31 July 2007 to 01 April 2008.

B. As a result of this modification there is no additional cost to the Government. Total task order amount of $116,181.00 remains the same.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) LYNDA BONDS / ADDED BY SUMI TEL: EMAIL: Lynda.Bonds@hnd01.usace.army.mil	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY Lynda Bonds (Signature of Contracting Officer)	16C. DATE SIGNED 17-Sep-2007

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

SECTION F - DELIVERIES OR PERFORMANCE

The following Delivery Schedule Item has been deleted from CLIN 0001:

DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
31-JUL-2007		US ARMY ENGINEERING & SUPPORT CENTER NO CONTACT SPECIFIED CEHNC-CT 4820 UNIVERSITY SQUARE HUNTSVILLE AL 35816-1822 SEE "ADMINISTERED BY" FOB: Destination	W912DY

The following Delivery Schedule item has been added to CLIN 0001:

DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
POP 22-AUG-2007 TO 01-APR-2008	N/A	US ARMY ENGINEERING & SUPPORT CENTER NO CONTACT SPECIFIED CEHNC-CT 4820 UNIVERSITY SQUARE HUNTSVILLE AL 35816-1822 SEE "ADMINISTERED BY" FOB: Destination	W912DY

(End of Summary of Changes)

Estimate Documentation Report

System:

RACER Version: 10.2.0
Database Location: C:\Documents and Settings\Andy W\Application Data\Earth Tech\RACER 10.2\Racer.mdb

Folder:

Folder Name: Seneca

Project:

Project ID: SEAD-25
Project Name: SEAD-25
Project Category: Planned Industrial Area

Location
State / Country: NEW YORK
City: SENECA ARMY DEPOT

Location Modifier	Default	User
	1.114	1.114

Options
Database: System Costs
Cost Database Date: 2009
Report Option: Fiscal

Description

SEAD-25 & 26 - Fire Training and Fire Demonstration areas.

The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of 5-year reviews, site close out, and LUCs. Groundwater monitoring cost obtained from the Performance Based Contract. Note: The Installation Action Plan LTM phase begins 200605 and this phase is included in the current PBC.

Site: SEAD-25/26, Fire Training Areas

Source:
1. Final Record of Decision, Fire Training and Demonstration Pad (SEAD 25) and the Fire Training Pit and Area (September 2004)
2. Performance Based Contract SOW Contract #: FA8903-04-D-8675, January 2005

3. Professional judgment based on site knowledge.

RACER Assumptions:

Five-Year Review (LTM #1):
1. 4 review cycles
2. Reviews cycle began June 2006 with first review in 2011
3. Low complexity
4. Tasks include Document Review, Interviews and Site Inspections
5. Report for Five Year Review to include all default parameters

Land Use Controls (LTM #1)
1. Tasks include Monitoring & Enforcement, and Modification/Termination
2. Monitoring & Enforcement parameters used are Report & Certifications annually
3. Modification/Termination parameters used are Document Evaluation, Modify LUCIP, Amend Decision Documents, and Termination Letters (all with Low complexity)

Site Closeout Documentation (LTM #2):
1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years
5. Well abandonment includes sub-contractor costs for fieldwork

Estimate Documentation Report

Site Documentation:

Site ID: SEAD-25
Site Name: Fire Training Area
Site Type: None

Media/Waste Type
Primary: N/A
Secondary: N/A

Contaminant
Primary: None
Secondary: None

Phase Names
SI: ☐
RI/FS: ☐
RD: ☐
IRA: ☐
RA(C): ☐
RA(O): ☐
LTM: ☑
Site Closeout: ☐

Documentation
Description: Long Term Management will include: 5-year Reviews, Site Closeout documentation, Well Abandonment, and Land Use Controls.

Changes from FY08 estimate:
- updated to FY09 cost basis.
- LUC implementation deleted and M&E period updated.
- 5-year Review costs moved from site closeout phase to phase LTM #1 to run cuncurrently with LUC M&E period

Support Team: Stephen M. Absolom - SEDA BEC
Andrew Weinberg - Bechtel-S Corp.

References: 1. Final Record of Decision, Fire Training and Demonstration Pad (SEAD 25) and the Fire Training Pit and Area (September 2004)
2. Performance Based Contract SOW Contract #: FA8903-04-D-8675, January 2005
3. Professional judgment based on site knowledge.

Estimator Information
Estimator Name: Andrew Weinberg
Estimator Title: Senior Geologist
Agency/Org./Office: Bechtel-S Corp.
Business Address: 203 E. Milton St.
Austin, TX 78704
Telephone Number: 512-344-9657

Estimate Documentation Report

Email Address: aweinberg@bechtel-s.com
Estimate Prepared Date: 01/21/2009

Estimator Signature: _____ **Date:** _____

Reviewer Information

Reviewer Name: Steve Absolom
Reviewer Title: Installation Manager
Agency/Org./Office: Seneca Army Depot Activity
Business Address: .
Telephone Number: (607) 869-1309
Email Address: stephen.m.absolom@us.army.mil
Date Reviewed: 02/09/2009

Reviewer Signature: _____ **Date:** _____

Estimated Costs:

Phase Names		Direct Cost	Marked-up Cost
LTM #1		$158,093	$436,064
LTM #2		$47,755	$90,846
	Total Cost:	$205,848	$526,910

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM #1
Description: Land Use Control monitoring and enforcement FY2010 through FY2038, with termination in FY2038. Four 5-Year Reviews, first in 2011 added to this phase.

Start Date: October, 2010
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate
Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
ADMINISTRATIVE LAND USE CONTROLS	Yes	100	0
Five-Year Review	Yes	100	0

Total Marked-up Cost: $436,064

Technologies:

Estimate Documentation Report

Technology Name: **Administrative Land Use Controls (# 1)**
User Name: **ADMINISTRATIVE LAND USE CONTROLS**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Rename Model		ADMINISTRATIVE LAND USE CONTROLS	n/a
Planning Documents		No	n/a
Implementation		No	n/a
Monitoring & Enforcement		Yes	n/a
Monitoring & Enforcement: Start Date		2010	n/a
Modification/Termination		Yes	n/a
Modification/Termination: Start Date		2038	n/a
Type of Site		Transferring Government Installation	n/a
Monitoring & Enforcement			
Required Parameters			
Duration of Monitoring/Enforcement		28	Years
Notice Letters		No	n/a
Guard Service/Security		No	n/a
Reports & Certifications		Yes	n/a
Reports & Certifications: Frequency		Annually	n/a
Site Visits/Inspections		No	n/a
Modify/Termination			
Required Parameters			
Document Evaluation		Yes	n/a
Document Evaluation: Number		1	EA
Document Evaluation: Plan Complexity		Low	n/a
Modify LUC Documents		Yes	n/a
Modify LUC Documents: Number		1	EA
Modify LUC Documents: Plan Complexity		Low	n/a
Amend Decision Documents		Yes	n/a
Amend Decision Documents: Number		1	EA
Amend Decision Documents: Plan Complexity		Low	n/a
Termination Letters		Yes	n/a
Termination Letters: Number		1	EA
Termination Letters: Plan Complexity		Low	n/a

Estimate Documentation Report

Comments:

Estimate Documentation Report

Technology Name: **Five-Year Review (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Site Complexity		Low	n/a
Document Review		Yes	n/a
Interviews		Yes	n/a
Site Inspection		Yes	n/a
Report		Yes	n/a
Travel		No	n/a
Rebound Study		No	n/a
Start Date		October-2011	n/a
No. Reviews		4	EA
Document Review			
Required Parameters			
5-Year Review Check List		Yes	n/a
Record of Decision		Yes	n/a
Remedial Action Design & Construction		Yes	n/a
Close-Out Report		Yes	n/a
Operations & Maintenance Manuals & Reports		Yes	n/a
Consent Decree or Settlement Records		Yes	n/a
Groundwater Monitoring & Reports		Yes	n/a
Remedial Action Required		Yes	n/a
Previous 5-Year Review Reports		Yes	n/a
Interviews			
Required Parameters			
Current and Previous Staff Management		Yes	n/a
Community Groups		Yes	n/a
State Contacts		Yes	n/a
Local Government Contacts		Yes	n/a
Operations & Maintenance Contractors		Yes	n/a
PRPs		Yes	n/a
Remedial Design Consultant		Yes	n/a
Site Inspection			
Required Parameters			

Estimate Documentation Report

Technology Name: **Five-Year Review (# 1)**

Description	*Default*	*Value*	*UOM*
Site Inspection			
Required Parameters			
General Site Inspection		Yes	n/a
Containment System Inspection		Yes	n/a
Monitoring Systems Inspection		Yes	n/a
Treatment Systems Inspection		Yes	n/a
Regulatory Compliance		Yes	n/a
Site Visit Documentation (Photos, Diagrams, etc.)		Yes	n/a
Report			
Required Parameters			
Introduction		Yes	n/a
Remedial Objectives		Yes	n/a
ARARs Review		Yes	n/a
Summary of Site Visit		Yes	n/a
Areas of Non Compliance		Yes	n/a
Technology Recommendations		Yes	n/a
Statement of Protectiveness		Yes	n/a
Next Review		Yes	n/a
Implementation Requirements		Yes	n/a

Comments:

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM #2
Description: Long Term Managememt includes site closeout documentation and well abandonment. Site closeout and well abandonment in last year of LTM phase.

Start Date: May, 2037
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate

Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
Site Close-Out Documentation	Yes	100	0
Well Abandonment	Yes	100	0

Total Marked-up Cost: $90,846

Technologies:

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Meetings		Yes	n/a
Work Plans and Reports		Yes	n/a
Documents		Yes	n/a
Site Close-Out Complexity		Low	n/a
Meetings			
Required Parameters			
Kick Off/Scoping Meetings		Yes	n/a
Kick Off/Scoping Meetings: Number of Meetings	1	1	EA
Kick Off/Scoping Meetings: Travel		Yes	n/a
Kick Off/Scoping Meetings: Travelers		2	EA
Kick Off/Scoping Meetings: Days		5	Days
Kick Off/Scoping Meetings: Air Fare		0	$
Review Meetings		Yes	n/a
Review Meetings: Number of Meetings	1	1	EA
Review Meetings: Travel		No	n/a
Regulatory Review Meetings		Yes	n/a
Regulatory Review Meetings: Number of Meetings	1	1	EA
Regulatory Review Meetings: Travel		No	n/a
Work Plans & Reports			
Required Parameters			
Work Plans		Yes	n/a
Draft Work Plan		Yes	n/a
Final Work Plan		Yes	n/a
Reports		Yes	n/a
Draft Close-Out Report		Yes	n/a
Draft Final Close-Out Report		Yes	n/a
Final Close-Out Report		Yes	n/a
Progress Reports		Yes	n/a
Project Duration	8	8	months
Documents			
Required Parameters			

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
Documents			
Required Parameters			
Draft Decision Document		Yes	n/a
Draft Final Decision Document		Yes	n/a
Final Decision Document		Yes	n/a
Long Term Document Storage		Yes	n/a
Number of Boxes		2	EA
Duration of Storage		30	Yrs

Comments:

Technology Name: **Well Abandonment (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Safety Level		D	n/a
Abandon Wells			
Required Parameters			
Technology/Group Name		Well Group	n/a
Number of Wells		30	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a

Comments:

SEAD ~~-28~~ 25

Phase	2009	2010	2011	2012	2013	2014	2015	Outyears
GW	38	38	38	38	39	38	38	77
5yr				23				
CO								29
Well								50
LVE	8	8	8	8	8	8	8	188

38,098
9) 342,888
27
72
72
88
81
74
72

38
7
266

343
266
77

8.1
30) 244.00
240
40

244
- 56
188

MEMORANDUM FOR RECORD

SUBJECT: Environmental Liabilities **Date:** 13 January 2009

This memorandum serves as formal documentation of the information used to develop the Cost-To-Complete (CTC) estimate for the 2009 data call. Future monitoring cost is based on PBC cost for one year of monitoring. The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of the 5-Year Review period, Site Closeout costs, and for LUCs. Groundwater monitoring costs were obtained from the current PBC contract. The ROD implementation was initiated in 2007. Of the 15 years of monitoring expected per the ROD, 13 years remain.

Site: SEAD-3/6/8/14/15, Ash Landfill Site

Source:
1. Final Record of Decision, Ash Landfill, January 2005
2. Performance Based Contract SOW Contract #: FA8903-04-D-8675, January 2005
3. Professional judgment based on site knowledge
4. COE memo dated 13 Mar 2008 S&A rate
5. COE email dated 12 Jan 2009 Contracting Support

RACER Assumptions:
Five-Year Review (RA-O):
1. 3 review cycles
2. Reviews cycle begins 2007, first review in 2012
3. Moderate complexity
4. Tasks include Document Review, Interviews and Site Inspections
5. Report for Five Year Review to include all default parameters.

Site Closeout Documentation (RA-O):
1. Site Closeout is moderate complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years

Well Abandonment (RA-O)
1. Three well groups: Group 1 (61 wells), Biowall (11 wells), Trench (11 wells)
2. Well depth: 15 feet
3. Well diameter: 2"
4. Unconsolidated
5. Overdrill/removal

COE Support Assumptions:

1. Two contracting events
2. Contract monitoring occurs annually for 13 years
3. S&A occurs annually for 13 years
4. Contract closeout occurs after two events

Land Use Controls (LTM phase):

1. Tasks include Implementation, Monitoring & Enforcement, and Modification/Termination
2. Implementation parameters used are Deed Notification and Restrictive Covenants (all with Low complexity)
3. Monitoring & Enforcement parameters used are Report & Certifications annually

Cost Summary SEAD-6 3,8,14,15

RAO

GW Monitoring: Actual Contract Cost with FY06 Escalation
183,000 (contract cost) x 1.0674 = 195,334 per yr
195,334 per yr x 13 years = $2,539,342 $2,539,342

5-Year Review (RACER) $140,802

LTM $521,112
(Land Use Controls, Well Abandonment, Site Closeout)

COE Support Cost $291,673
Contract Procurement $5,000 x 2 events = $10,000
Contract Monitor $7,000 x 13 years = $91,000
Contract Closeout $2,500 x 2 events = $5,000
Contract S&A (2,539,342 + 140,802 + 521,112) 0.058= $185,673

Total Site Cost **$3,492,929**

Cost Change > 10% from 2006 Report? No

Reason:

Prepared by: Randall Battaglia _____ 11 Mar 09
Signature Date

Reviewed by: Stephen M. Absolom _____ 11 Mar 09
Signature Date

Absolom, Stephen M Mr CIV USA

From: Nohrstedt, John HNC [John.Nohrstedt@usace.army.mil]
Sent: Monday, January 12, 2009 4:18 PM
To: Absolom, Stephen M Mr CIV USA
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Cost per year for contracting to monitor a contractor:
5 hrs/month X 12 months = 60 hrs
Approximately $5,000 to $7,000

CONTRACT MONITORING

Cost for contracting Task Order Close out:
Firm Fixed Price - 5 to 10 hrs - Approx. $500 to $1000
Cost Plus - 10 to 25 hrs - Approx. $1000 to $2,500

CONTRACT CLOSEOUT

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA [mailto:stephen.m.absolom@us.army.mil]
Sent: Monday, January 12, 2009 8:07 AM
To: Nohrstedt, John HNC; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,
What will the cost per year be to monitor the TO if it is a multiple year task order.
Also need to a cost for TO Close out.
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362
-----Original Message-----
From: Nohrstedt, John HNC [mailto:John.Nohrstedt@usace.army.mil]
Sent: Friday, January 09, 2009 12:35 PM
To: Absolom, Stephen M Mr CIV USA; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Below are the man-hours to prepare and issue a simple task order:

Prepare SOW and IGE	- 6 to 10 hrs
Review	- 0.5 to 2 hr
Issue RFP	- 2 to 3 hrs
Review Proposal	- 2 to 4 hrs
Tech Evaluation	- 4 to 8 hrs
Negotiation	- 2 to 4 hrs
Review Revised Proposal	- 2 to 3 hrs
Tech Eval. of revised	- 0.5 to 2 hrs
Issue Award	- 4 to 6 hrs

TOTAL - 23 to 42 hours

The cost would be approximately $3,000 to $5,000. — Contract Procurement

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA
[mailto:stephen.m.absolom@us.army.mil]
Sent: Friday, January 09, 2009 9:14 AM
To: Battaglia, Randy W NAN02; Nohrstedt, John HNC
Subject: Contracting Cost

Steve,
I am starting to update my CTC for this year. One area not preivously included in the costing is the establishment of a new Task/Delivery order. Can you give me a Cost to be included in my CTC for the COE to prepare and issue a task order? Please note that your email will be included in the CTC file so it needs to be accurate as possible.

Thanks
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

CERM-P (37)

13 MAR 2008

MEMORANDUM FOR MAJOR SUBORDINATE COMMANDS (MSC)

SUBJECT: Fiscal Year (FY) 2008 Supervision and Administration (S&A) Rate Changes

1. References:

a. CERM-P memorandum, 27 July 2005, Subject: S&A Accounting Procedures for Modularity Projects.

b. CERM-P memorandum, 20 September 2006, Subject: FY 2006 S&A Rate Changes.

2. Effective 1 April 2008 the Operation and Maintenance (O&M) and the Defense Environmental Restoration Program (DERP) S&A rate for the Continental United States (CONUS) is reduced for new Fiscal Year 2008 (FY08) contract awards from six and one-half percent to five and eight-tenths percent. The intent of this change is to adjust the S&A rate to match the current expense and income activity; the level of service or effort should remain unchanged. Any O&M losses to your S&A checkbook that result from the rate change will be reimbursed from the national S&A account. The Major Subordinate Command (MSC) maximum checkbook carryover will be increased to three months' expense and reflected in the next update to the consolidated command guidance.

S&A RATE

3. The one percent furniture rate in reference "a" was not intended to be restricted to modularity projects. It may be used for any MILCON or O&M project. This change in the O&M rate does not affect modularity/relocatable projects as they continue to be charged the MILCON rate per reference "a".

CERM-P (37)
SUBJECT: FY 2008 Supervision and Administration (S&A) Rate Changes

4. Since these changes significantly affect S&A schedules the FY08 S&A performance will be measured against your mid-year schedules due 25 April 2008. Special instructions are provided in the enclosed standing operating procedures to assist in implementation of these changes. These changes will be codified in the next update to the consolidated command guidance.

5. Point of contact for this action is Mr. Philip Blount, CERM-P, (202) 761-8908.

FOR THE COMMANDER:

Encl

Wesley C. Miller
Director of Resource Management

FINAL

RECORD OF DECISION

FOR

ASH LANDFILL

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

Prepared for:

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

and

UNITED STATES ARMY CORPS OF ENGINEERS
4820 UNIVERSITY SQUARE
HUNTSVILLE, ALABAMA

Prepared By:

PARSONS
150 Federal St, 4th Floor
Boston, Massachusetts

Contract Number: DACA87-95-D-0031
Delivery Order 0022

January 2005

natural biodegradation, since the chemical and biological reactions in the reactive wall release hydrogen, a substance that is used up in microbial dechlorination. This would decrease contaminant levels, which can be expected to significantly reduce the time to achieve ARAR compliance compared to Alternatives MC-3, MC-5 and MC-6.

Alternatives MC-5 and MC-6 include surface water discharge of treated groundwater. Discharge requirements are generally the federal and State AWQC. The discharge from the groundwater treatment system would be designed to meet the federal AWQC and the anti-degradation limits.

Alternatives MC-5 and MC-6 are expected to achieve other ARARs including the RCRA requirements for treatment facilities, the Department of Transportation (DOT) requirements for off-site transportation of any residual materials, and the New York Solid and Hazardous Waste Regulations and the Occupational Safety and Health Act (OSHA). In addition, the operation of the treatment system in Alternative MC-4 would comply with federal and state air standards.

10.2.3 Long- Term Effectiveness and Permanence

Alternatives SC-1, MC-1 and MC-2 would not remove or contain contaminants in the groundwater in a continuous or active manner, with the exception of what would be removed by the reactive barrier wall that is currently in place and operating. Contaminants would continue to migrate and the volume of contaminated groundwater would increase. The No-Action alternative, MC-1, and the alternative water supply alternative, MC-2, are not considered to be effective over the long-term because contaminated groundwater, other than that captured via the reactive barrier wall, remains on-site and some migration off of the property would occur. This condition currently does not affect the drinking water of off-site residents and groundwater modeling has indicated that the concentrations of contaminants would be below drinking water standards by the time the groundwater reaches these wells. These alternatives would require long-term monitoring and sampling.

Alternatives MC-3, MC-5 and MC-6 are all expected to be equal in providing long-term permanence, since each alternative would operate until the desired concentration levels are achieved. The limiting factor in achieving this goal is the rate at which contaminants can be flushed out of the soil matrix. Since the aquifer matrix is glacial till and is high in clay content, diffusion is likely to play an important role in releasing contamination from the aquifer. This means the time for cleanup would be long, estimated to be approximately 45 years. MC 3a is expected to take 15 years. time - GW monitor

Alternative SC-2 is ranked high for long-term effectiveness and permanence since all materials would be excavated and disposed of in an off-site landfill. Once in the landfill, the contaminated materials are permanently entombed. However, since this alternative does not permanently fix the contaminants and involves such large volume of soil, these wastes may not be as permanently entombed as Alternative SC-4. Therefore, although SC-2 is ranked high for permanence, Alternative

11.0 SELECTED REMEDY

Based on an evaluation of the various options, the selected remedy is Alternative SC-5 for source control and Alternative MC-3a for migration control (**Figure 11-1**). The elements that compose the selected remedy include the following:

- Excavation and off-site disposal of debris piles and establishment and maintenance of a vegetative soil cover for the Ash Landfill and the Non-Combustion Fill Landfill (NCFL) for source control;
- Installation of three in-situ permeable reactive barrier walls, and maintenance of the proposed walls and the existing wall for migration control of the groundwater plume;
- A Contingency Plan will be developed to include one of the following options; provision of an alternative water supply for potential downgradient receptors (farmhouse) or air sparging of the plume in the event that groundwater conditions downgradient of the recommended remedial action described above exceed trigger values;
- Land Use Controls (LUCs) to attain the remedial action objectives; and,
- Completion of a review of the selected remedy every five-years (at minimum), in accordance with Section 121(c) of the CERCLA. If a wall material other than iron is selected, the Army will conduct a review of the remedy's effectiveness one year after the walls are installed. Subsequent annual reviews will be performed until the first five year review. The typical five year review schedule will be followed thereafter.

Land Use Control Performance Objectives

The LUC performance objectives for the Ash Landfill are to:

- Prevent access or use of the groundwater until cleanup levels are met.
- Maintain the integrity of any current or future remedial or monitoring system such as monitoring wells and impermeable reactive barriers.
- Prohibit excavation of the soil or construction of inhabitable structures (temporary or permanent) above the area of the existing groundwater plume.
- Maintain the vegetative soil layer over the ash fill areas and the NCFL to limit ecological contact.

The groundwater LUCs will be continued until such time that the concentration of hazardous substances in the groundwater have been reduced to levels that allow for unlimited exposure and unrestricted use. Intrusive restrictions for those areas requiring a vegetative soil cover will continue indefinitely. These land use controls will be implemented over the area of the groundwater plume,

NCFL, and the Ash Landfill, as shown on **Figure 1-1.**

LUC Remedial Design

In order to implement the Army's remedy, which includes the imposition of land use controls, a LUC Remedial Design for the Ash Landfill will be prepared which satisfies the applicable requirements of Paragraphs (a) and (c), Environmental Conservation Law (ECL) Article 27, Section 1318: Institutional and Engineering Controls. In addition, the Army will prepare an environmental easement for the Ash Landfill, consistent with Section 27-1318(b) and Article 71, Title 36 of ECL, in favor of the State of New York and the Army, which will be recorded at the time of the property's transfer from federal ownership. A schedule for completion of the draft Ash Landfill LUC Remedial Design Plan (LUC RD) will be completed within 21 days of the ROD signature, consistent with Section 14.4 of the Federal Facilities Agreement (FFA).

The Army shall implement, inspect, report, and enforce the LUCs described in this ROD in accordance with the approved LUC RD. Although the Army may later transfer these responsibilities to another party by contract, property transfer agreement, or through other means, the Army shall retain ultimate responsibility for remedy integrity. Should the Army transfer these responsibilities, the Army shall provide timely written notice to the regulators of the transferee which shall include the entity's name, address, and general remedial responsibility.

During the excavation of the Debris Piles, the Incinerator Cooling Water Pond area will be re-graded to fill the pond.

The five-year reviews are intended to evaluate whether the response actions remain protective of public health and the environment, and they will consist of document review, ARAR review, interviews, inspection/technology review, and reporting.

A contingency plan will be developed as part of this preferred alternative. The contingency plan will include additional monitoring and air sparging, as necessary, and implementation of an alternative water supply for potential downgradient receptor (farmhouse), if required based on trigger criteria. Following installation of the reactive walls, groundwater from monitoring well MW-56 will be analyzed, and the VOC results will be compared to the Class GA groundwater standards (trigger criteria). If a statistical analysis of the data for this well shows exceedances of Class GA standards, additional remedial action would be required. Temporary wells will be installed in the vicinity of MW-56, and the results will be used to develop an approach for air sparging. A description of the air sparging process is summarized in Alternative MC-3. If concentrations at MW-56 continue to exceed the trigger values following air sparging, an activated carbon system for the farmhouse water supply system would be installed or public water would be delivered to the house. More extensive air sparging would be performed until trigger values are no longer exceeded.

Alternative SC-5 was selected as the preferred source control alternative because the vegetative cover will be an effective barrier against exposure and is therefore one of the highest ranked alternatives for protectiveness to human and ecological receptors. The alternative minimizes the negative short-term effects, such as truck traffic and dust problems, that a large excavation would cause. SC-5 will be compliant with all ARARs. This alternative also minimizes the amount of off-site land filling that will be required. SC-5 is the easiest to implement and has the lowest cost.

Alternative MC-3a was selected as the preferred management of migration alternative because it will achieve substantial risk reduction by chemically destroying the dissolved chlorinated ethene compounds in groundwater. This alternative is effective in achieving these reductions. The alternative will be protective of human health and the environment by preventing off-site migration of the VOC plume. Monitoring of the plume will ensure that downgradient receptors are protected. The monitoring plan will provide adequate warning should monitoring data indicate that the plume is threatening the drinking water supply wells of site neighbors, i.e., the farmhouse wells.

GW Monitoring

ORDER FOR SUPPLIES OR SERVICES

1. CONTRACT/PURCH ORDER/AGREEMENT NO.	2. DELIVERY ORDER/ CALL NO.	3. DATE OF ORDER/CALL (YYYYMMMDD)	4. REQUISITION/PURCH REQUEST NO.	5. PRIORITY
FA8903-04-D-8675	0012	06 APR 2005	SEE SCHEDULE	N

6. ISSUED BY HSW/PKV-W CODE FA8903
AIR FORCE MATERIEL COMMAND
311TH HUMAN SYSTEMS WING/PKV-W
3300 SIDNEY BROOKS
BROOKS CITY BASE TX 78235-5112
EDWIN CUSTODIO (210)536-4493
Edwin.Custodio@hqafcee.brooks.af.mil

7. ADMINISTERED BY (If Other than 6) CODE S0512A
DCMA LOS ANGELES
16111 PLUMMER STREET
BLDG. 10, 2ND FLOOR
SEPULVEDA CA 91343
DCMALOSANGELES@DCMA.MIL

SCD: C PAS: (NONE)

8. DELIVERY FOB
[X] DESTINATION
[ ] OTHER (See Schedule if other)

9. CONTRACTOR CODE 1BVK6 FACILITY
NAME AND ADDRESS
PARSONS INFRASTRUCTURE & TECHNOLOGY GROUP INC.
100 WEST WALNUT STREET
PASADENA CA 91124-0001
(626) 440-6165

ORIGINAL

10. DELIVER TO FOB POINT BY (Date)
(YYYYMMMDD) SEE SCHEDULE

11. X IF BUSINESS IS
[ ] SMALL
[ ] SMALL DISAD-VANTAGED
[ ] WOMEN-OWNED

12. DISCOUNT ITEMS
N

13. MAIL INVOICES TO ADDRESS IN BLOCK
See Field 15 (Payment Office) and Section G

14. SHIP TO CODE
SEE SCHEDULE

15. PAYMENT WILL BE MADE BY CODE HQ0339
DFAS COLUMBUS CENTER
DFAS-CO/WEST ENTITLEMENT OPS
P.O. BOX 182381
COLUMBUS OH 43218-2381

EFT:T

MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.

16. TYPE OF ORDER
DELIVERY/CALL [X] — This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.
PURCHASE [ ] — Reference your ____ furnish the following on items specified herein.

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR | SIGNATURE | TYPED NAME AND TITLE | DATE SIGNED(YYYYMMMDD)

[ ] If this box is marked, supplier must sign Acceptance and return the following number of copies:

17. ACCOUNTING AND APPROPRIATION DATA/LOCAL USE
SEE SCHEDULE

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/SERVICES	20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT

*If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.

24. UNITED STATES OF AMERICA
BY: EDWIN CUSTODIO CONTRACTING/ORDERING OFFICER

25. TOTAL $3,906,958.00

29. DIFFERENCES

26. QUANTITY IN COLUMN 20 HAS BEEN
[ ] INSPECTED [ ] RECEIVED [ ] ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

DATE SIGNATURE AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

27. S/R NO.

28. D.O. VOUCHER NO.

30. INITIALS

[ ] PARTIAL [ ] FINAL

32. PAID BY

33. AMOUNT VERIFIED CORRECT FOR

32. PAYMENT
[ ] COMPLETE [ ] PARTIAL [ ] FINAL

34. CHECK NUMBER

35. BILL OF LADING

36. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT.

DATE SIGNATURE AND TITLE OF CERTIFYING OFFICER

37. RECEIVED AT	38. RECEIVED BY (Print)	39. DATE RECEIVED (YYYYMMMDD)	40. TOTAL CONTAINERS	41. S/R ACCOUNT NO.	42. S/R VOUCHER NO.

ORDER FOR SUPPLIES OR SERVICES

1. CONTRACT/PURCH ORDER/AGREEMENT NO.	2. DELIVERY ORDER/ CALL NO.	3. DATE OF ORDER/CALL (YYYYMMMDD)	4. REQUISITION/PURCH REQUEST NO.	5. PRIORITY
FA8903-04-D-8675	0012	06 APR 2005	SEE SCHEDULE	N

6. ISSUED BY HSW/PKV-W CODE FA8903
AIR FORCE MATERIEL COMMAND
311TH HUMAN SYSTEMS WING/PKV-W
3300 SIDNEY BROOKS
BROOKS CITY BASE TX 78235-5112
EDWIN CUSTODIO (210)536-4493
Edwin.Custodio@hqafcee.brooks.af.mil

7. ADMINISTERED BY *(If Other than 6)* CODE S0512A
DCMA LOS ANGELES
16111 PLUMMER STREET
BLDG. 10, 2ND FLOOR
SEPULVEDA CA 91343
DCMALOSANGELES@DCMA.MIL

SCD: C PAS: (NONE)

8. DELIVERY FOB
X DESTINATION
OTHER *(See Schedule if other)*

9. CONTRACTOR CODE 1BVK6 FACILITY
NAME AND ADDRESS
PARSONS INFRASTRUCTURE & TECHNOLOGY GROUP INC.
100 WEST WALNUT STREET
PASADENA CA 91124-0001
(626) 440-6165

10. DELIVER TO FOB POINT BY *(Date)* (YYYYMMMDD) SEE SCHEDULE

11. X IF BUSINESS IS
SMALL
SMALL DISAD-VANTAGED
WOMEN-OWNED

12. DISCOUNT ITEMS
N

13. MAIL INVOICES TO ADDRESS IN BLOCK
See Field 15 (Payment Office) and Section G

14. SHIP TO CODE
SEE SCHEDULE

15. PAYMENT WILL BE MADE BY CODE HQ0339
DFAS COLUMBUS CENTER
DFAS-CO/WEST ENTITLEMENT OPS
P.O. BOX 182381
COLUMBUS OH 43218-2381

EFT:T

MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.

16. TYPE OF ORDER
DELIVERY/CALL X — This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.
PURCHASE — Reference your furnish the following on items specified herein.

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR | SIGNATURE | TYPED NAME AND TITLE | DATE SIGNED(YYYYMMMDD)

☐ If this box is marked, supplier must sign Acceptance and return the following number of copies:

17. ACCOUNTING AND APPROPRIATION DATA/LOCAL USE
SEE SCHEDULE

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/SERVICES	20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT

*If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.

24. UNITED STATES OF AMERICA
//signed//
BY: EDWIN CUSTODIO 06 APR 2005
CONTRACTING/ORDERING OFFICER

25. TOTAL $3,906,958.00

29. DIFFERENCES

26. QUANTITY IN COLUMN 20 HAS BEEN
☐ INSPECTED ☐ RECEIVED ☐ ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

DATE SIGNATURE AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

27. SHIP NO. | **28. D.O. VOUCHER NO.** | **30. INITIALS**

☐ PARTIAL ☐ FINAL

32. PAID BY

33. AMOUNT VERIFIED CORRECT FOR

32. PAYMENT ☐ COMPLETE ☐ PARTIAL ☐ FINAL

34. CHECK NUMBER

35. BILL OF LADING

36. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT.

DATE SIGNATURE AND TITLE OF CERTIFYING OFFICER

37. RECEIVED AT	38. RECEIVED BY *(Print)*	39. DATE RECEIVED *(YYYYMMMDD)*	40. TOTAL CONTAINERS	41. S/R ACCOUNT NO.	42. S/R VOUCHER NO.

1. In accordance with the provisions and the authority of FAR Clause 52.216-18 "Ordering (OCT 1995)" of the Basic Contract FA8903-04-D-8675 and this Task Order 0012, the Contractor shall accomplish the effort described in the Statement of Work(SOW) dated 20 January 2005, Attachment 1 hereto, at a total Firm Fixed Price **(FFP)** of $3,906,958.00.

2. SECTION B - SUPPLIES OR SERVICES AND PRICE/COSTS:

B028 CONTRACT TYPE: FIRM FIXED PRICE (FEB 1997)

TOTAL PRICE: $3,906,958.00

Applicable to the following Line Items: CLIN 0001 and 0002

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
0001		1 Lot	$3,906,958.00 $3,906,958.00
	Noun:	ENVIRONMENTAL REMEDIATION AND CONSTRUCTION EFFORTS	
	ACRN:	9	
	NSN:	N - Not Applicable	
	Contract type:	J - FIRM FIXED PRICE	
	Inspection:	DESTINATION	
	Acceptance:	DESTINATION	
	FOB:	DESTINATION	
	Descriptive Data:		
	The Contractor shall provide the necessary effort for environmental remediation and construction efforts as set forth in the attached Statement of Work (SOW) dated 20 January 2005, Attachment 1, and attached to Section J.		
000101			
	Noun:	Funding Info Only	
	ACRN:	AA $1,008,632.49	
	PR/MIPR:	FY7624-04-08470	$1,008,632.49
	Descriptive Data:		
	Project # SEN 04-1		
000102			
	Noun:	Funding Info Only	
	ACRN:	AB $994,055.59	
	PR/MIPR:	FY7624-04-08470	$994,055.59
	Descriptive Data:		
	Project # SEN 04-1		

STATEMENT OF WORK

REMEDIATION OF THE SENECA ARMY DEPOT ACTIVITY

CONTRACT: FA8903-04-D-8675
TASK ORDER: 0012
Project Number: SEN 04-1

20 January 2005

The following provides a description of the sites identified in this SOW. It is the responsibility of the Contractor to schedule a site visit, research, investigate, and reach their own conclusions regarding site conditions.

All work under this contract will be conducted under the FFA, as provided.

SEAD 25:

The Fire Training and Demonstration Pad (SEAD 25) was in use from the late 1960s to the late 1980s. The pad was used for fire control training. During the 1980s, the pad was used twice for fire fighting demonstrations, once in 1982 or 1983 and in 1987. The soil and groundwater is contaminated with volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs). The future intended use of the site is industrial.

The selected remedy for this site as detailed in the ROD includes the following components:

- Excavate soil at the source in an area approximately 60 feet by 100 feet by 6 feet deep (approximately 1,350 cy).
- Excavate sediment from an area 780 feet by 3 feet by 2 feet deep (175 cy) from the northwest ditch.
- Dewater the excavation pit.
- Treat groundwater recovered from the pit.
- Backfill the excavations.
- Conduct semi-annual groundwater monitoring.
- Evaluate effectiveness of land use controls for one year.
- Complete a one-year review of the selected remedy.
- Prepare a contingency plan that may include additional monitoring and air sparging of the plume, if necessary.

SEAD 26:

The Fire Training Pit and Area (SEAD 26) was in use from 1977 to 1994. The pit is approximately 75 feet in diameter and approximately 3 feet deep. A bentonite liner was installed in the pit in 1982 or 1983. This pit was used one to four times a year for fire fighting training during which time various flammable materials were floated on water, ignited, and extinguished. Prior to 1977, the fire training area surrounding the pit may also have been used for fire demonstrations. Groundwater has been impacted by VOCs and soils have been impacted by VOCs and SVOCs.

The selected remedy for this site as detailed in the ROD includes the following components:

- Excavate surface soils with total carcinogenic PAH concentrations above 10 ppm (approximately 1,050 cy).

- Backfill the excavation.
- Conduct semi-annual groundwater monitoring.
- Evaluate effectiveness of land use controls for one year.
- Complete a one-year review of the selected remedy.
- Prepare a contingency plan that may include additional monitoring and air sparging of the plume, if necessary.

SITE

Ash Landfill Operable Unit SEAD-6

The ~~Ash Landfill Operable~~ Unit contains the following solid waste management units (SWMUs):

- SEAD 3: Incinerator Cooling Water Pond
- SEAD 6: Ash Landfill
- SEAD 8: Non-Combustible Fill Landfill (NCFL)
- SEAD 14: Refuse Burning Pits including the Debris Piles
- SEAD 15: Abandoned Solid Waste Incinerator Building

The Ash Landfill site was initially estimated to encompass an area of approximately 130 acres. This larger area was investigated to ensure that no previously unknown waste disposal areas were overlooked. Following the remedial investigation, the area of the Ash Landfill site was refocused to an area of approximately 23 acres. This area is comprised of the five SWMUs presented above.

The Incinerator Cooling Water Pond is a circular-bermed area approximately 50 feet in diameter. The Ash Landfill is a kidney-shaped landfill approximately 550 feet by 300 feet (4 acres) in area. The groundwater plume associated with the Ash Landfill is approximately 18 acres and contains elevated concentrations of chlorinated solvents extending the property line. The NCFL is an area approximately 400 feet by 400 feet (3 acres) in area. The Refuse Burning Pits were approximately 15 feet in diameter and 20 feet deep, where trash was open burned. The Debris Piles were discovered near this side of the Ash Landfill area and contamination was found in the Debris Piles. The Abandoned Incinerator Building is approximately 25 feet by 40 feet. The area that comprises the remainder of the 130 acres of the Ash Landfill site is a grassy shrub-covered area.

The selected remedy for the Ash Landfill Operable Unit is the following:

- Excavation and offsite disposal of Debris Piles, and establishment and maintenance of a vegetative soil cover for the Ash Landfill and the Non-Combustible Fill Landfill (NCFL) for source control.
- Installation of three in-situ permeable reactive barrier walls filled with 100% zero valence iron, and maintenance of the proposed walls and the migration wall for migration control of the groundwater plume.
- Backfilling and re-grading the Incinerator Cooling Water Pond during excavation of the Debris Piles.

- A Contingency Plan will be developed to include one of the following options; provision of an alternative water supply for potential down gradient receptors (farmhouse) or air sparging of the plume in the event that groundwater conditions down gradient of the recommended walls described above exceed the trigger values.
- Evaluate effectiveness of land use controls for one year.
- Complete a one-year review of the selected remedy.

The objectives and standards for this SOW are outlined in Table 1.

Table 1 Requirements Summary

Objective	Standards
SEAD 25 – Fire Training and Demonstration Pad • Achieve Remedy in Place (RIP) at SEAD-25. **SEAD 26 – Fire Training Pit and Area** • Achieve RIP at SEAD-26. **SEADs 3, 6, 8, 14 and 15 – Ash Landfill Operable Unit** • Achieve Response Complete (RC) for SEAD 3. • Achieve RIP for SEADs 6, 8, 14 and 15.	• Compliance with existing RODs, the FFA, and associated schedules. • Army approval *(e.g., receipt of documentation confirming RIP or RC)* and Regulator approval or concurrence *(e.g., receipt of documentation confirming remedies are "operational and functional," "operating properly and successfully," or meeting other appropriate criteria).*
Perform long-term monitoring (LTM) at all sites identified in this SOW, as required after achievement of RIP, for a period of one year.	Army approval and Regulator approval or concurrence *(e.g., final acceptance of monitoring reports with no violations).*
Develop and implement and exit or ramp-down strategy for LTM/LTO efforts at all sites identified in this SOW.	Army approval and Regulator approval or concurrence *(e.g., documentation formally adopting the decision rules for ramp down and/or exit strategies).*
Complete the first year of the CERCLA 121(c) five-year review required for the sites identified in this SOW, and correction of any deficiencies noted.	Army approval and Regulator approval or concurrence *(e.g., formal documentation accepting the reviews).*

RIP or RC will be attained upon the finalization of appropriate written documentation certifying that site remediation has met all of the identified response objectives and no further action is necessary, subject to any requirement for long-term monitoring and/or operations. The Contractor should note that if monitoring and/or operations are necessary as a result of the Contractor's proposed and approved or constructed remedy at a site, the Contractor will be responsible for the following:

- Performing the required monitoring and/or operations at that site for (1) year following achievement of RIP.
- Performing the first year of the CERCLA 121(c) five-year review required at that site.

Tom
Here are the assumptions for the LTM at the Ash landfill and 25/26 from the proposal by Parsons.
Steve

SM Absolom
SEDA Installation Manager
Ph. (607) 869-1309
Fax (607) 869-1362
Cell (315) 406-4737
----- Original Message -----
From: Heino, Todd
To: Stephen Absolom
Sent: Tuesday, March 14, 2006 1:07 PM
Subject: Annual Monitoring Assumptions

Steve,

Here are the assumptions:

2.3 WBS 60000 – FIRST YEAR GROUNDWATER MONITORING

Parsons will implement the Post-Closure Monitoring Plan for the Ash Landfill and the Post-Closure Monitoring Plan for SEADs 25 and 26 for the first year after remedial action implementation. Four rounds of monitoring will be conducted at the Ash Landfill and two rounds of monitoring will be conducted at SEADs 25 and 26 as required in the respective RODs.

wells frequency

Approximately 27 wells will be sampled each quarter at the Ash Landfill to monitor the performance of the reactive walls and show that performance criteria are not being exceeded at MW-56. The samples will be submitted for the analysis of VOCs, ethene, ethane, methane, nitrate, nitrite, chloride, sulfate, iron, manganese, volatile fatty acids, alkalinity, hydrogen, sulfide and total organic carbon (TOC). Following sampling and analysis of the wells, a quarterly sampling report will be prepared and submitted to the regulators for information. At the end of the first year, an annual report will be submitted to the regulators for approval.

analytes

SEAD 6 Ash Landfill

Approximately 25 wells will be sampled twice during the first year at SEADs 25 and 26 to show that natural attenuation of BTEX is continuing at the two sites. The samples will be submitted for the analysis of VOCs, SVOCs, methane, ethane, ethene, nitrate, nitrite, chloride, sulfate, DOC, dissolved hydrogen and total inorganic carbon. Following sampling and analysis of the wells, a semi-annual sampling report will be prepared and submitted to the regulators for information. At the end of the first year, an annual report will be submitted to the regulators for approval.

In addition, at the end of the first year of monitoring Parsons will perform vegetable oil injection into the six reactive trenches to enhance the biodegradation. A total of 520 gallons will be injected into the six trenches.

The cost for future years of monitoring at the Ash Landfill will be best determined after the post-closure monitoring plan has been approved. Until then, it's just a guess.

Please let me know if this is sufficient.

Thanks,

Todd

Todd Heino
Program Manager
PARSONS
150 Federal Street
Boston, Massachusetts 02110-1713
617-449-1405 (tel.)
339-206-7413 (cell)
617-946-9777 (fax.)
todd.heino@parsons.com

PARSONS
Safety-Make it Personal

Estimate Documentation Report

System:

RACER Version: 10.2.0
Database Location: C:\Documents and Settings\Andy W\Application Data\Earth Tech\RACER 10.2\Racer.mdb

Folder:

Folder Name: Seneca

Project:

Project ID: SEAD-006
Project Name: SEAD-006
Project Category: Institutional/Training

Location
State / Country: NEW YORK
City: SENECA ARMY DEPOT

Location Modifier	Default	User
	1.114	1.114

Options
Database: System Costs
Cost Database Date: 2009
Report Option: Fiscal

Description

SEAD-006 Ash landfill site. This includes SEADs 3, 6, 8. 14, and 15. The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of Five Year Reviews, Site Closeout, and LUCs.

Site: SEAD-006/3/8/14/15, Ash Landfill Site

Source:
1. Final Record of Decision, Ash Landfill, January 2005
2. Professional judgement based on site knowledge
3. Performance Based contract SOW Contract #: FA8903-04-D-8675, January 2005

RACER Assumptions:
RA(O)

Estimate Documentation Report

1. Three 5-Year Reviews, first in 2012

Site Closeout Documentation (LTM):
1. Site Closeout in FY2022 is moderate complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years
5. Well abandonment includes sub-contractor costs for fieldwork

Land Use Controls (LTM Phase)
1. Tasks include Implemenatation, Monitroing and Enforcement, and Modification/Termination
2. Implementation parameters used are Deed Notification and Restrictive Covenants (all with low complexity)
3. Monitoring and Enforcement parameters used are Report & Certifications annually

Estimate Documentation Report

Site Documentation:

Site ID: SEAD-006
Site Name: Ash Landfill
Site Type: None

Media/Waste Type

Primary: Groundwater
Secondary: N/A

Contaminant

Primary: Volatile Organic Compounds (VOCs)
Secondary: None

Phase Names

SI: ☐
RI/FS: ☐
RD: ☐
IRA: ☐
RA(C): ☐
RA(O): ☑
LTM: ☑
Site Closeout: ☐

Documentation

Description: Ash Landfill: RA(O) consists of the 5-year reviews and site closeout and the LTM phase is for the LUC.

Support Team: Stephen M. Absolom - SEDA BEC
Randy Battaglia - US Army Corps of Engineers, Project Engineer

References:
1. Final Record of Decision, Ash Landfill, January 2005
2. Professional judgement based on site knowledge
3. Performance based contract SOW, Contract #:FA8903-04-D-8675

Estimator Information

Estimator Name: Andrew Weinberg
Estimator Title: Senior Geologist
Agency/Org./Office: Bechtel-S Corp.
Business Address: 203 E. Milton St.
Austin, TX 78704
Telephone Number: 512-344-9657
Email Address: aweinberg@bechtel-s.com
Estimate Prepared Date: 01/28/2009

Estimator Signature: _____ **Date:** _____

Reviewer Information

Estimate Documentation Report

Reviewer Name: Steve Absolom
Reviewer Title: Installation Manager
Agency/Org./Office: Seneca Army Depot Activity
Business Address: .
Telephone Number: (607) 869-1309
Email Address: stephen.m.absolom@us.army.mil
Date Reviewed: 02/09/2009

Reviewer Signature: _____ **Date:** _____

Estimated Costs:

Phase Names		Direct Cost	Marked-up Cost
RA(O)		$50,626	$140,802
LTM (LUCs)		$228,027	$521,112
	Total Cost:	$278,654	$661,914

Estimate Documentation Report

Phase Documentation:

Phase Type: Operations & Maintenance
Phase Name: RA(O)
Description: Remedial Action Operations consist of Five Year Reviews.

Start Date: September, 2007
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate
Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
Five-Year Review	Yes	100	0

Total Marked-up Cost: $140,802

Technologies:

Estimate Documentation Report

Technology Name: **Five-Year Review (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Site Complexity		Moderate	n/a
Document Review		Yes	n/a
Interviews		Yes	n/a
Site Inspection		Yes	n/a
Report		Yes	n/a
Travel		No	n/a
Rebound Study		No	n/a
Start Date		September-2012	n/a
No. Reviews		3	EA
Document Review			
Required Parameters			
5-Year Review Check List		Yes	n/a
Record of Decision		Yes	n/a
Remedial Action Design & Construction		Yes	n/a
Close-Out Report		Yes	n/a
Operations & Maintenance Manuals & Reports		Yes	n/a
Consent Decree or Settlement Records		Yes	n/a
Groundwater Monitoring & Reports		Yes	n/a
Remedial Action Required		Yes	n/a
Previous 5-Year Review Reports		Yes	n/a
Interviews			
Required Parameters			
Current and Previous Staff Management		Yes	n/a
Community Groups		Yes	n/a
State Contacts		Yes	n/a
Local Government Contacts		Yes	n/a
Operations & Maintenance Contractors		Yes	n/a
PRPs		Yes	n/a
Remedial Design Consultant		Yes	n/a
Site Inspection			
Required Parameters			

Estimate Documentation Report

Technology Name: **Five-Year Review (# 1)**

Description	*Default*	*Value*	*UOM*
Site Inspection			
Required Parameters			
General Site Inspection		Yes	n/a
Containment System Inspection		Yes	n/a
Monitoring Systems Inspection		Yes	n/a
Treatment Systems Inspection		Yes	n/a
Regulatory Compliance		Yes	n/a
Site Visit Documentation (Photos, Diagrams, etc.)		Yes	n/a
Report			
Required Parameters			
Introduction		Yes	n/a
Remedial Objectives		Yes	n/a
ARARs Review		Yes	n/a
Summary of Site Visit		Yes	n/a
Areas of Non Compliance		Yes	n/a
Technology Recommendations		Yes	n/a
Statement of Protectiveness		Yes	n/a
Next Review		Yes	n/a
Implementation Requirements		Yes	n/a

Comments:

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM (LUCs)
Description: Administrative land use controls to implement the ICs, Site closeout, and well abandonment.

Start Date: February, 2022
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate

Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
ADMINISTRATIVE LAND USE CONTROLS	Yes	100	0
Site Close-Out Documentation	Yes	100	0
Well Abandonment	Yes	100	0

Total Marked-up Cost: $521,112

Technologies:

Estimate Documentation Report

Technology Name: **Administrative Land Use Controls (# 1)**
User Name: **ADMINISTRATIVE LAND USE CONTROLS**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Rename Model		ADMINISTRATIVE LAND USE CONTROLS	n/a
Planning Documents		No	n/a
Implementation		Yes	n/a
Implementation: Start Date		2022	n/a
Monitoring & Enforcement		Yes	n/a
Monitoring & Enforcement: Start Date		2022	n/a
Modification/Termination		Yes	n/a
Modification/Termination: Start Date		2022	n/a
Type of Site		Transferring Government Installation	n/a
Implementation			
Required Parameters			
Modify Installation (or City) Master Plan		No	n/a
Deed Notification		Yes	n/a
Deed Notification: Number		1	EA
Deed Notification: Task Complexity		Low	n/a
Negotiating Easements		No	n/a
Restrictive Covenants		Yes	n/a
Restrictive Covenants: Number		1	EA
Restrictive Covenants: Task Complexity		Low	n/a
Equitable Servitudes		No	n/a
Access Control Signs		No	n/a
Utility Notification Service		No	n/a
Geographic Information Systems (GIS)/Overlay Maps		No	n/a
Develop Finding of Suitability to Transfer (FOST)		No	n/a
Monitoring & Enforcement			
Required Parameters			
Duration of Monitoring/Enforcement		30	Years
Notice Letters		No	n/a
Guard Service/Security		No	n/a
Reports & Certifications		Yes	n/a

Estimate Documentation Report

Technology Name: **Administrative Land Use Controls (# 1)**
User Name: **ADMINISTRATIVE LAND USE CONTROLS**

Description	*Default*	*Value*	*UOM*
Monitoring & Enforcement			
Required Parameters			
Reports & Certifications: Frequency		Annually	n/a
Site Visits/Inspections		No	n/a
Modify/Termination			
Required Parameters			
Document Evaluation		Yes	n/a
Document Evaluation: Number		1	EA
Document Evaluation: Plan Complexity		Low	n/a
Modify LUC Documents		Yes	n/a
Modify LUC Documents: Number		1	EA
Modify LUC Documents: Plan Complexity		Low	n/a
Amend Decision Documents		Yes	n/a
Amend Decision Documents: Number		1	EA
Amend Decision Documents: Plan Complexity		Low	n/a
Termination Letters		Yes	n/a
Termination Letters: Number		1	EA
Termination Letters: Plan Complexity		Low	n/a

Comments:

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Meetings		Yes	n/a
Work Plans and Reports		Yes	n/a
Documents		Yes	n/a
Site Close-Out Complexity		Moderate	n/a
Meetings			
Required Parameters			
Kick Off/Scoping Meetings		Yes	n/a
Kick Off/Scoping Meetings: Number of Meetings	1	1	EA
Kick Off/Scoping Meetings: Travel		Yes	n/a
Kick Off/Scoping Meetings: Travelers		2	EA
Kick Off/Scoping Meetings: Days		5	Days
Kick Off/Scoping Meetings: Air Fare		0	$
Review Meetings		Yes	n/a
Review Meetings: Number of Meetings	1	1	EA
Review Meetings: Travel		No	n/a
Regulatory Review Meetings		Yes	n/a
Regulatory Review Meetings: Number of Meetings	1	1	EA
Regulatory Review Meetings: Travel		No	n/a
Work Plans & Reports			
Required Parameters			
Work Plans		Yes	n/a
Draft Work Plan		Yes	n/a
Final Work Plan		Yes	n/a
Reports		Yes	n/a
Draft Close-Out Report		Yes	n/a
Draft Final Close-Out Report		Yes	n/a
Final Close-Out Report		Yes	n/a
Progress Reports		Yes	n/a
Project Duration	10	10	months
Documents			
Required Parameters			

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
Documents			
Required Parameters			
Draft Decision Document		Yes	n/a
Draft Final Decision Document		Yes	n/a
Final Decision Document		Yes	n/a
Long Term Document Storage		Yes	n/a
Number of Boxes		4	EA
Duration of Storage		30	Yrs

Comments:

Estimate Documentation Report

Technology Name: **Well Abandonment (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Safety Level		D	n/a
Abandon Wells			
Required Parameters			
Technology/Group Name		Well Group 1	n/a
Number of Wells		61	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a
Technology/Group Name		Well Group Biowall	n/a
Number of Wells		11	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a
Technology/Group Name		Well Group - Trench	n/a
Number of Wells		11	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a

Comments:

MEMORANDUM FOR RECORD

SUBJECT: Environmental Liabilities **Date:** 13 January 2009

This memorandum serves as formal documentation of the information used to develop the Cost-To-Complete (CTC) estimate for the 2009 data call. The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the Site Closeout and Well Abandonment and Five Year Reviews.

Site: SEAD-5, Sewage Sludge Waste Piles

Source:
1. Draft Record of Decision, Five Former SWMUs—SEADs 1,2,5,24, and 48, December 2008.
2. Professional judgment based on site knowledge.
3, Email from John Nohrstedt, January 12, 2009, Contracting Cost Estimate
4. COE Memo dated 13 March 08, S&A Rate.

Assumptions: Regulatory acceptance of the SEAD-5 Completion Report discussed the removal of all contaminated soil. This site is located within the Planned Industrial Area and will require Land Use Controls in perpetuity for 30 years. Inspection required soil cap and compliance with G.W. restrictions. LUC monitoring is to be performed as part of SEAD-9 monitoring effort.

RACER Assumptions:
Site Closeout Documentation (LTM):
1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years

Well Abandonment (LTM):
1. Number of wells: 3
2. Well depth: 15 feet
3. Well diameter: 2"
4. Unconsolidated
5. Overdrill/removal

Cost Summary SEAD-5

Site Closeout (RACER)		$48,947
COE Support contracting and COE S&A		
Contracting	$3,000	
Monitoring	$5,000	
Closeout	$1,000	
S&A Cost		
(Closeout Cost)0.058		
48,947 x 0.058 =	$2,839	$11,839
Total Site Cost		**$60,786**

Cost Increase > 10% from 2008 Report?

Reason: Estimate inflation.

Prepared by: Randall Battaglia _____ 11 MAR 09
Signature Date

Reviewed by: Stephen M. Absolom _____ 11 MAR 09
Signature Date

Absolom, Stephen M Mr CIV USA

From: Nohrstedt, John HNC [John.Nohrstedt@usace.army.mil]
Sent: Monday, January 12, 2009 4:18 PM
To: Absolom, Stephen M Mr CIV USA
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Cost per year for contracting to monitor a contractor:
5 hrs/month X 12 months = 60 hrs
Approximately $5,000 to $7,000

Cost for contracting Task Order Close out:
Firm Fixed Price - 5 to 10 hrs - Approx. $500 to $1000
Cost Plus - 10 to 25 hrs - Approx. $1000 to $2,500

Cost to monitor DO

Cost to Closeout DO

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA [mailto:stephen.m.absolom@us.army.mil]
Sent: Monday, January 12, 2009 8:07 AM
To: Nohrstedt, John HNC; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,
What will the cost per year be to monitor the TO if it is a multiple year task order.
Also need to a cost for TO Close out.
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362
-----Original Message-----
From: Nohrstedt, John HNC [mailto:John.Nohrstedt@usace.army.mil]
Sent: Friday, January 09, 2009 12:35 PM
To: Absolom, Stephen M Mr CIV USA; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Below are the man-hours to prepare and issue a simple task order:

Prepare SOW and IGE	- 6 to 10 hrs
Review	- 0.5 to 2 hr
Issue RFP	- 2 to 3 hrs
Review Proposal	- 2 to 4 hrs
Tech Evaluation	- 4 to 8 hrs
Negotiation	- 2 to 4 hrs
Review Revised Proposal	- 2 to 3 hrs
Tech Eval. of revised	- 0.5 to 2 hrs
Issue Award	- 4 to 6 hrs

TOTAL - 23 to 42 hours

The cost would be approximately $3,000 to $5,000. Cost to procure D.O.

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA
[mailto:stephen.m.absolom@us.army.mil]
Sent: Friday, January 09, 2009 9:14 AM
To: Battaglia, Randy W NAN02; Nohrstedt, John HNC
Subject: Contracting Cost

Steve,
I am starting to update my CTC for this year. One area not preivously included in the costing is the establishment of a new Task/Delivery order. Can you give me a Cost to be included in my CTC for the COE to prepare and issue a task order? Please note that your email will be included in the CTC file so it needs to be accurate as possible.

Thanks
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

CERM-P (37)

13 MAR 2008

MEMORANDUM FOR MAJOR SUBORDINATE COMMANDS (MSC)

SUBJECT: Fiscal Year (FY) 2008 Supervision and Administration (S&A) Rate Changes

1. References:

a. CERM-P memorandum, 27 July 2005, Subject: S&A Accounting Procedures for Modularity Projects.

b. CERM-P memorandum, 20 September 2006, Subject: FY 2006 S&A Rate Changes.

2. Effective 1 April 2008 the Operation and Maintenance (O&M) and the Defense Environmental Restoration Program (DERP) S&A rate for the Continental United States (CONUS) is reduced for new Fiscal Year 2008 (FY08) contract awards from six and one-half percent to five and eight-tenths percent. The intent of this change is to adjust the S&A rate to match the current expense and income activity; the level of service or effort should remain unchanged. Any O&M losses to your S&A checkbook that result from the rate change will be reimbursed from the national S&A account. The Major Subordinate Command (MSC) maximum checkbook carryover will be increased to three months' expense and reflected in the next update to the consolidated command guidance.

S&A RATE

3. The one percent furniture rate in reference "a" was not intended to be restricted to modularity projects. It may be used for any MILCON or O&M project. This change in the O&M rate does not affect modularity/relocatable projects as they continue to be charged the MILCON rate per reference "a".

CERM-P (37)
SUBJECT: FY 2008 Supervision and Administration (S&A) Rate Changes

4. Since these changes significantly affect S&A schedules the FY08 S&A performance will be measured against your mid-year schedules due 25 April 2008. Special instructions are provided in the enclosed standing operating procedures to assist in implementation of these changes. These changes will be codified in the next update to the consolidated command guidance.

5. Point of contact for this action is Mr. Philip Blount, CERM-P, (202) 761-8908.

FOR THE COMMANDER:

Encl

Wesley C. Miller
Director of Resource Management

Estimate Documentation Report

System:

RACER Version: 10.2.0
Database Location: C:\Documents and Settings\Andy W\Application Data\Earth Tech\RACER 10.2\Racer.mdb

Folder:

Folder Name: Seneca

Project:

Project ID: SEAD-5
Project Name: SEAD-5
Project Category: Planned Industrial Area

Location
State / Country: NEW YORK
City: SENECA ARMY DEPOT

Location Modifier	Default	User
	1.114	1.114

Options
Database: System Costs
Cost Database Date: 2009
Report Option: Fiscal

Description

SEAD-5 Sewage Sludge Waste Piles: Location where SEDA stored the sludge removed from the sewage treatment plants.

Source:
1. Final Completion Report- Industrial Waste Site (Sludge Piles) SEAD-5 Time Critical Removal Action, February 2006
2. Revised Draft Final Proposed Plan Five Former SWMUs- SEADs 1, 2, 5, 24 and 48, November 2007
3. Professional judgment based on site knowledge

Assumptions: Regulatory acceptance of the SEAD-5 Completion Report that discussed the removal of all contaminated soil from the site. The next phase will be to seek a No Further Action designation and close out the site. This site is located within the Planned Industrial Area and will need Institutional Controls (IC). Site will require close out costs only. Cost for

the IC (Land Use Controls) and 5-year reviews programmed under site SEAD-09.

RACER Assumptions:
Site Closeout Documentation (LTM)

1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years
5. Well abandonment includes sub-contractor costs for fieldwork

Estimate Documentation Report

Site Documentation:

Site ID: SEAD-5
Site Name: Sewage Sludge Waste Piles
Site Type: None

Media/Waste Type
Primary: N/A
Secondary: N/A

Contaminant
Primary: None
Secondary: None

Phase Names
SI: ☐
RI/FS: ☐
RD: ☐
IRA: ☐
RA(C): ☐
RA(O): ☐
LTM: ☑
Site Closeout: ☐

Documentation
Description: SEAD-5
Site Closeout following the soil removal contaminated with metals. No Further Action will be proposed after removal of all contaminants. Site will require Institutional Controls and five year reviews.

Costs updated to 2009 database; LUC and five-year review costs deleted; these costs will be covered under Site SEAD-009.

Support Team: Stephen M. Absolom - BEC, Seneca Army Depot
Andrew Weinberg - Bechtel-S Corp.

References:
1. Final Completion Report- Industrial Waste Site (Sludge Piles) SEAD-5 Time Critical Removal Action, February 2006
2. Revised Draft Final Proposed Plan Five Former SWMUs- SEADs 1, 2, 5, 24, and 48, November 2007
3. Professional judgment based on site knowledge

Estimator Information
Estimator Name: Andrew Weinberg
Estimator Title: Senior Geologist
Agency/Org./Office: Bechtel-S Corp.
Business Address: 203 E. Milton St.
Austin, TX 78704
Telephone Number: 512-344-9657
Email Address: aweinberg@bechtel-s.com

Estimate Documentation Report

Estimate Prepared Date: 02/20/2009

Estimator Signature: _____ **Date:** _____

Reviewer Information

Reviewer Name: Steve Absolom
Reviewer Title: Installation Manager
Agency/Org./Office: Seneca Army Depot Activity
Business Address: .
Telephone Number: (607) 869-1309
Email Address: stephen.m.absolom@us.army.mil
Date Reviewed: 02/20/2009

Reviewer Signature: _____ **Date:** _____

Estimated Costs:

Phase Names		Direct Cost	Marked-up Cost
LTM #1		$20,922	$48,947
	Total Cost:	$20,922	$48,947

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM #1
Description: Site Closeout and well abandonment costs in FY2010.

Start Date: October, 2010
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate
Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
Site Close-Out Documentation	Yes	100	0
Well Abandonment	Yes	100	0

Total Marked-up Cost: $48,947

Technologies:

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Meetings		Yes	n/a
Work Plans and Reports		Yes	n/a
Documents		Yes	n/a
Site Close-Out Complexity		Low	n/a
Meetings			
Required Parameters			
Kick Off/Scoping Meetings		Yes	n/a
Kick Off/Scoping Meetings: Number of Meetings	1	1	EA
Kick Off/Scoping Meetings: Travel		Yes	n/a
Kick Off/Scoping Meetings: Travelers		2	EA
Kick Off/Scoping Meetings: Days		5	Days
Kick Off/Scoping Meetings: Air Fare		0	$
Review Meetings		Yes	n/a
Review Meetings: Number of Meetings	1	1	EA
Review Meetings: Travel		No	n/a
Regulatory Review Meetings		Yes	n/a
Regulatory Review Meetings: Number of Meetings	1	1	EA
Regulatory Review Meetings: Travel		No	n/a
Work Plans & Reports			
Required Parameters			
Work Plans		Yes	n/a
Draft Work Plan		Yes	n/a
Final Work Plan		Yes	n/a
Reports		Yes	n/a
Draft Close-Out Report		Yes	n/a
Draft Final Close-Out Report		Yes	n/a
Final Close-Out Report		Yes	n/a
Progress Reports		Yes	n/a
Project Duration	8	11	months
Documents			
Required Parameters			

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
Documents			
Required Parameters			
Draft Decision Document		Yes	n/a
Draft Final Decision Document		Yes	n/a
Final Decision Document		Yes	n/a
Long Term Document Storage		Yes	n/a
Number of Boxes		2	EA
Duration of Storage		30	Yrs

Comments:

Technology Name: **Well Abandonment (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Safety Level		D	n/a
Abandon Wells			
Required Parameters			
Technology/Group Name		Well Group	n/a
Number of Wells		3	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a

Comments:

MEMORANDUM FOR RECORD

SUBJECT: Environmental Liabilities **Date:** 12 January 2009

This memorandum serves as formal documentation of the information used to develop the Cost-To-Complete (CTC) estimate for the 2009 data call. Since this site is a Military Munitions Rule site, the costs reported have been captured in an OE EE/CA.

Site: SEAD-002-R-01, East EOD Ranges (alias SEAD-118). This includes EOD Area #2 and EOD Area #3.

Source:

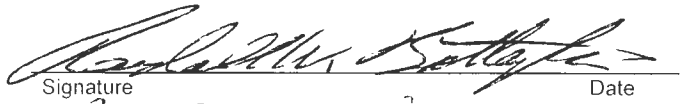
1. Final Ordnance and Explosives Engineering Evaluation/Cost Analysis (OE EE/CA), January 2004.
2. Completion Report, Munitions Response and CERCLA Closure, SEAD 002-R-01, SEAD 57, SEAD 46, and SEAD 007-R-01, April 2007.

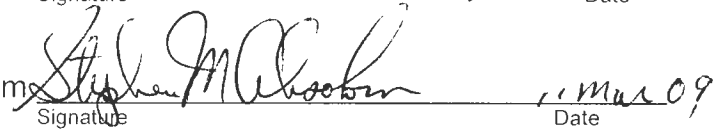
Assumptions: This site will require Long Term Management funds as identified in the OE EE/CA for OE Reviews. Remedial Action is complete.

Phase: LTM will be an Institutional Control in perpetuity. Initial duration is 30 years for a recurring review every 2 years.

Cost Summary	**SEAD-002-R-01 (SEAD-118)**
LTM	
OE Review site visits (EECA) $1,719/visit for 15 visits	$25,783
Total Site Cost	**$25,783**

Cost Increase > 10% from 2008 Report? No

Prepared by: Randall Battaglia  11 MAR 09
Signature Date

Reviewed by: Stephen M. Absolom  11 Mar 09
Signature Date

FINAL

ORDNANCE AND EXPLOSIVES ENGINEERING EVALUATION/ COST ANALYSIS REPORT

SENECA ARMY DEPOT ROMULUS, SENECA COUNTY, NEW YORK

Prepared For:

SENECA ARMY DEPOT ACTIVITY
and
U.S. ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT
and
HUNTSVILLE CENTER

Contract No. DACA87-95-D-0018
Delivery Order No. 0052

Prepared By:

PARSONS ENGINEERING SCIENCE, INC.
100 SUMMER ST
BOSTON, MA 02110

JANUARY 2004

Table G-23
SEAD-4 (3.5" Rocket Range)
Cost Estimate for Alternative 3:
Clearance to 6"

This estimate assumes:
Clearance to 6" of 370 acres in SEAD-45
A 700' x 700' fence surrounding the demo berm in SEAD-57

Item	Unit	Unit Cost	Amount	Initial Cost	Life Cycle Cost (30 yrs)	Total Cost
UXO Clearence to 6"[1]	acre	$3,400	370	$1,258,000	$0	$1,258,000
UXO Sweep Contractor[2]	linear feet	$2	5,700	$11,400	$0	$11,400
Fencing Installed[3]	linear feet	$10	5,700	$57,000	$171,000	$228,000
Signs Installed	1 sign (per 500' of fence)	$93	11	$1,060	$6,840	$7,900
A-E Field Oversight		15% of UXO Clearance/IC		$199,119	$0	$199,119
A-E Project Management		8% of UXO Clearance/IC		$106,197	$0	$106,197
Moderate Brush Cutting[4]	acre	$426	185	$78,810	0	$78,810
Heavy Brush Cutting[4]	acre	$603	185	$111,555	0	$111,555
			Subtotal:	$1,711,586	$177,840	$1,889,426
CEHNC Oversite		15% of subtotal		$256,738	$0	$256,738
					Total Cost Estimate:	$2,146,164
					Contingency (25%):	$536,541
						$2,682,705
					Cost per. Acre =	*$6,464*

Assumptions
[1]Cost for UXO clearance includes all ODC and mobilization costs, and equipment
[2]Estimate includes surface sweep of area to be performed prior to having fence installed
[3]Cost to install fencing is $10 per linear foot of 8 foot chain link with three strands of barbed wire
[4]Brush cutting costs taken from ECHOS 1996 and adjusted for inflation using Engineering News Record Construction Cost Index History

Table G-24
Seneca Army Depot Activity
Costs for Recurring Reviews
30 Year Period

Reviews
30 yr duration
Every 2 yrs for all site.

This estimate assumes:
Recurring review Depot wide every 2 years
2 man crew on site for 4 days
Report to be files upon completion of review

Item	Unit	Unit Cost	Amount	Per Review Cost	Total Cost	(30 yrs)[1]
Mob/Demob		$1,500	2	$3,000		$18,427
Per Diem	day	$124	8	$992		$6,093
Reviewers (2)	hour	$65	100	$6,500		$39,924
A-E Field Oversight		15% of UXO Clearance/IC		$1,574		$9,667
A-E Project Management		8% of UXO Clearance/IC		$839		$5,155
			Subtotal:	$12,905		$79,266
CEHNC Oversite		15% of subtotal		$1,936		$11,890
				Total Cost Estimate:		$91,156
				Contingency (25%):		$22,789
						$113,944

$113,944 F.Y. 04 Cost
1.1314 Escalation Factor
128,916 F.Y. 09 Cost

$128,916 / 5 sites = $25,783/site

$25,783 / 15 site visits = $1,719 per site visit
Every 2 years for 30 years.

Assumptions
[1]30 Year costs assume present value costs with a discount factor of 7%

COMPLETION REPORT

MUNITIONS RESPONSE

SEAD 002-R-01, SEAD 57, SEAD 46 AND SEAD 007-R-01

SENECA ARMY DEPOT ACTIVITY,
ROMULUS, NEW YORK

April 2007

Prepared by:

PARSONS
150 Federal Street
Boston, MA 02110

TABLES OF CONTENTS

3.0 ORDNANCE AND EXPLOSIVES DEMILITARIZATION AND DISPOSAL

All MD and scrap metal items collected by UXO technicians on a daily basis were transferred to a staging area, inspected by both the SUXOS and UXO QC Supervisor, and placed into a locked storage area for temporary storage. Additional inspections were performed by the Senior UXO Supervisor (SUXOS), and again by the Senior QC (UXOQCS) Supervisor prior to being transferred to drums where a 1348-1A form was issued, Section 3.2 describes the final disposal procedures for all explosives and MD scrap metal

3.1 INTENTIONAL DETONATIONS

Demolition operations for MPPEH were conducted at the Open Detonation Hill (OD) to the north of the former Open Burning Grounds (OBG). In accordance with "Procedures for Demolition of Multiple Rounds (Consolidate Shots) on UXO Sites", dated August 1998 and approved by DDESB on 27 October 1998. Explosives Consumption Records are included in Appendix D. A table showing the suspected MPPEH items and the date they were vented is included as Table 2-2. Venting with a shape charge was used to distinguish MEC from MD.

All demolition explosives were transferred from the Army to Parsons/USA Environmental and kept in a secure storage bunker provided by the Army. All explosives were inspected weekly while in storage and transported in accordance with the State of New York's Department of Labor, Industrial Rule 39 and the Department of Treasury, Bureau of Alcohol, Tobacco, and Firearms (ATF) regulations.

3.2 OTHER DEMILITARIZATION PROCEDURES

All projectiles and intact MD were demilitarized by either explosive venting or by the removal/deformation of the rotating bands and fuse wells following inspections.

Following venting of all MPPEH items, thermal treatment of small arms, and/or physical demilitarization procedures, all items were disposed of off-site. A total of 4,180 pounds of cultural debris scrap metal, 618 pounds of aluminum MD and 2,689 pounds of ferrous MD scrap metal was disposed off-site. A 1348-1A form, chain of custody form, and certificate of destruction for this material is included in Appendix D.

Demobilization

Demobilization occurred in November 2006 following completion of the 10% QC inspection for all six sites.

3.3 CONCLUSIONS

Between May 2006 and November 2006, Parsons performed munitions removal operations in accordance with the ESS requirements. In general, the results of the munitions removal project performed at Seneca Army Depot for SEAD 46, SEAD 57, SEAD 007-R-01 and SEAD 002-R-01 indicate that all MPPEH has been cleared from these sites. A total of two of the 11,739 identified anomalies which were investigated were found to be MEC. This indicates that these sites were free of MEC with the exception of an area north of SEAD 57 buffer area and not part of this project. The

Army believes that no additional munitions response activities are required at these sites. The conclusions from each individual site are provided below.

SEAD 57 (Former EOD Range) and the SEAD-57 Buffer Area

The only MEC items encountered during this project were found north of SEAD 57 including one fused unfired 37mm projectile in Grid 57 K-16 and one MKII grenade located in 57K-18 as shown on Figure 1-4c. Most ferrous MD items at SEAD 57 were found north of Building T011 and were not found within the high density 1,000 foot kick out radius from the SEAD 57 berm. Figure 1-4c identifies all ferrous and aluminum MD items that were recovered as part of the SEAD 57 investigation. The ferrous MD items are shown in this figure. The pattern of the aluminum MD clearly radiates out from the center of the SEAD 57 berm in a circular pattern. The 43 other MPPEH items (listed on Table 2-2) found at SEAD 57 were all determined to be MD upon venting of the items during the disposal process. SEAD 57 is considered cleared of MPPEH.

SEAD 46 (Former 3.5-inch Rocket Range)

During the investigation of SEAD 46, 22 MPPEH items were found from the 1,611 geophysical anomalies investigated. All 22 items were found to be MD after they were vented. No MEC items were found at SEAD 46. The locations of the MD suggest that the SEAD 46 berm was not used as a target for anything other than small arms practice. The MD items are actually found in areas located away from the berm. Based on the discovery of inert landmines and a sign that identifies the area as a practice minefield for EOD and military training exercises, this was most likely the use of the site. There is no evidence that it was used as a rocket range as previously identified. Based on the results of the past three investigations SEAD 46 is considered cleared of MPPEH.

SEAD 002-R-01 (EOD Areas 2 and 3)

Two MPPEH items (an electric Squibb) were found at EOD Area 2 and it was later determined to be expended. The second item, a M16 APERS, was found by the survey team conducting a boundary survey of the pond low water mark. This item was found without a fuse but due to the mud and debris that filled the case, the item was vented to dispose of any explosive residue that may have remained. It was determined to be inert. At EOD Area 3, no MPPEH items were found during the geophysical anomaly investigation or the expanded handheld investigation of the unmapped area. SEAD 002-R-01 is considered cleared of MPPEH.

SEAD 007-R-01 (Grenade Range)

During the anomaly investigation of the Grenade Range, a total of 221 MPPEH items were found. All MPPEH were related to the M73 Practice LAW Rocket. The 40mm practice grenade found at this site has an inertia driven expelling system with no explosive material. The M73 Practice LAW Rocket has a 1.5 gram spotting charge. The 1.5 gram spotting charge is designed to produce only a flash, smoke, and noise at the time of impact initiated by an inertia driven firing pin. Of the 221 M73 Sub-caliber rounds found, none were found to have the rocket motor intact, all had been functioned previously. Based on these reasons, all of the MPPEH items were reclassified as MD. All 221 of

these rounds were brought to the demolition area and disposed of by detonation. SEAD 007-R-01 is considered cleared of MPPEH.

Local Training Areas

Six individual MD items were found in the Local Training Areas B through L. The items were 37mm and 57mm TPT (target practice) rounds that contained no explosives. The remaining MD items were all small arms ammunition (50 cal.) both ball and incendiary ammunition that were thermally treated before disposal. The Local Training Areas B-7 through L-7are considered free of MPPEH.

SEAD - 002-R-01

Phase	2010	2011	2012	2013	2014	2015	2016	Outyears
LTM		2		2		2		20

SEAD 002-R-01

Phase	2009	2010	2011	2012	2013	2014	2015	Outyears
LTM	2		2		2		2	17

Table G-23
SEAD-4 (3.5" Rocket Range)
Cost Estimate for Alternative 3:
Clearance to 6"

This estimate assumes:
Clearance to 6" of 370 acres in SEAD-45
A 700' x 700' fence surrounding the demo berm in SEAD-57

Item	Unit	Unit Cost	Amount	Initial Cost	Life Cycle Cost (30 yrs)	Total Cost
UXO Clearence to 6"[1]	acre	$3,400	370	$1,258,000	$0	$1,258,000
UXO Sweep Contractor[2]	linear feet	$2	5,700	$11,400	$0	$11,400
Fencing Installed[3]	linear feet	$10	5,700	$57,000	$171,000	$228,000
Signs Installed	1 sign (per 500' of fence)	$93	11	$1,060	$6,840	$7,900
A-E Field Oversight		15% of UXO Clearance/IC		$199,119	$0	$199,119
A-E Project Management		8% of UXO Clearance/IC		$106,197	$0	$106,197
Moderate Brush Cutting[4]	acre	$426	185	$78,810	0	$78,810
Heavy Brush Cutting[4]	acre	$603	185	$111,555	0	$111,555
			Subtotal:	$1,711,586	$177,840	$1,889,426
CEHNC Oversite		15% of subtotal		$256,738	$0	$256,738
					Total Cost Estimate:	$2,146,164
					Contingency (25%):	$536,541
						$2,682,705
					Cost per. Acre =	*$6,464*

Assumptions
[1]Cost for UXO clearance includes all ODC and mobilization costs, and equipment
[2]Estimate includes surface sweep of area to be performed prior to having fence installed
[3]Cost to install fencing is $10 per linear foot of 8 foot chain link with three strands of barbed wire
[4]Brush cutting costs taken from ECHOS 1996 and adjusted for inflation using Engineering News Record Construction Cost Index History

Table G-24
Seneca Army Depot Activity
Costs for Recurring Reviews
30 Year Period

Reviews
30 yr duration
Every 2 yrs for all sites

This estimate assumes:
Recurring review Depot wide every 2 years
2 man crew on site for 4 days
Report to be files upon completion of review

Item	Unit	Unit Cost	Amount	Per Review Cost	Total Cost	(30 yrs)[1]
Mob/Demob		$1,500	2	$3,000		$18,427
Per Diem	day	$124	8	$992		$6,093
Reviewers (2)	hour	$65	100	$6,500		$39,924
A-E Field Oversight		15% of UXO Clearance/IC		$1,574		$9,667
A-E Project Management		8% of UXO Clearance/IC		$839		$5,155
			Subtotal:	$12,905		$79,266
CEHNC Oversite		15% of subtotal		$1,936		$11,890
				Total Cost Estimate:		$91,156
				Contingency (25%):		$22,789
						$113,944

Assumptions
[1]30 Year costs assume present value costs with a discount factor of 7%

MEMORANDUM FOR RECORD

SUBJECT: Environmental Liabilities **Date:** 13 January 2009

This memorandum serves as formal documentation of the information used to develop the Cost-To-Complete (CTC) estimate for the 2009 data call. The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of site close out. RD/RA costs were obtained from the FS. The Proposed Plan identifies CERCLA requirements.

Site: SEAD-12, Radioactive Waste Burial Pits including SEAD-72, Building 803

Source:
1. Draft Final Proposed Plan, SEAD 12 and SEAD 72, November 2008 (CERCLA Action)
2. Final Feasibility Study Report, SEAD-12, January 2008
3. Corps of Engineers S&A letter dated 13 March 2008
4. Professional judgment based on site knowledge
5. Email from John Nohrstedt, January 12, 2009, Contracting Cost.
6. Work Authorization Directive, June 23, 2009

RACER Assumptions:
Site Closeout will be required following the SEAD-12 Removal Action. No post remediation monitoring is expected as contaminants are associated with the soil and the proposed plan will be to excavate all contaminated soil and dispose off-site.

Site Closeout Documentation (LTM):
1. Site Closeout is moderate complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years

Well Abandonment (LTM):
1. Number of wells: 45
2. Well depth: 15 feet
3. Well diameter: 2"
4. Unconsolidated
5. Overdrill/removal

Cost Summary SEAD-12

Remedial Design from FS (see calculations, MFR p. 15)		$222,623
Remedial Action from FS (see calculations, MFR p. 15)		$2,271,277
RCRA Closure Bldg 803	$58,000 FY04 Plan cost (see p. 17) x 1.1314 escalation	$65,621
COE S & A (222,623 + 2,271,277 + 65,621)0.058		$148,452
Funding already received (WAD)		($2,000,000)
RD/RA Cost remaining		$707,973
LUC		$37,000
LTM		
Site Closeout and Well Abandonment (RACER)		$130,740

COE Support:

COE contracting:		
Procurement		
(2 events x $5,000/event)	$10,000	
Monitoring		
(2 years x 7,000/year)	$14,000	
Closeout		
(2 contracts x 2,500/contract)	$5,000	
COE S&A: (130,740 +37,000) x 0.058 = $9,729		$38,729

Total Site Cost	**$914,442**

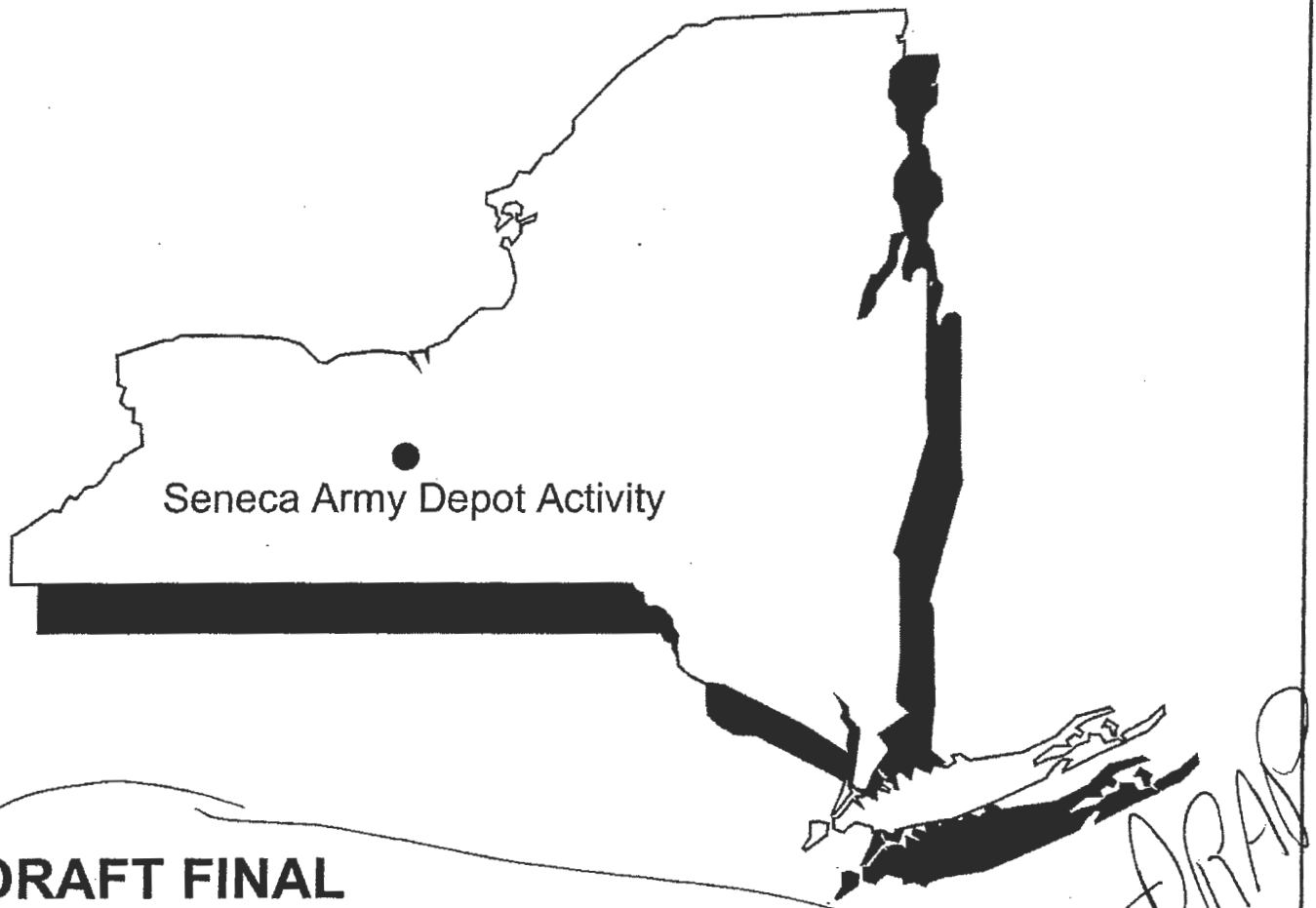
Cost Difference > 10% from 2008 Report? Yes
Received Partial Funding

Prepared by: Randall Battaglia _____ 11 MAR 09
Signature Date

Reviewed by: Stephen M. Absolom _____ 11 Mar 09
Signature Date

US Army, Engineering & Support Center
Huntsville, AL

Seneca Army Depot Activity
Romulus, NY



DRAFT FINAL
PROPOSED PLAN
RADIOLOGICAL WASTE BURIAL SITES (SEAD-12) AND MIXED WASTE STORAGE FACILITY (SEAD-72) SENECA ARMY DEPOT ACTIVITY

EPA Site ID# NY0213820830
NY Site ID# 8-50-006
Contract No. DACA87-02-D-0005
Delivery Order No. 0031

PARSONS
November 2008

##########

Proposed Plan – Draft Final

THE RADIOACTIVE WASTE BURIAL SITES (SEAD-12) AND THE MIXED WASTE STORAGE FACILITY (SEAD-72) SENECA ARMY DEPOT ACTIVITY (SEDA) ROMULUS, NEW YORK

November 2008

##########

PURPOSE OF THIS DOCUMENT

site

This Proposed Plan describes the remedial alternative selected for two areas of concern (AOCs), SEAD-12 (the Radioactive Waste Burial Sites) and SEAD-72 (the Mixed Waste Storage Facility), at the Seneca Army Depot Activity (SEDA or Depot) Superfund Site. This Proposed Plan was developed by the U.S. Army (Army) and the U.S. Environmental Protection Agency (EPA) in consultation with the New York State Department of Environmental Conservation (NYSDEC). The Army and the EPA are issuing this Proposed Plan as part of their public participation responsibilities under Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Action (CERCLA) of 1980, as amended, and Sections 300.430(f) and 300.435(c) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The nature and extent of the contamination at SEAD-12 and SEAD-72 are described in the August 2002 Remedial Investigation (RI) Report, the March 2003 Radiological Survey Report, the October 2006 Supplemental RI (SRI) Report, and the January 2008 Feasibility Study (FS) Report. The Army, EPA, and NYSDEC encourage the public to review these documents to gain a more comprehensive understanding of the AOCs and the Superfund activities that have been completed.

This Proposed Plan is being provided as a supplement to the RI, Radiological Survey, SRI, and FS reports to inform the public of the Army's, EPA's, and NYSDEC's preferred remedy for the AOCs and to solicit public comments pertinent to the selected remedies. The preferred remedy for SEAD-12 consists of an environmental easement to prevent access to and use of Buildings 813/814 or newly constructed buildings within the area, and to prohibit access to and use of groundwater in the vicinity of Buildings 813/814 and former monitoring well MW12-37. For SEAD-72, the Army would complete the RCRA Closure of Building 803 in accordance with the previously submitted Closure Plan. Changes to the preferred remedy, or a change from the preferred remedy to another remedy, may be made if public comments or additional data indicate that such a change will result in a more appropriate remedial action. The final decision regarding the selected remedies for SEAD-12 and SEAD-72 will be made after the Army and the EPA have taken all public comments into consideration. The Army and the EPA are soliciting comments because the Army, EPA, and NYSDEC may select remedies other than the preferred remedies for SEAD-12 and SEAD-72 presented in this Proposed Plan.

A risk assessment was not performed to evaluate potential risks via the indoor air exposure pathway at Buildings 813/814. Currently, the vapor intrusion exposure pathway is not complete as no receptors are identified and the building is not in use. It is the Army's position that potential future receptors would be determined when the existing buildings were either designated for re-use, or when new buildings were considered for construction over the existing footprints of Buildings 813/814, which are suspected to be underlain by soil containing elevated levels of TCE. It will be the responsibility of the organization making the determination to occupy the buildings to perform such an analysis prior to use of the buildings.

REMEDIAL ACTION OBJECTIVES

Remedial action objectives (RAOs) are specific goals to protect human health and the environment. These objectives are based on available information and standards, such as applicable or relevant and appropriate requirements (ARARs), to-be-considered guidance, and site-specific risk-based levels.

Results of the risk assessment for SEAD-12 indicate that soil in the three most impacted areas (Disposal Pit A/B; Disposal Pit C; and the Former Dry Waste Disposal Pit) and other media (groundwater, sediment, surface water) do not pose unacceptable risks to human health or the ecological receptors based on the unrestricted use scenario. Therefore, no further CERCLA action is warranted at any location within SEAD-12, exclusive of the area where Buildings 813/814 (**Figure 3**) are located.

Access to and use of Building 813 and 814 should be restricted until additional data is provided to quantify risks that may exist to potential future users or occupants of these buildings due to the presence of volatile organic compounds, including trichloroethene, in the soil beneath these buildings. Further, while an interim remedial action was performed exterior of Buildings 813 and 814 to eliminate soil that was found to contain trichloroethene and that was shown to affect groundwater in the immediate area of former monitoring well MW12-37, there is a continuing potential for recontamination of groundwater due to possible outward migration of VOCs from below the building slabs. Therefore, access to and use of the groundwater in an area surrounding these existing buildings will also be implemented and maintained until additional data is provided to confirm that there has been is no indication of recontamination of soil and groundwater beyond the edge of the buildings.

The remedial action objectives established for SEAD-12 are as follows:

- Prohibit potential exposure to volatile organic compounds in the indoor air at existing Buildings 813/814 or in potential newly constructed buildings above the footprints of the existing buildings (**Figure 3**) that may present a potential human health risk.
- Prohibit access to and use of groundwater in the vicinity of Buildings 813 and 814, and the location of former monitoring well location MW12-37.
- Release SEAD-12, other than the area shown in **Figure 3**, for unrestricted use.
- Implement and complete the RCRA Closure of Building 803 (SEAD-72)

Further, as test pit investigations completed in SEAD-12 indicate that Disposal Pit A/B and Disposal Pit C contain significant quantities of debris and some of the debris can be characterized as "military related components", the Army will excavate Disposal Pit A/B and Disposal Pit C to remove military related components and debris as a non-CERCLA activity.

For SEAD-72, the Army will conduct and complete RCRA Closure at Building 803 in accordance with the previously submitted Closure Plan. The final Closure Plan for Building 803, the former Mixed Waste Storage Facility, was submitted to the NYSDEC and EPA in October 2005. After the implementation of this plan, the Army anticipates that a permanent solution will be achieved at Building 803 to safeguard against any future contaminant release. Building 803 currently is unoccupied, unused and void of any discernible regulated waste; there is visible evidence of neglect including dust, debris and peeling paint. There is a remote potential that trace levels of hazardous VOC solvents may remain in the building. Building decontamination procedures will be implemented to eliminate any trace solvents that remain. The efficacy of the decontamination process will be confirmed by subsequent sampling and analysis for the VOCs of concern. The anticipated present-worth cost associated with the closure is $58,000. The anticipated construction time is less than one month, with an overall completion time of six months. Once clean closure is documented, there will be no further actions required at Building 803.

The proposed actions for Building 803 and Disposal Pit A/B and Disposal Pit C are not CERCLA actions and therefore are not discussed in the following remedial alternative evaluation section.

SUMMARY OF SEAD-12 REMEDIAL ALTERNATIVES

CERCLA §121(b)(1),42U.S.C. § 9621(b)(1), mandates that remedial actions must be protective of human health and the environment, cost-effective, comply with ARARs, and utilize permanent solutions and alternative treatment technologies and resource recovery alternatives to the maximum extent practicable. Section 121(b)(1) also establishes a preference for remedial actions which employ, as a principal element, treatment to permanently and significantly reduce the volume, toxicity, or mobility of the hazardous substances, pollutants and contaminants at a site. CERCLA §121(d), further specified that a remedial action must attain a level or standard of control of the hazardous substances, pollutants, and contaminants, which at least attains ARARs under federal and state laws, unless a waiver can be justified pursuant to CERCLA §121(d)(4), 42 U.S.C. § 9621(d)(4).

Detailed descriptions of the remedial alternatives for addressing the former isolated groundwater anomaly identified in the vicinity of Buildings 813/814 can be found in the FS report. The FS report presents and evaluates four remedial alternatives for Buildings 813/814 as well as Disposal Pits A/B and C. Because the proposed actions for Disposal Pits A/B and C are not CERCLA actions, the non-CERCLA portions of the alternatives (i.e., actions that address Disposal Pits A/B and C) are not discussed in this section. The CERCLA action for Alternatives 2 and 3 are the same; therefore, these two alternatives are presented in this Proposed Plan as one alternative, named as Alternative 2/3.

The construction time for each alternative reflects only the time required to construct or implement the remedy and does not include the time required to design the remedy, negotiate the performance of the remedy, or procure contracts for design and construction.

The alternatives, along with the technologies and processes that make up each alternative, are:

Alternative 1: No Action

The Superfund program requires that the "no-action" alternative be considered as a baseline for comparison with the other alternatives. The no-action remedial alternative for soil does not include any physical remedial measures that address the problem of contamination at SEAD-12.

Because this alternative would result in contaminants remaining above levels that allow for unrestricted use and unlimited exposure, CERCLA requires that the alternative be reviewed at least once every five years. If justified by the review, remedial actions may be implemented to remove, treat, or contain the contaminated media.

SEAD-12, Alternative 1 Costs

Capital Cost	$0
Annual Long-Term Monitoring (LTM)	$0
Present-Worth Cost of LTM	$0
Construction Time	0 months

Alternative 2/3: Environmental Easement

Alternative 2/3 involves an environmental easement that will be established to a designated area including Buildings 813/814 (as shown in **Figure 3**). The environmental easement would prohibit access to or use of Buildings 813/814 or any newly constructed building over the footprint of Buildings 813/814 and prohibit the access to and use of groundwater use in the vicinity of Buildings 813/814 (as shown in **Figure 3**). The groundwater restriction would remain in effect until data were provided that indicated that groundwater quality in the vicinity of Buildings 813 and 814 met GA standards. The easement will state that an investigation of vapor intrusion potential and indoor air quality must be performed before the existing buildings, or any newly constructed buildings in the area, were occupied.

SEAD-12, Alternative 2/3 Costs

Annual LTM Cost	$3,000
Present-Worth Cost of LTM	$37,000
Total Cost	$37,000
Construction Time	1 month

LUC COST

Alternative 4: Building Demolition for Unrestricted Use

Alternative 4 involves a vapor intrusion study and a probable action that would alleviate the need for land use controls (i.e., building demolition and soil excavation and disposal). Alternative 4 would restore SEAD-12 for unrestricted use by future property users.

The vapor intrusion study would be conducted to determine whether the potential for vapor intrusion to the indoor environment exists, and to evaluate other contributing factors that may play a role in the volatile vapors inside of Buildings 813 and 814, if any. The vapor intrusion study would start with a building inventory inspection. Following the inspection, sources or potential sources of volatile vapors would be removed from the buildings and surrounding area (or otherwise mitigated) to the extent practicable. Direct measurements of VOC concentrations present in sub slab vapors below the building foundations along with indoor and outdoor air would be obtained. Inspections and sampling would be conducted in accordance with protocols and procedures provided in *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (NYSDOH, 2006).

If warranted, based on the vapor intrusion investigation results, Buildings 813 and 814 would be demolished. The buildings would be demolished to the slab or to the existing grade using conventional demolition techniques. Soil underneath the foundation of Building 813 where elevated TCE concentrations were detected would be excavated. Confirmatory samples would then be collected to ensure that the residual concentrations of VOCs are consistent with NYSDEC SCOs for the unrestricted use scenarios. The demolition material would be sorted, as necessary and loaded

Compared to Alternative 2/3, Alternative 4 was ranked lower in this category as it potentially includes the demolition of Buildings 813/814. Excavation and building demolition would increase short-term risks to workers relative to no action, even with use of dust controls and personal protection equipment, due to the increase in concentrations of airborne soil particulates.

Implementability

The technical feasibility for Alternative 1 ranked the highest among the alternatives. However, the administrative feasibility of the alternative is not considered favorable since extensive coordination with local, state, and regional agencies would be required in the attempt to support and justify no remedial action at SEAD-12.

Alternatives 2/3 and 4 can be constructed easily, though Alternative 4 involves more excavation, testing, transportation, and disposal. In addition, a licensed off-site landfill capable of accepting the building debris and soil from SEAD-12 would be needed for Alternative 4.

Cost

Capital costs, operating costs, and administrative costs were estimated for Alternatives 1, 2/3, and 4. Capital costs include those costs for professional labor, construction and equipment, field work, monitoring and testing, and treatment and disposal. Operating costs include costs for administrative and professional labor, monitoring, and utilities. Administrative costs include the costs for land use restrictions.

Alternative 1 (no action) is the least costly alternative and incurs no cost for SEAD-12. The costs for the Buildings 813/814 area remediation are $37,000 and $440,000 for Alternative 2/3 and Alternative 4, respectively.

State Acceptance

NYSDEC concurs with the preferred remedial alternative (i.e., Alternative 2/3).

Community Acceptance

Community acceptance of the preferred alternative will be assessed in the ROD following review of the public comments received on the RI report, SRI report, FS report, and this Proposed Plan.

PROPOSED REMEDY

SEAD-12 is suitable for unrestricted use, exclusive of the area proposed in **Figure 3** where a future vapor intrusion risk analysis may be needed if a future user/occupant is identified in existing or newly constructed buildings within the area. Since TCE was detected in soil underneath Buildings 813/814; the Army is proposing to reduce potential risks, if any, associated with indoor air exposure.

Both the environmental easement (Alternative 2/3) and the Buildings 813/814 vapor intrusion study and building demolition (Alternative 4) alternatives were evaluated together with the no-action alternative (Alternative 1) for SEAD-12. Based on the comparative alternative analysis, Alternatives 2/3 and 4 have the similar rankings and both ranked higher than the no-action alternative. The costs are $37,000 and $440,000 for Alternative 2/3 and Alternative 4, respectively. The cost of Alternative 4 is approximately twelve times of the cost for Alternative 2/3. Alternative 2/3 is comparatively cost effective in reducing potential risks associated with indoor air exposure. As a result, Alternative 2/3 is the recommended alternative.

In summary, the preferred remedy at SEAD-12 is to establish an environmental easement to prohibit access to and use of Buildings 813/814 or any newly constructed building overlying the footprint of the existing buildings until such time as a vapor intrusion study is conducted in the building(s) and showed that potential risks from volatile organic compound, including trichloroethene, intrusion did not pose risks to future receptors. Additionally, a separate LUC that prohibits access to and use of groundwater in the vicinity of Buildings 813/814 (as shown in **Figure 3**) would also be implemented nad maintained.

The vapor intrusion easement will state that an investigation of vapor intrusion potential and indoor air quality must be performed by the property owner at the time of the use determination before the buildings, or any newly constructed buildings in the designated area, are occupied. The groundwater access and use restriction will be maintained until new analytical data are provided to, and approved by, the Army, EPA, and NYSDEC to indicate that groundwater in the vicinity of Building 813 and 814, and former well MW12-37 meets GA groundwater standards.

To implement the remedy selected in this Proposed Plan, which includes the imposition of LUCs at SEAD-12, a LUC RD Plan will be prepared which is consistent with Paragraphs (a) and (c) of the New York State Environmental Conservation Law (ECL) Article 27, Section 1318: Institutional and Engineering Controls. The LUC RD Plan will include: a Site Description; the Institutional Control (IC) Land Use Restrictions; the LUC Mechanism to ensure that the land use restrictions are not violated in the future; implementation and maintenance actions, including periodic inspections; periodic certifications that the institutional engineering controls are in-place and being maintained by the owner or persons implementing the remedy; and, Reporting/Notification requirements. In addition, the Army will prepare an environmental easement for SEAD-12, consistent with Section 27-1318(b) and Article 71, Title 36 of ECL, in favor of the State of New York and the Army, which will be recorded at the time of the property's transfer from Federal ownership. The easement will provide that EPA and the Army will be third-party beneficiaries of the easement. A schedule for completion of the draft SEAD-12 LUC Remedial Design Plan covering the AOC will be completed within 21 days of the ROD signature, consistent with Section 14.4 of the FFA. In accordance with the FFA and CERCLA §121(c), the remedial action (including ICs) will be reviewed no less often than every 5 years. After such reviews, modifications may be implemented to the remedial program, if appropriate.

The Army shall implement, inspect, report, and enforce the LUC described in this Proposed Plan in accordance with the approved LUC RD. Although the Army may later transfer these responsibilities to another party by contract, property transfer agreement, or through other means, the Army shall retain ultimate responsibility for remedy integrity.

SEAD 72 ACTION

The Army will implement and complete the RCRA Closure of Building 803, the former Mixed Waste Storage facility, in accordance with the previously submitted Closure Plan for SEAD-72.

Further, as a separate act from CERCLA, the Army will perform a removal action at Disposal Pit A/B and Disposal Pit C to remove military related components and debris.

NON CERCLA Requirement

FINAL

FEASIBILITY STUDY REPORT

FOR THE RADIOACTIVE WASTE BURIAL SITES (SEAD-12)

SENECA ARMY DEPOT ACTIVITY, ROMULUS, NY

Prepared for:

SENECA ARMY DEPOT ACTIVITY
5786 STATE ROUTE 96
ROMULUS, NEW YORK 14541

and

UNITED STATES ARMY CORPS OF ENGINEERS
4820 UNIVERSITY SQUARE
HUNTSVILLE, ALABAMA 35816

Prepared by:

PARSONS
150 Federal Street
Boston, MA 02110

Contract Number: DACA87-02-D-0005
Delivery Order: 0031
USEPA Site ID: NY0213820830
NY Site ID: 8-50-006

January 2008

5,000 + 9,000 = 14,000 cubic yards

Alternative 2, Excavation/Disposal in Off-Site Landfill/Environmental Easement: Approximately 5,000 cubic yards of soil and debris will be excavated from Disposal Pit A/B and approximately 9,000 cubic yards of soil and debris will be removed from Disposal Pit C. Because there are no contaminants of concern at these areas, the extent of excavation will be the limits of the debris encountered within the excavation areas. All debris and soil removed from the excavation will be scanned for the presence of radionuclides. Although there were no radiological exceedances in the disposal pits, the soil and debris will be screened to provide further concurrence that all subsurface materials encountered are free from unacceptable levels of radioactivity. If elevated levels of radioactivity are found, further analytical testing would be performed to confirm and identify the radionuclides of concern. Such material would be disposed properly off-site at a licensed facility. Once all military debris and radiologically-impacted soils have been removed, the remaining soil will be backfilled. Additional clean fill from off-site will be used, as needed. The excavated areas will be re-contoured to match the existing terrain characteristics. The cost for the debris excavation and disposal is approximately $2.371 million.

In addition to the excavation of military debris, an environmental easement will be prepared to prohibit access to Buildings 813/814 and any newly constructed building in the area, prior to conducting an indoor air survey. This is needed due to the presence of trichloroethylene in soil beneath the buildings foundation. The cost for the environmental easement is about $74,000.

The total present worth cost for this alternative is $2.445 million (± 25-50 percent).

Alternative 4, Excavation/Disposal in Off-Site Landfill/Building Demolition for Unrestricted Use: Actions for Disposal Pit A/B and Disposal Pit C are the same as those presented in Alternative 2. The cost for the debris excavation and disposal is approximately $2.371 million, the same as the cost for Alternative 2. In addition to the excavation of military debris, a vapor intrusion study will be performed for Buildings 813 and 814. If warranted based on the study results, the buildings will be demolished and soil associated with elevated trichloroethylene concentrations underneath the building foundation will be excavated and disposed. This alternative will result in unrestricted use for SEAD-12. The alternative involves demolition of approximately 150 cubic yards of building material and excavation of approximately 900 cubic yards of soil underneath the buildings. The cost for the vapor intrusion study and buildings demolition is estimated at $440,000.

The total present worth cost for this alternative is $2.811 million (± 25-50 percent).

4.5.3.5 Costs

Alternative 1 (no-action) has no costs associated with it and was therefore ranked higher than Alternative 2 (excavation/disposal/easement) and Alternative 4 (excavation/disposal/building demolition).

The cost for excavation and disposal of debris from Disposal Pits A/B and C is estimated at $2,371,000, the same for Alternative 2 and Alternative 4. The costs for the Buildings 813/814 area remediation are $74,000 and $440,000 for Alternative 2 and Alternative 4, respectively. The cost of Alternative 4 for the Buildings 813/814 area remediation is about six times of the cost for Alternative 2. The total estimated costs for Alternative 2 and Alternative 4 are $2,445,000 and $2,811,000. The accuracy of these cost estimates are expected to be on the order of ± 25-50%. These estimates were developed primarily for comparative purposes.

4.6 UNCERTAINTY ASSOCIATED WITH ALTERNATIVE

Alternatives discussed in this FS have been well defined. Nonetheless, uncertainties related to the alternatives remain. A significant uncertainty that would affect the alternative analysis and cost estimate is the actual volumes of debris present in the disposal pits. Other uncertainties (e.g., uncertainties with the definition of alternatives, uncertainties associated with land disposal, and uncertainties related to construction) would also affect the alternative analysis and cost estimation. The focus of the alternative analysis presented in this FS is to make comparative estimates for alternatives with relative accuracy; uncertainties associated with the identified alternatives are not expected to impact the overall alternative comparison results.

4.7 SUMMARY AND CONCLUSIONS

All of the identified remedial alternatives meet the threshold criteria of protectiveness of human health and the environment and compliance with ARARs based upon the results of the human health and ecological risk assessment and a comparison with ARARs. These alternatives are intended to address the presence of military-related debris identified during the Remedial Investigation in specific areas of SEAD-12.

Alternative 4 ranked the highest among the four alternatives for long-term human health and environmental protectiveness, reduction of mobility, reduction of volume, permanence, and administrative feasibility. Both Alternative 2 and Alternative 4 would result in the excavation and disposal of military debris associated with Disposal Pit A/B and Disposal Pit C. The only difference between Alternative 2 and Alternative 4 is the way in which potential future exposure to indoor air in Buildings 813/814 are managed. An environmental easement is adopted in Alternative 2 for Buildings 813/814 while building demolition is proposed in Alternative 4. Alternative 1 ranked the highest among the four alternatives for short-term human health and environmental protectiveness, technical feasibility, and availability of services and materials. All the four alternatives ranked the same in reduction of toxicity.

Alternatives 2 and 4 have the highest total scores among the four alternatives (29 and 30, respectively). The intended land-use for SEAD-12 is institutional training. The presence of military

debris could potentially place restrictions on the use of SEAD-12 as an institutional training area. Based upon the lack of long-term effectiveness and permanence associated with military debris for the no-action alternative, Alternatives 2 and 4 are the recommended alternatives. A detailed screening process would be employed during the excavation and stockpiling stage to ensure that all materials classified as military or containing isotopes above the threshold criteria are disposed of properly. In addition, an environmental easement (Alternative 2) or a building demolition (Alternative 4) will be performed for Buildings 813/814 area. The easement will state that an investigation of vapor intrusion potential and indoor air quality must be performed before the buildings, or any newly constructed buildings in the vicinity, are occupied. The building demolition will include demolition of the Buildings 813/814 and excavation of soil associated with elevated levels of TCE in soil underneath the building foundation. The estimated costs are $2,445,000 and $2,811,000 for Alternative 2 and Alternative 4, respectively. The cost for the debris excavation from Disposal Pits A/B and appropriate disposal is $2,371,000, the same for Alternative 2 and Alternative 4. The cost for the Buildings 813/814 area remediation using Alternative 4 is approximately six times of the cost for Alternative 2 ($74,000 and $440,000 for Alternative 2 and Alternative 4, respectively). The costs associated with these two alternatives assume that a percentage of the materials excavated would be classified for off-site disposal. The actual costs may be higher or lower depending upon the type and volume of material present in the areas identified for excavation.

NON-CERCLA COST.

Table 4-1
COST ESTIMATE SUMMARY FOR REMEDIAL ACTION ALTERNATIVES
SEAD-12 Feasibility Study
Seneca Army Depot Activity

Costs	Reference Table	Alternative 2 Excavation of Soil/Debris, Off-site Disposal of Debris, and Environmental Easement	Alternative 4 (unrestricted) Excavation of Soil/Debris, Off-site Disposal of Debris, Vapor Intrusion Study, and Buildings 813/814 Demolition
Disposal Pits A/B and C			
Capital Costs			
Remedial Design	A-2	$ 158,000	$ 158,000
Mobilization/Demobilization	A-2	$ 39,000	$ 39,000
Rad Sampling, Testing, & Air Monitoring	A-2	$ 41,000	$ 41,000
Site Services	A-2	$ 355,000	$ 355,000
Soil/Debris Excavation, Backfill and Disp.	A-2	$ 1,124,000	$ 1,124,000
Cost to Prime		**$ 1,717,000**	**$ 1,717,000**
Field Office Support (5%)		$ 86,000	$ 86,000
Home Office Support (15%)		$ 270,000	$ 270,000
Profit (10%)		$ 207,000	$ 207,000
Bond (4%)		$ 91,000	$ 91,000
Cost to Owner		**$ 2,371,000**	**$ 2,371,000**
Buildings 813/814 Area			
Capital Costs			
Vapor Intrusion Study	A-4	NA	$ 94,000
Building Demolition	A-6	NA	$ 224,000
Cost to Prime		**$ -**	**$ 318,000**
Field Office Support (5%)		$ -	$ 16,000
Home Office Support (15%)		$ -	$ 50,000
Profit (10%)		$ -	$ 38,000
Bond (4%)		$ -	$ 17,000
O&M Costs			
Environmental Easement [1]	A-2	$ 74,000	NA
Cost to Owner		**$ 74,000**	**$ 440,000**
SEAD-12 Total			
TOTAL PRESENT WORTH COST (±25-50%)		**$ 2,445,000**	**$ 2,811,000**

RD + RA

Notes:
1. The present worth cost associated with environmental easement was calculated based on an annual $3,000 cost, along with a discount rate of 7% and a 30-year time interval.
2. Refer to Appendix A, Tables A-1 through A-6, for cost estimate information and backup quantity estimate information.

RD Cost 158,000
× 1.05 field office support
165,900
× 1.15 home office support
190,785
× 1.10 profit
209,863.5
× 1.04 bond
218,258

RD/RA ⇒ 2,445,000
RD − 218,258
RA 2,226,742
ESCALATION FACTOR 1.02
2,271,277. Cost

RD = 218,258
× 1.02 ESCALATION FACTOR (FY08)
222,623 COST

SEAD 72

RCRA Closure Plan

Building 803, Mixed Waste Storage Facility

Prepared for:

Seneca Army Depot Activity
Romulus, New York

and

US Army Corps of Engineers
Huntsville Center

Prepared by:

PARSONS
100 Summer Street, Suite 800
Boston, Massachusetts 02110

Contract No.: DACA87-95-D-0031
Delivery Order No.: 25
739263

December 2004

2.3.10 Closure Costs

An estimate of the costs to close Building 803, the Mixed Waste Storage Facility has been developed using MCACES. Costs projected for this activity have been derived based on the Army retaining a third-party consultant to oversee the proposed closure of Building 803 and to collect the necessary samples for analysis, and a third-party organization being retained to complete all of the required decontamination and hazardous waste removal operations. All decontamination wastes deemed hazardous will be shipped off-site for disposal at a licensed TSDF.

The estimated cost for closing Building 803 is approximately $58,000, however, this cost includes the possible necessity of steam cleaning the entire building. If this is not necessary, the cost will decrease significantly. Details of this estimate are summarized in **Table 2-5** and detailed in **Appendix D** of this closure plan .

Action -
Cost to clean bldg 803 (part of SEAD-12)
for RCRA closure.

$58,000 FY04
1.1314 ESCALATION FACTOR FY09
65,621.

Absolom, Stephen M Mr CIV USA

From: Nohrstedt, John HNC [John.Nohrstedt@usace.army.mil]
Sent: Monday, January 12, 2009 4:18 PM
To: Absolom, Stephen M Mr CIV USA
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Cost per year for contracting to monitor a contractor:
5 hrs/month X 12 months = 60 hrs
Approximately $5,000 to $7,000

Contract Monitoring / yr

Cost for contracting Task Order Close out:
Firm Fixed Price - 5 to 10 hrs - Approx. $500 to $1000
Cost Plus - 10 to 25 hrs - Approx. $1000 to $2,500

Contract Closeout

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA [mailto:stephen.m.absolom@us.army.mil]
Sent: Monday, January 12, 2009 8:07 AM
To: Nohrstedt, John HNC; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,
What will the cost per year be to monitor the TO if it is a multiple year task order.
Also need to a cost for TO Close out.
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362
-----Original Message-----
From: Nohrstedt, John HNC [mailto:John.Nohrstedt@usace.army.mil]
Sent: Friday, January 09, 2009 12:35 PM
To: Absolom, Stephen M Mr CIV USA; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Below are the man-hours to prepare and issue a simple task order:

Prepare SOW and IGE	- 6 to 10 hrs
Review	- 0.5 to 2 hr
Issue RFP	- 2 to 3 hrs
Review Proposal	- 2 to 4 hrs
Tech Evaluation	- 4 to 8 hrs
Negotiation	- 2 to 4 hrs
Review Revised Proposal	- 2 to 3 hrs
Tech Eval. of revised	- 0.5 to 2 hrs
Issue Award	- 4 to 6 hrs

TOTAL - 23 to 42 hours

The cost would be approximately $3,000 to $5,000. Procurement

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA
[mailto:stephen.m.absolom@us.army.mil]
Sent: Friday, January 09, 2009 9:14 AM
To: Battaglia, Randy W NAN02; Nohrstedt, John HNC
Subject: Contracting Cost

Steve,
I am starting to update my CTC for this year. One area not preivously included in the costing is the establishment of a new Task/Delivery order. Can you give me a Cost to be included in my CTC for the COE to prepare and issue a task order? Please note that your email will be included in the CTC file so it needs to be accurate as possible.

Thanks
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

CERM-P (37)

13 MAR 2008

MEMORANDUM FOR MAJOR SUBORDINATE COMMANDS (MSC)

SUBJECT: Fiscal Year (FY) 2008 Supervision and Administration (S&A) Rate Changes

1. References:

a. CERM-P memorandum, 27 July 2005, Subject: S&A Accounting Procedures for Modularity Projects.

b. CERM-P memorandum, 20 September 2006, Subject: FY 2006 S&A Rate Changes.

2. Effective 1 April 2008 the Operation and Maintenance (O&M) and the Defense Environmental Restoration Program (DERP) S&A rate for the Continental United States (CONUS) is reduced for new Fiscal Year 2008 (FY08) contract awards from six and one-half percent to five and eight-tenths percent. The intent of this change is to adjust the S&A rate to match the current expense and income activity; the level of service or effort should remain unchanged. Any O&M losses to your S&A checkbook that result from the rate change will be reimbursed from the national S&A account. The Major Subordinate Command (MSC) maximum checkbook carryover will be increased to three months' expense and reflected in the next update to the consolidated command guidance.

3. The one percent furniture rate in reference "a" was not intended to be restricted to modularity projects. It may be used for any MILCON or O&M project. This change in the O&M rate does not affect modularity/relocatable projects as they continue to be charged the MILCON rate per reference "a".

CERM-P (37)
SUBJECT: FY 2008 Supervision and Administration (S&A) Rate Changes

4. Since these changes significantly affect S&A schedules the FY08 S&A performance will be measured against your mid-year schedules due 25 April 2008. Special instructions are provided in the enclosed standing operating procedures to assist in implementation of these changes. These changes will be codified in the next update to the consolidated command guidance.

5. Point of contact for this action is Mr. Philip Blount, CERM-P, (202) 761-8908.

FOR THE COMMANDER:

Encl

Wesley C. Miller
Director of Resource Management

WORK AUTHORIZATION DIRECTIVE (WAD)
BASE REALIGNMENT AND CLOSURE (BRAC) ENVIRONMENTAL RESTORATION
AND FUNDS RELEASE DOCUMENT

CEMP-NAD 23 June 2008

DIRECTIVE NO. BR-SEN-08-14

ISSUED THRU: CENAD-PD-IIS-S (BELDIN-QUINONES)
TO: CENAN-PP-E (BATTAGLIA)

ISSUED FOR: BRAC ER at Seneca AD, NY.

1. Reference DA FAD, 23 June 2008, advice number # 08-0002-05325.

2. You are authorized Base Closure Account (BCA) environmental restoration funds to execute the following project(s).

BRAC ROUND: 97	increase X /decrease__ reprog_	
APPRN: 97 X/2013 0510.40N1 2008 BCA	**DIV/DIST:** NAN	**ASN:** 8011
PROJECT	AMSCO	+/- ALLOCATION
Listed as "SITES"	61366R32	+ $2,000,000.00
POC at CENAN-PP-E is Randy Battaglia, 607-869-1523. POC at CEMP-NAD is Dave Koran, 202-761-0076.		

3. These funds are for the above specified projects only. The funds may not be transferred to other projects without approval and authorization of this office.

4. These funds must be obligated within 30 days of receipt. If these funds cannot be obligated in 30 days this office is to be notified immediately.

5. Accounting and Reporting Instructions:
   a. Report all financial data on a monthly basis via the Integrated Command Accounting and Reporting (ICAR) System.
   b. Report excess funds to CEMP-NAD as soon as they are identified.
   c. Provide a copy of this WAD to your Resource Management Office.

AMSCO For SEAD12

CF: BELDIN-QUINONES

Estimate Documentation Report

System:

RACER Version: 10.2.0
Database Location: C:\Documents and Settings\Andy W\Application Data\Earth Tech\RACER 10.2\Racer.mdb

Folder:

Folder Name: Seneca

Project:

Project ID: SEAD-12
Project Name: SEAD-12
Project Category: Institutional/Training

Location
State / Country: NEW YORK
City: SENECA ARMY DEPOT

Location Modifier	Default	User
	1.114	1.114

Options
Database: System Costs
Cost Database Date: 2009
Report Option: Fiscal

Description

SEAD-12, Radioactive Waste Burial Sites and SEAD-72, Building 803

The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of site close out. RD/RA costs were obtained from the RI/FS and RCRA Closure Plan.

Site: SEAD-12, Radioactive Waste Burial Pits including SEAD-72, Building 803

Source:
1. Final Feasibility Study Report, SEAD-12, January 2008
2. RCRA Closure Plan, Building 803, Mixed Waste Storage Facility, December 2004
3. Corps of Engineers S&A letter dated 31 March 2004
4. Professional judgment based on site knowledge

Estimate Documentation Report

Note: Building 803 (SEAD-72) is included with SEAD-12. The RCRA Closure of SEAD-72 will require funding for the cleaning as addressed in the Closure Plan. In addition, the Draft Final Supplemental RI for SEAD-12 addressed a TCE contaminated area at Bldg. 813/814. This Supplemental RI concludes that No Further Action will be required at Bldg. 813/814 site.

RACER Assumptions:
Site Closeout will be required following the SEAD-12 Removal Action. No post remediation monitoring is expected as contaminants are associated with the soil and the proposed plan will be to excavate all contaminated soil and dispose off-site.

Site Closeout Documentation (LTM):
1. Site Closeout is moderate complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years

Well abandonment (LTM):
1. Number of wells: 45
2. Well depth: 15 feet
3. Well diameter: 2"
4. Unconsolidated
5. Overdrill/removal

Estimate Documentation Report

Site Documentation:

Site ID: SEAD-12
Site Name: Radioactive Waste Burial Sites
Site Type: None

Media/Waste Type
Primary: Solids
Secondary: N/A

Contaminant
Primary: Radioactive (Low Level)
Secondary: None

Phase Names
SI: ☐
RI/FS: ☐
RD: ☐
IRA: ☐
RA(C): ☐
RA(O): ☐
LTM: ☑
Site Closeout: ☐

Documentation
Description: Site Closeout Documentation for SEAD-12 (SEAD-72 is included as part of SEAD-12. It is a RCRA permitted Mixed Waste Storage Building located within the SEAD-12 boundry and Closure Costs are captured in Reference #2 document noted below).

Costs updated to FY09 database; all other parameters unchanged.
Support Team: Stephen M. Absolom - BEC, Seneca Army Depot
Thomas R. Enroth- US Army Corps of Engineers, Project Engineer
References: 1. Final Feasibility Study Report, SEAD-12, January 2008
2. RCRA Closure Plan, Building 803, Mixed Waste Storage Facility, December 2004

Estimator Information
Estimator Name: Andrew Weinberg
Estimator Title: Senior Geologist
Agency/Org./Office: Bechtel-S Corp.
Business Address: 203 E. Milton St.
Austin, TX 78704
Telephone Number: 512-344-9657
Email Address: aweinberg@bechtel-s.com
Estimate Prepared Date: 01/21/2009

Estimate Documentation Report

Estimator Signature: _____ **Date:** _____

Reviewer Information

Reviewer Name: Steve Absolom
Reviewer Title: Installation Manager
Agency/Org./Office: Seneca Army Depot Activity
Business Address: .
Telephone Number: (607) 869-1309
Email Address: stephen.m.absolom@us.army.mil
Date Reviewed: 02/09/2009

Reviewer Signature: _____ **Date:** _____

Estimated Costs:

Phase Names		Direct Cost	Marked-up Cost
LTM		$68,968	$130,740
	Total Cost:	$68,968	$130,740

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM
Description: Site Closeout Documentation in last year of LTM Phase

Start Date: October, 2009
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate

Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
Site Close-Out Documentation	Yes	100	0
Well Abandonment	Yes	100	0

Total Marked-up Cost: $130,740

Technologies:

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Meetings		Yes	n/a
Work Plans and Reports		Yes	n/a
Documents		Yes	n/a
Site Close-Out Complexity		Moderate	n/a
Meetings			
Required Parameters			
Kick Off/Scoping Meetings		Yes	n/a
Kick Off/Scoping Meetings: Number of Meetings	1	1	EA
Kick Off/Scoping Meetings: Travel		Yes	n/a
Kick Off/Scoping Meetings: Travelers		2	EA
Kick Off/Scoping Meetings: Days		5	Days
Kick Off/Scoping Meetings: Air Fare		0	$
Review Meetings		Yes	n/a
Review Meetings: Number of Meetings	1	1	EA
Review Meetings: Travel		No	n/a
Regulatory Review Meetings		Yes	n/a
Regulatory Review Meetings: Number of Meetings	1	1	EA
Regulatory Review Meetings: Travel		No	n/a
Work Plans & Reports			
Required Parameters			
Work Plans		Yes	n/a
Draft Work Plan		Yes	n/a
Final Work Plan		Yes	n/a
Reports		Yes	n/a
Draft Close-Out Report		Yes	n/a
Draft Final Close-Out Report		Yes	n/a
Final Close-Out Report		Yes	n/a
Progress Reports		Yes	n/a
Project Duration	10	12	months
Documents			
Required Parameters			

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
Documents			
Required Parameters			
Draft Decision Document		Yes	n/a
Draft Final Decision Document		Yes	n/a
Final Decision Document		Yes	n/a
Long Term Document Storage		Yes	n/a
Number of Boxes		5	EA
Duration of Storage		30	Yrs

Comments:

Technology Name: **Well Abandonment (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Safety Level		D	n/a
Abandon Wells			
Required Parameters			
Technology/Group Name		Well Group	n/a
Number of Wells		45	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a

Comments:

MEMORANDUM FOR RECORD

SUBJECT: Environmental Liabilities **Date:** 19 February 08

This memorandum serves as formal documentation of the information used to develop the Cost-To-Complete (CTC) estimate for the 2009 data call. The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of the site closeout.

Site: SEAD-11, Old Construction Debris Landfill

Source:
1. Draft Construction Completion Report for the Old Construction Debris Landfill (SEAD-11), March 2007
2. Professional judgment based on site knowledge

Site Assumptions: After the IRA, the source of contamination was removed. Following regulatory acceptance of the Final Completion Report, it is expected that the site should then qualify for a No Further Action Record of Decision. Because the groundwater contaminants are below the GA groundwater standard, no groundwater monitoring is expected to be required.

RACER Assumptions:
Site Closeout Documentation (LTM):
1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years

Well abandonment (LTM):
1. Number of wells: 7
2. Depth of wells: 15 ft
3. Diameter of wells: 2"
4. Unconsolidated
5. Overdrill/removal

Cost Summary	**SEAD-11**
Site Closeout & Well Abandonment (RACER)	$55,071
Total Site Cost	**$55,071**

Cost Increase > 10% from 2007 Report? Yes

Reason: Updated RACER estimate.

Prepared by: Janet R. Fallo _____ 2/21/08
Signature Date

Reviewed by: Stephen M. Absolom _____ 2/21/08
Signature Date

WORK AUTHORIZATION DIRECTIVE (WAD)
BASE REALIGNMENT AND CLOSURE (BRAC) ENVIRONMENTAL RESTORATION
AND FUNDS RELEASE DOCUMENT

CEMP-NAD 22 December 2008

DIRECTIVE NO. BR-SEN-09-09

ISSUED THRU: CENAD-PD-IIS-S (LOPEZ)
TO: CENAN-PP-E (BATTAGLIA)

ISSUED FOR: BRAC ER at Seneca AD, NY.

1. Reference DA FAD, 17 December 2008, advice number # 09-0002-01537.

2. You are authorized Base Closure Account (BCA) environmental restoration funds to execute the following project(s).

BRAC ROUND: 97	increase X /decrease__ reprog_	
APPRN: 97 X/2014 0510.40O1 2009 BCA	**DIV/DIST**: NAN	**ASN:** 8011
PROJECT	AMSCO	+/- ALLOCATION
Old Construction Debris Landfill	61366R38	+ $55,000.00
POC at CENAN-PP-E is Randy Battaglia, 607-869-1523. POC at CEMP-NAD is Dave Koran, 202-761-0076.		

3. These funds are for the above specified projects only. The funds may not be transferred to other projects without approval and authorization of this office.

4. These funds must be obligated within 30 days of receipt. If these funds cannot be obligated in 30 days this office is to be notified immediately.

5. Accounting and Reporting Instructions:
   a. Report all financial data on a monthly basis via the Integrated Command Accounting and Reporting (ICAR) System.
   b. Report excess funds to CEMP-NAD as soon as they are identified.
   c. Provide a copy of this WAD to your Resource Management Office.

CF: LOPEZ (NAD)

Estimate Documentation Report

System:

RACER Version: 10.2.0
Database Location: C:\Documents and Settings\Andy W\Application Data\Earth Tech\RACER 10.2\Racer.mdb

Folder:

Folder Name: Seneca

Project:

Project ID: SEAD-11
Project Name: SEAD-11
Project Category: Training Area

Location
State / Country: NEW YORK
City: SENECA ARMY DEPOT

Location Modifier	Default	User
	1.114	1.114

Options
Database: System Costs
Cost Database Date: 2009
Report Option: Fiscal

Description

Old Construction Debris Landfill- Site Closeout

A Performance Based Contract is being procured to take the site through response complete. The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of the site closeout.

Site: SEAD-11, Old Construction Debris Landfill

Source:
1. Final Action Memorandum for Removal Action at SEAD-11, April 2003
2. Professional judgment based on site knowledge

Site Assumptions: After the IRA, the source of the contamination will be removed. Following regulatory acceptance of the Final Completion Report,

it is expected that the site should then qualify for a No Further Action Record of Decision. Because the groundwater contaminants are below the GA groundwater standard, no groundwater monitoring is expected to be required.

RACER Assumptions:
Site Closeout Documentation (LTM):

1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years
5. Well abandonment includes sub-contractor costs for fieldwork

Estimate Documentation Report

Site Documentation:

Site ID: SEAD-11
Site Name: Old Construction DebrisLandfill
Site Type: None

Media/Waste Type
Primary: Soil
Secondary: N/A

Contaminant
Primary: Metals
Secondary: None

Phase Names
SI: ☐
RI/FS: ☐
RD: ☐
IRA: ☐
RA(C): ☐
RA(O): ☐
LTM: ☑
Site Closeout: ☐

Documentation
Description: SEAD-11 Old Construction Debris Landfill. FY2008 estimate updated to FY09 cost database.
Support Team: Stephen M. Absolom - SEDA BEC
Janet R. Fallo - US Army Corps of Engineers, Project Engineer
References: 1. Final Action Memorandum for Removal Action at SEAD-11, April 2003
2. Professional judgment based on site knowledge

Estimator Information
Estimator Name: Andrew Weinberg
Estimator Title: Senior Geologist
Agency/Org./Office: Bechtel-S Corp.
Business Address: 203 E. Milton St.
Austin, TX 78704
Telephone Number: 512-344-9657
Email Address: aweinberg@bechtel-s.com
Estimate Prepared Date: 01/21/2009

Estimator Signature: _____ **Date:** _____

Reviewer Information
Reviewer Name: Steve Absolom

Estimate Documentation Report

Reviewer Title: Installation Manager
Agency/Org./Office: Seneca Army Depot Activity
Business Address: .
Telephone Number: (607) 869-1309
Email Address: stephen.m.absolom@us.army.mil
Date Reviewed: 02/09/2009

Reviewer Signature: _____ **Date:** _____

Estimated Costs:

Phase Names		Direct Cost	Marked-up Cost
LTM		$29,910	$69,073
	Total Cost:	$29,910	$69,073

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM
Description: Site Closeout Documentation in last year of LTM Phase

Start Date: October, 2011
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate
Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
Site Close-Out Documentation	Yes	100	0
Well Abandonment	Yes	100	0

Total Marked-up Cost: $69,073

Technologies:

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Meetings		Yes	n/a
Work Plans and Reports		Yes	n/a
Documents		Yes	n/a
Site Close-Out Complexity		Moderate	n/a
Meetings			
Required Parameters			
Kick Off/Scoping Meetings		Yes	n/a
Kick Off/Scoping Meetings: Number of Meetings	1	1	EA
Kick Off/Scoping Meetings: Travel		Yes	n/a
Kick Off/Scoping Meetings: Travelers		2	EA
Kick Off/Scoping Meetings: Days		5	Days
Kick Off/Scoping Meetings: Air Fare		0	$
Review Meetings		Yes	n/a
Review Meetings: Number of Meetings	1	1	EA
Review Meetings: Travel		No	n/a
Regulatory Review Meetings		Yes	n/a
Regulatory Review Meetings: Number of Meetings	1	1	EA
Regulatory Review Meetings: Travel		No	n/a
Work Plans & Reports			
Required Parameters			
Work Plans		Yes	n/a
Draft Work Plan		Yes	n/a
Final Work Plan		Yes	n/a
Reports		Yes	n/a
Draft Close-Out Report		Yes	n/a
Draft Final Close-Out Report		Yes	n/a
Final Close-Out Report		Yes	n/a
Progress Reports		Yes	n/a
Project Duration	10	10	months
Documents			
Required Parameters			

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
Documents			
Required Parameters			
Draft Decision Document		Yes	n/a
Draft Final Decision Document		Yes	n/a
Final Decision Document		Yes	n/a
Long Term Document Storage		Yes	n/a
Number of Boxes		2	EA
Duration of Storage		30	Yrs

Comments:

Technology Name: **Well Abandonment (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Safety Level		D	n/a
Abandon Wells			
Required Parameters			
Technology/Group Name		Well Group	n/a
Number of Wells		7	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a

Comments:

DRAFT CONSTRUCTION COMPLETION REPORT

FOR THE OLD CONSTRUCTION DEBRIS LANDFILL (SEAD-11)

SENECA ARMY DEPOT ACTIVITY, ROMULUS, NY

March 2007

Prepared for:

AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE,

BROOKS CITY-BASE, TEXAS

and

SENECA ARMY DEPOT ACTIVITY

ROMULUS, NY

Contract Number FA8903-04-D-8675
Task Order 0031, CDRL A001C

EPA Site ID# NY0213820830
NY Site ID# 8-50-006

Prepared by:

PARSONS
150 Federal Street
Boston, MA 02110

EXECUTIVE SUMMARY

This Construction Completion Report for the Old Construction Debris Landfill (SEAD-11), located at the Seneca Army Depot Activity (SEDA or the Depot) in Romulus, New York is intended to provide record documentation of interim removal action (IRA) construction activities for SEAD-11. It provides documentation that all landfill material and soil exceeding cleanup goals were removed and no further action at the site is required. These activities were conducted in accordance with the "Interim Removal Action Work Plan for SEAD-11, *Final*" (Parsons, 2006).

Parsons and the selected earthwork contractor, St George Enterprises, Inc., mobilized to the site on October 27, 2006. Excavation of the landfill began on November 1, 2006 at the southern edge of the landfill, moving north. Using the depth contours sketch provided in the Work Plan as a guide, the dozer excavated to a depth at which all landfill material was visibly removed and native material was visible. As the landfill was excavated, larger material was size reduced prior to stockpiling and disposal. A total of 20 tons of metal was placed in a roll off box for disposal as scrap. The excavated material was stockpiled on the northwest corner of the landfill in an area adjacent to the newly constructed truck load-out road. The northeast corner, where materials were stockpiled, was the final section to be excavated. Four intact drums were recovered containing roofing material and a fifth drum contained a petroleum based liquid.. Waste characterization samples were collected from the drums. The five drums were disposed off-site by a disposal company. A total of 32,900 cubic yards (cy) of material were excavated from the landfill and a total of 42,188 tons were hauled off-site and disposed at Ontario County Landfill.

Confirmatory samples were collected at a frequency of one sample from the base of excavation every 2500 square feet (sf) and one sample along the perimeter every 50 linear feet (lf). The samples were analyzed for volatile organic compounds (VOCs), carcinogenic polycyclic aromatic hydrocarbons (cPAHs), and metals. Additional soil was excavated around the area of eight samples that failed to meet the cleanup goals, and additional confirmatory samples were collected to confirm that the newly excavated area met the cleanup goals. The cleanup goals proposed in the Work Plan for VOCs, cPAHs, and metals were NYSDEC TAGMs, 10 parts per million (ppm) benzo(a)pyrene toxicity equivalence (BTE), and USEPA Region IX Preliminary Remediation Goals (PRGs) for residential soil, respectively. In addition to QA/QC samples, a total of 80 final grid samples and 38 final perimeter samples were collected, and all of these samples met the cleanup goals. The sampling frequencies met the minimum requirements.

Once the excavation and confirmatory sampling was completed, the site was graded and seeded in order to restore vegetation. Backfilling the site was not necessary since the excavation of the landfill returned the site to its natural grade. The crew demobilized from the site on January 5, 2007.

Groundwater monitoring of the seven existing wells (MW11-1 through MW11-7) was completed between February 20 and February 22, 2007 to confirm that the groundwater has not been impacted since prior sampling events, and the groundwater is either meeting the GA standard or consistent with

background concentrations. Three VOCs (1,1,2-trichloro-1,2,2-trifluoroethane, tetrachloroethene, and trichloroethene) were detected below their respective groundwater action levels. Three metals (aluminum, iron, and manganese) were detected at concentrations above their respective groundwater action levels; however the maximum detection of each of the metals was significantly below their respective SEDA site-wide background concentrations.

All landfill material and soil exceeding proposed cleanup goals were removed from the site. The threat posed by the landfill material has been removed from the site. The remaining soil has been sampled and results demonstrate that it meets cleanup goals and is consistent with SEDA site-specific background concentrations. Groundwater sampling conducted after the IRM was consistent with SEDA background concentrations. Based on the data, the groundwater has not been negatively impacted by the presence of the landfill materials and no further monitoring for groundwater is required. No further action is required for this site for either soil or groundwater. The Army will proceed with preparing and submitting a No Further Action (NFA) Proposed Plan and Record of Decision (ROD).

NFA Determinat:

Estimate Documentation Report

System:

RACER Version: 10.0.2
Database Location: C:\Documents and Settings\e3ppmjrf\Application Data\Earth Tech\RACER 10.0\Racer.mdb

Folder:

Folder Name: Seneca 2008

Project:

Project ID: SEAD-11
Project Name: SEAD-11
Project Category: Training Area

Location
State / Country: NEW YORK
City: SENECA ARMY DEPOT

Location Modifier	Default	User
	1.055	1.055

Options
Database: System Costs
Cost Database Date: 2007
Report Option: Fiscal

Description

Old Construction Debris Landfill- Site Closeout

A Performance Based Contract is being procured to take the site through response complete. The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of the site closeout.

Site: SEAD-11, Old Construction Debris Landfill

Source:
1. Final Action Memorandum for Removal Action at SEAD-11, April 2003
2. Professional judgment based on site knowledge

Site Assumptions: After the IRA, the source of the contamination will be removed. Following regulatory acceptance of the Final Completion Report,

it is expected that the site should then qualify for a No Further Action Record of Decision. Because the groundwater contaminants are below the GA groundwater standard, no groundwater monitoring is expected to be required.

RACER Assumptions:
Site Closeout Documentation (LTM):

1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years
5. Well abandonment includes sub-contractor costs for fieldwork

Cost Increase > 10% from 2005 Report? No

Estimate Documentation Report

Site Documentation:

Site ID: SEAD-11
Site Name: Old Construction DebrisLandfill
Site Type: None

Media/Waste Type
Primary: Soil
Secondary: N/A

Contaminant
Primary: Metals
Secondary: None

Phase Names
SI: ☐
RI/FS: ☐
RD: ☐
IRA: ☐
RA(C): ☐
RA(O): ☐
LTM: ☑
Site Closeout: ☐

Documentation
Description: SEAD-11 Old Construction Debris Landfill.
Support Team: Stephen M. Absolom - SEDA BEC
Janet R. Fallo - US Army Corps of Engineers, Project Engineer
References: 1. Final Action Memorandum for Removal Action at SEAD-11, April 2003
2. Professional judgment based on site knowledge

Estimator Information
Estimator Name: Janet Fallo
Estimator Title: Project Manager
Agency/Org./Office: U.S. Army Corps of Engineers
Business Address: 5786 State Rt 96
Bldg 125
PO Box 9
Romulus, NY 14541-0009
Telephone Number: 607-869-1248
Email Address: janet.r.fallo@usace.army.mil
Estimate Prepared Date: 02/12/2008

Estimator Signature: _____ **Date:** _____

Reviewer Information

Estimate Documentation Report

Reviewer Name:	Steve Absolom
Reviewer Title:	Installation Manager
Agency/Org./Office:	Seneca Army Depot Activity
Business Address:	.
Telephone Number:	(607) 869-1309
Email Address:	stephen.m.absolom@us.army.mil
Date Reviewed:	02/09/2007

Reviewer Signature: _____ **Date:** _____

Estimated Costs:

Phase Names		Direct Cost	Marked-up Cost
LTM		$24,535	$55,071
	Total Cost:	$24,535	$55,071

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM
Description: Site Closeout Documentation

Start Date: October, 2007
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate
Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
Site Close-Out Documentation	Yes	100	0
Well Abandonment	Yes	100	0

Total Marked-up Cost: $55,071

Technologies:

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Meetings		Yes	n/a
Work Plans and Reports		Yes	n/a
Documents		Yes	n/a
Site Close-Out Complexity		Moderate	n/a
Meetings			
Required Parameters			
Kick Off/Scoping Meetings		Yes	n/a
Kick Off/Scoping Meetings: Number of Meetings	1	1	EA
Kick Off/Scoping Meetings: Travel		Yes	n/a
Kick Off/Scoping Meetings: Travelers		2	EA
Kick Off/Scoping Meetings: Days		5	Days
Kick Off/Scoping Meetings: Air Fare		0	$
Review Meetings		Yes	n/a
Review Meetings: Number of Meetings	1	1	EA
Review Meetings: Travel		No	n/a
Regulatory Review Meetings		Yes	n/a
Regulatory Review Meetings: Number of Meetings	1	1	EA
Regulatory Review Meetings: Travel		No	n/a
Work Plans & Reports			
Required Parameters			
Work Plans		Yes	n/a
Draft Work Plan		Yes	n/a
Final Work Plan		Yes	n/a
Reports		Yes	n/a
Draft Close-Out Report		Yes	n/a
Draft Final Close-Out Report		Yes	n/a
Final Close-Out Report		Yes	n/a
Progress Reports		Yes	n/a
Project Duration	10	10	months
Documents			
Required Parameters			

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
Documents			
Required Parameters			
Draft Decision Document		Yes	n/a
Draft Final Decision Document		Yes	n/a
Final Decision Document		Yes	n/a
Long Term Document Storage		Yes	n/a
Number of Boxes		2	EA
Duration of Storage		30	Yrs

Comments:

Technology Name: **Well Abandonment (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Safety Level		D	n/a
Abandon Wells			
Required Parameters			
Technology/Group Name		Well Group	n/a
Number of Wells		7	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a

Comments:

SEAD 11

Phase	2009	2010	2011	2012	2013	2014	2015	Outyears
CO	55							

MEMORANDUM FOR RECORD

09

SUBJECT: Environmental Liabilities **Date:** 5 March 08

This memorandum serves as formal documentation of the information used to develop the Cost-To-Complete (CTC) estimate for the 2008 data call. A Draft RI indicates that the site will not require remedial action. The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost for site close-out. This site is included in a Performance Based Contract. The first 5 years of monitoring and the five year review is included in the contract.

Site: SEAD-121 Environmental Baseline Sites- Industrial Area (SEAD-121c - DRMO Yard)

Source:
1. Final Proposed Plan Two Areas of Concern Requiring Land Use Controls SWMUs SEAD-121C and 121I January 2008
2. Professional judgment based on site knowledge
3. PBC Contract # FA8903-04-D-8675, June 2006

RACER Assumptions:

Site Closeout Documentation (LTM):
1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years

Well abandonment (LTM):
1. Number of wells: 6
2. Depth of wells: 15 ft
3. Diameter of wells: 2"
4. Unconsolidated
5. Overdrill/removal

recieved close out funds in FY09 No further funding required

Cost Summary **SEAD-121c**

LTM

Site Closeout (RACER)	$28,903
Well Abandonment (RACER)	13,858
Land Use Control (annual monitoring) Based on actual contract cost of the first 5 yrs $2,777 x 1.0496 (escalation) x 25 years	72,868
5-year review Based on actual contract cost of the first review $3,333 x 1.0496 (escalation) x 5 reviews	17,492
Total Site Cost	**$133,121**

Cost Difference > 10% from 2006 Report? No

Prepared by: Janet R. Fallo _____ 3/5/08
Signature Date

Reviewed by: Stephen M. Absolom _____ 3/5/08
Signature Date

Estimate Documentation Report

System:

RACER Version: 10.2.0
Database Location: C:\Documents and Settings\Andy W\Application Data\Earth Tech\RACER 10.2\Racer.mdb

Folder:

Folder Name: Seneca

Project:

Project ID: SEAD-121
Project Name: SEAD-121
Project Category: Planned Industrial Area

Location
State / Country: NEW YORK
City: SENECA ARMY DEPOT

Location Modifier	Default	User
	1.114	1.114

Options
Database: System Costs
Cost Database Date: 2009
Report Option: Fiscal

Description

DRMO Yard - SEAD-121C

This site is included in a Performance Based Contract. The first 5 years of monitoring and the five year review is included in the contract.

Site: SEAD-121 Environmental Baseline Sites- Industrial Area (SEAD-121c -DRMO Yard)

Source:
1. Final Proposed Plan Two Areas of Concern Requiring Land Use Controls
SWMUs SEAD-121C and 121I January 2008
2. Professional judgment based on site knowledge
3. PBC Contract # FA8903-04-D-8675, June 2006

Estimate Documentation Report

RACER Assumptions:
Site Closeout Documentation (LTM):
1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years

Well abandonment (LTM):
1. Number of wells: 6
2. Depth of wells: 15 ft
3. Diameter of wells: 2"
4. Unconsolidated
5. Overdrill/removal

Estimate Documentation Report

Site Documentation:

Site ID: SEAD-121C
Site Name: DRMO Yard
Site Type: None

Media/Waste Type
Primary: Groundwater
Secondary: N/A

Contaminant
Primary: Metals
Secondary: None

Phase Names
SI: ☐
RI/FS: ☐
RD: ☐
IRA: ☐
RA(C): ☐
RA(O): ☐
LTM: ☑
Site Closeout: ☐

Documentation
Description: SEAD-121c Industrial Area (DRMO yard).

Changes from FY2008 estimate:
- updated costs to FY09 basis

Support Team: Stephen M. Absolom - SEDA BEC
Andrew Werinberg - Bechtel-S Corp.

References:
1. Final Proposed Plan Two Areas of Concern Requiring Land Use Controls SWMUs SEAD-121C and 121I January 2008
2. Professional judgment based on site knowledge
3. PBC Contract # FA8903-04-D-8675, June 2006

Estimator Information
Estimator Name: Andrew Weinberg
Estimator Title: Senior Geologist
Agency/Org./Office: Bechtel-S Corp.
Business Address: 203 E. Milton St.
Austin, TX 78704
Telephone Number: 512-344-9657
Email Address: aweinberg@bechtel-s.com
Estimate Prepared Date: 01/22/2009

Estimator Signature: _____ **Date:** _____

Estimate Documentation Report

Reviewer Information

Reviewer Name: Steve Absolom
Reviewer Title: Installation Manager
Agency/Org./Office: Seneca Army Depot Activity
Business Address: .
Telephone Number: (607) 869-1309
Email Address: stephen.m.absolom@us.army.mil
Date Reviewed: 02/09/2009

Reviewer Signature: _____ **Date:** _____

Estimated Costs:

Phase Names		Direct Cost	Marked-up Cost
LTM #1		$23,659	$52,960
	Total Cost:	$23,659	$52,960

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM #1
Description: Site Close Out for SEAD-121c in last year of LTM phase.

Start Date: September, 2038
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate
Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
Site Close-Out Documentation	Yes	100	0
Well Abandonment	Yes	100	0

Total Marked-up Cost: $52,960

Technologies:

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Meetings		Yes	n/a
Work Plans and Reports		Yes	n/a
Documents		Yes	n/a
Site Close-Out Complexity		Low	n/a
Meetings			
Required Parameters			
Kick Off/Scoping Meetings		Yes	n/a
Kick Off/Scoping Meetings: Number of Meetings	1	1	EA
Kick Off/Scoping Meetings: Travel		Yes	n/a
Kick Off/Scoping Meetings: Travelers		2	EA
Kick Off/Scoping Meetings: Days		5	Days
Kick Off/Scoping Meetings: Air Fare		0	$
Review Meetings		Yes	n/a
Review Meetings: Number of Meetings	1	1	EA
Review Meetings: Travel		No	n/a
Regulatory Review Meetings		Yes	n/a
Regulatory Review Meetings: Number of Meetings	1	1	EA
Regulatory Review Meetings: Travel		No	n/a
Work Plans & Reports			
Required Parameters			
Work Plans		Yes	n/a
Draft Work Plan		Yes	n/a
Final Work Plan		Yes	n/a
Reports		Yes	n/a
Draft Close-Out Report		Yes	n/a
Draft Final Close-Out Report		Yes	n/a
Final Close-Out Report		Yes	n/a
Progress Reports		Yes	n/a
Project Duration	8	8	months
Documents			
Required Parameters			

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
Documents			
Required Parameters			
Draft Decision Document		Yes	n/a
Draft Final Decision Document		Yes	n/a
Final Decision Document		Yes	n/a
Long Term Document Storage		Yes	n/a
Number of Boxes		2	EA
Duration of Storage		30	Yrs

Comments:

Technology Name: **Well Abandonment (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Safety Level		D	n/a
Abandon Wells			
Required Parameters			
Technology/Group Name		Well Group	n/a
Number of Wells		6	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a

Comments:

WORK AUTHORIZATION DIRECTIVE (WAD)
BASE REALIGNMENT AND CLOSURE (BRAC) ENVIRONMENTAL RESTORATION
AND FUNDS RELEASE DOCUMENT

CEMP-NAD 22 December 2008

DIRECTIVE NO. BR-SEN-09-02

ISSUED THRU: CENAD-PD-IIS-S (LOPEZ)
TO: CENAN-PP-E (BATTAGLIA)

ISSUED FOR: BRAC ER at Seneca AD, NY.

1. Reference DA FAD, 17 December 2008, advice number # 09-0002-01541.

2. You are authorized Base Closure Account (BCA) environmental restoration funds to execute the following project(s).

BRAC ROUND: 97	increase X /decrease__ reprog_	
APPRN: 97 X/2014 0510.40O1 2009 BCA	**DIV/DIST**: NAN	**ASN:** 8011
PROJECT	AMSCO	+/- ALLOCATION
EBS Sites Industrial Area	61367R01	+ $3,000.00
POC at CENAN-PP-E is Randy Battaglia, 607-869-1523. POC at CEMP-NAD is Dave Koran, 202-761-0076.		

3. These funds are for the above specified projects only. The funds may not be transferred to other projects without approval and authorization of this office.

4. These funds must be obligated within 30 days of receipt. If these funds cannot be obligated in 30 days this office is to be notified immediately.

5. Accounting and Reporting Instructions:
   a. Report all financial data on a monthly basis via the Integrated Command Accounting and Reporting (ICAR) System.
   b. Report excess funds to CEMP-NAD as soon as they are identified.
   c. Provide a copy of this WAD to your Resource Management Office.

CF: LOPEZ (NAD)

Absolom, Stephen M Mr CIV USA

From: Battaglia, Randy W NAN02 [Randy.W.Battaglia@usace.army.mil]
Sent: Tuesday, December 23, 2008 7:28 AM
To: Absolom, Stephen M Mr CIV USA
Subject: FW: WADs BR-SEN-09-01 through BR-SEN-09-09 for BRAC at Seneca AD

Attachments: SENECA-09-01.doc; SENECA-09-02.doc; SENECA-09-03.doc; SENECA-09-04.doc; SENECA-09-05.doc; SENECA-09-06.doc; SENECA-09-07.doc; SENECA-09-08.doc; SENECA-09-09.doc

SENECA-09-01.doc (29 KB) SENECA-09-02.doc (29 KB) SENECA-09-03.doc (29 KB) SENECA-09-04.doc (29 KB) SENECA-09-05.doc (29 KB) SENECA-09-06.doc (29 KB) SENECA-09-07.doc (29 KB)

SENECA-09-08.doc (29 KB) SENECA-09-09.doc (29 KB)

Steve, FYI

Randy
RW Battaglia
Project Manager
607-869-1523

-----Original Message-----
From: Koran, David HQ02
Sent: Monday, December 22, 2008 1:22 PM
To: Newman, Sylvia HQ02; Bell, Raylonda F HQ02
Cc: Battaglia, Randy W NAN02; Gajdek, Rich E NAN02; Lopez, Luis R NAD; Koran, David HQ02; Iarosis, Michael F HQ02
Subject: WADs BR-SEN-09-01 through BR-SEN-09-09 for BRAC at Seneca AD

All,

Enclosed are WADs BR-SEN-09-01 through -09 for Seneca Army Depot, NY

09-01	Multi-Sites ROD with Risk	61366R42	$73,000
09-02	EBS Sites Industrial Area	61367R01	$3,000
09-03	BEC Supoort	62366P27	$75,000
09-04	RAB Support	62366P46	$5,000
09-05	FTAS Sites 25 and 26	61366R29	$46,000
09-06	"SITES"	61366R32	$46,000
09-07	ASH Landfill Remediation	61366R33	$192,000
09-08	LTM IRFNA Site	61366R39	$113,000
09-09	Old Construction Debris Landfill	61366R38	$55,000

SEAD 121

Thanks,

Dave Koran

Proposed Plan

Two Areas of Concern (AOCs) Requiring Land Use Controls (LUCs), SWMUs SEAD-121C, the Defense Reutilization and Marketing Office (DRMO) Yard, and SEAD-121I, the Rumored Cosmoline Oil Disposal Area at the SENECA ARMY DEPOT ACTIVITY (SEDA) Romulus, New York

January 2008

PURPOSE OF THE PROPOSED PLAN

This Proposed Plan describes the remedial alternative selected for two areas of concern (AOCs), SEAD-121C (the former Defense Reutilization and Marketing Office [DRMO] Yard) and SEAD-121I (the Rumored Cosmoline Oil Disposal Area) at the Seneca Army Depot Activity (SEDA or Depot) Superfund Site, located in Seneca County, New York. This Proposed Plan was developed by the U.S. Army (Army) in consultation with the U.S. Environmental Protection Agency (EPA) and the New York State Department of Environmental Conservation (NYSDEC). The Army is issuing this Proposed Plan as part of their public participation responsibilities under Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended, and Sections 300.430(f) and 300.435(c) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The nature and extent of the contamination at the two AOCs is described in the April 2006 Remedial Investigation (RI) Report and the November 2007 Construction Completion Report (CCR). The Army, EPA, and NYSDEC encourage the public to review these documents to gain a more comprehensive understanding of the AOCs, the site and the Superfund activities that have been completed.

This Proposed Plan is being provided as a supplement to the RI and CCR Reports to inform the public of the Army's preferred remedies for the AOCs and to solicit public comments pertinent to the selected remedies. The preferred remedy for both AOCs includes provisions to formally impose and implement Land Use Controls (LUCs) that prohibit the use of the designated land for residential activities, and to prohibit access to and use of groundwater.

The identified LUCs were previously established for three other AOCs (i.e., SEADs 27, 64A, and 66) that are located in proximity to SEADs 121C and 121I. At the time of the final determination for the other three SEADs, all parties agreed that the identified LUCs should be imposed on all land within the Planned Industrial / Office-Development and Warehousing (PID) Area at the former Depot due to the anticipated future use of the land and the similarity of its known past uses by the Army.

The remedies described in this Proposed Plan are the preferred remedy for each of the AOCs. Changes to the preferred remedy, or a change from the preferred remedy to another remedy, may be made if public comments or additional data indicate that such a change will result in a more appropriate remedial action. The final decision regarding the selected remedies will be made after the Army and the EPA have taken all public comments into consideration. The Army is soliciting comments because the Army and EPA may select a remedy other that the preferred remedy for either or both of the AOCs.

to be implemented and monitored during the excavation, loading, and hauling activities. Lesser levels of controls would also need to be implemented, maintained and monitored during the work associated with Alternative 3.

Implementability

Alternative 1, the no-action alternative, would be the easiest alternative to implement, since there are no actions to undertake.

Alternative 4 will be slightly more difficult to implement than Alternative 1 because it requires the implementation, maintenance, oversight and annual reporting of the continuing effectiveness of land use controls and the preparation, submittal and approval of a land use control implementation plan.

The excavation; stabilization, as necessary; characterization; transport; and disposal of soil and debris excavated under either Alternatives 2 or 3 at both AOCs are readily available and mature technologies and can be accomplished. The increased volume of soil/debris requiring excavation under Alternative 2 at both AOCs would increase the difficulty of completing this alternative above those anticipated for Alternative 3.

Cost

The present-worth cost associated with Alternatives 1, 2, 3, and 4 is calculated using a discount rate of seven percent (7%) and a 30-year time interval. The estimated capital, operation, maintenance, and monitoring, and the present-worth costs are presented in **Table 12** below.

TABLE 12

Remedial Alternative Comparative Cost Summary

Alternative	Capital Cost	Annual OM&M Costs	Total Present-Worth Costs
SEAD-121C, the DRMO Yard			
1	$0	$6,000	$74,460
2	$17,600,000	$3,000	$17,637,230
3	$1,490,000	$6,000	$1,564,460
4	$350,000	$6,000	$424,460
SEAD-121I, the Rumored Cosmoline Oil Disposal Area			
1	$0	$6,000	$74,460
2	$4,542,500	$3,000	4,579,730
3	$2,163,000	$6,000	$2,237,460
4	$375,000	$6,000	$449,460

Alternative 1 is the least expensive remedial action alternative at an estimated cost of $74,460. Alternative 2 is the most expensive remedial action alternative with respective AOC costs of $17,637,230 for SEAD-121C and $4,579,730 for SEAD-121I.

State Acceptance

NYSDEC has provided a letter that indicates that it concurs with the preferred remedial soil and groundwater alternatives.

Community Acceptance

Community acceptance of the preferred alternative for SEAD-121C and SEAD-121I will be assessed in the ROD following review of the public comments received on the Proposed Plan.

SELECTED REMEDY

The selected remedy for any site should, at a minimum, eliminate or mitigate all significant threats to the public health or the environment presented by the hazardous substances or waste present at the site. Based on the data presented and summarized earlier within this Proposed Plan, the Army and EPA have selected Soil

Alternatives 4 and Groundwater Alternative 1 for SEAD-121C and SEAD-121I.

At SEAD-121C, the Army has excavated soil that contained concentrations of lead in excess of 1,500 mg/Kg to reduce potential human health risks that may be associated with the identified contamination. The successful completion of the SEAD-121C removal action is based on a determination that the 95th upper confidence limit (95th UCL) of the mean for soil in the immediate area of the excavation achieves a post-excavation level of 1,250 mg/Kg or less. Confirmatory sampling and analysis results substantiating the level of cleanup achieved are provided in **Table 2**. This remedy does not include the excavation of the anomalous levels of cPAH compounds found at SEAD-121C because they have been determined to reflect background contamination from the greater industrialized area of the former Depot, broken up pieces of asphalt, and an anomalous result that does not result in unacceptable risks for the planned future industrial occupant.

At SEAD-121I, the Army cleaned up the areas where the former strategic stockpiles were located and demonstrated that residual levels of manganese were below cleanup goals that were established for the action. The residual level of iron (reported as the 95th UCL of the excavation dataset only) in the vicinity of the excavations was 22,116 mg/Kg versus a cleanup objective of 100,000 mg/Kg; while the residual level of manganese was 3,550 mg/Kg as opposed to a cleanup goal of 10,000 mg/Kg. The AOC-wide residual levels for these two metals are even lower (see **Table 6**).

The Army will impose LUCs on land that is designated as SEAD-121C, the DRMO Yard, and SEAD-121I, the Rumored Cosmoline Oil Disposal Area. The Army's recommended LUCs will:

- Prohibit use of the land for residential activities including residential housing, elementary or secondary schools, child care facilities, playgrounds, etc.; and,
- Prohibit access to, and use of groundwater at the AOCs.

LUC.

Results of the site investigations and risk assessment performed using data developed from SEAD-121C and SEAD-121I indicate that hazardous substances have been identified to exist at, or in the vicinity of, the AOCs. Levels found are higher than New York reference values for Unrestricted Use, and it is likely that the identified concentrations would pose a threat to residential populations. Thus, the levels measured do not allow for unlimited exposure and unrestricted use of the land.

At SEAD-121C (DRMO Yard) levels of residual hazardous substances, including cPAH compounds, found in the soil do not pose a potential risk to the human receptors that are considered most likely to use the land (i.e., industrial worker, construction worker, adolescent trespasser) for the foreseeable future. Further, while hazardous substances were identified in the groundwater at concentrations above New York AWQSs, an alternative potable water distribution supply exists throughout the PID Area, which minimizes the potential risks represented by contact or ingestion with this media.

At SEAD-121I (Rumored Cosmoline Oil Disposal Area) levels of residual manganese found in the soil in proximity to the former strategic stockpiles have been reduced to levels that are consistent with Federal and State cleanup objectives for soil at industrial sites. Further, the quality of the groundwater at SEAD-121I, while not found during the investigations completed, is unknown and thus suspect. Groundwater found at other locations within the PID Area suggests that there is a regional poor quality of groundwater and the potential to have hazardous substances at concentrations in excess of New York AWQSs could be present. Therefore, the Army believes it prudent to limit or restrict potential contact with, or ingestion of, this media until such time as sufficient data is available to clarify if possible risk exists. The presence of a potable water supply in the PID Area again minimizes the potential impact of this decision.

Finally, since the area surrounding these sites has a land use control all ready existing on it, the sites should stay consistent with the surrounding land uses.

Contract

ORDER FOR SUPPLIES OR SERVICES

1. CONTRACT/~~PURCH ORDER~~/AGREEMENT NO.	2. DELIVERY ORDER/ CALL NO.	3. DATE OF ORDER/CALL (YYYYMMMDD)	4. REQUISITION/PURCH REQUEST NO.	5. PRIORITY
FA8903-04-D-8675	0031	20 JUN 2006	SEE SCHEDULE	DO-C9

6. ISSUED BY HSW/PKV-W — CODE FA8903
AIR FORCE MATERIEL COMMAND
311TH HUMAN SYSTEMS WING/PKV-W
3300 SIDNEY BROOKS
BROOKS CITY BASE TX 78235-5112
EDWIN CUSTODIO (210)536-4493
Edwin.Custodio@hqafcee.brooks.af.mil

7. ADMINISTERED BY *(If Other than 6)* — CODE S0512A
DCMA LOS ANGELES
P.O. BOX 9608
MISSION HILLS CA 91346-9608
DCMALOSANGELES@DCMA.MIL

SCD: C PAS: (NONE)

8. DELIVERY FOB
X DESTINATION
OTHER *(See Schedule if other)*

9. CONTRACTOR — CODE 1BVK6 — FACILITY
NAME AND ADDRESS
PARSONS INFRASTRUCTURE & TECHNOLOGY GROUP INC
100 W WALNUT ST
PASADENA CA 91124-0001
(626) 440-2000

10. DELIVER TO FOB POINT BY *(Date)*
(YYYYMMMDD) SEE SCHEDULE

11. X IF BUSINESS IS
SMALL
SMALL DISAD-VANTAGED
WOMEN-OWNED

12. DISCOUNT ITEMS
N

13. MAIL INVOICES TO ADDRESS IN BLOCK
SEE BLOCK 15 (PAYMENT OFFICE)

14. SHIP TO — CODE
SEE SCHEDULE

15. PAYMENT WILL BE MADE BY — CODE HQ0339
DFAS COLUMBUS CENTER
DFAS-CO/WEST ENTITLEMENT OPS
P.O. BOX 182381
COLUMBUS OH 43218-2381

EFT:T

MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.

16. TYPE OF ORDER
DELIVERY/CALL X
PURCHASE

This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.

Reference your ~~furnish~~ the following on items specified herein.

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR | SIGNATURE | TYPED NAME AND TITLE | DATE SIGNED(YYYYMMMDD)

☐ If this box is marked, supplier must sign Acceptance and return the following number of copies:

17. ACCOUNTING AND APPROPRIATION DATA/LOCAL USE
SEE SCHEDULE

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/SERVICES	20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT

*If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.

24. UNITED STATES OF AMERICA
//signed//
BY: EDWIN CUSTODIO — 20 JUN 2006 CONTRACTING/ORDERING OFFICER

25. TOTAL $10,820,000.00

29. DIFFERENCES

26. QUANTITY IN COLUMN 20 HAS BEEN
☐ INSPECTED ☐ RECEIVED ☐ ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

DATE SIGNATURE AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

27. SHIP NO. — PARTIAL / FINAL

28. D.O. VOUCHER NO.

30. INITIALS

32. PAID BY

33. AMOUNT VERIFIED CORRECT FOR

32 PAYMENT — COMPLETE / PARTIAL / FINAL

34 CHECK NUMBER

36 I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT.

DATE SIGNATURE AND TITLE OF CERTIFYING OFFICER

35. BILL OF LADING

37. RECEIVED AT	38. RECEIVED BY *(Print)*	39. DATE RECEIVED *(YYYYMMMDD)*	40. TOTAL CONTAINERS	41. S/R ACCOUNT NO.	42. S/R VOUCHER NO.

PARSONS

INVOICE

Parsons Infrastructure & Technology Group, Inc.
Remittance Address: PO Box 88954 • Chicago, IL 60695-1954 • www.parsons.com
Wire transfer: Account 323289711 • ABA 021000021

Billed to:
DFAS-Columbus Center
West Entitlement Operations
P.O. Box 182381
Columbus, OH 43218-2381

Invoice date: 2006/10/10
Shipment number: SER0004
Invoice number: 06100626
Client number: 72483
Job number: 745172

Project name: Seneca Army Depot Remedial Actions
Authorization: Contract FA8903-04-D-8675 order 0031

Invoice amount: $ 10,980

CLIN 0001
SUMMARY BY ACRN

ACRN	Contract amount	Previously billed	Current billing	Cumulative billed
AA	$ 39,614	$ 39,614	$ -	$ 39,614
AB	$ 600,000	$ 160,320	$ 10,980	$ 171,300
AC	$ 548,386	$ -	$ -	$ -
AD	$ 601,000	$ 107,304	$ -	$ 107,304
AE	$ 4,870,000	$ 1,017,093	$ -	$ 1,017,093
AF	$ 4,161,000	$ 397,813	$ -	$ 397,813
	$ 10,820,000	$ 1,722,144	$ 10,980	$ 1,733,124

LTM

SEE MILESTONE DETAIL BEGINNING ON NEXT PAGE.

Jesse Perez

Shipment number SER0004, invoice number 06100626, continued

Milestone	ACRN	Milestone payment	Previously billed	Current billing	Cumulative billed
SEAD 11 Mobilization (5%)	AE	$ 243,500	$ 243,500	$ -	$ 243,500
SEAD 11 Insurance/Bonds	AE	$ 542,479	$ 542,479	$ -	$ 542,479
SEAD 11 Submittal of WBS and Schedule	AE	$ 56,105	$ 56,105	$ -	$ 56,105
SEAD 11 Approval of QPP/Work Plan	AE	$ 75,009	$ 75,009	$ -	$ 75,009
SEAD 11 RA WP Submittal	AE	$ 100,000	$ 100,000	$ -	$ 100,000
SEAD 11 RA WP Approval	AE	$ 50,000	$ -	$ -	$ -
SEAD 11 Excavation 25% Complete	AE	$ 1,100,000	$ -	$ -	$ -
SEAD 11 Excavation 50% Complete	AE	$ 1,050,000	$ -	$ -	$ -
SEAD 11 Excavation 75% Complete	AE	$ 705,871	$ -	$ -	$ -
SEAD 11 Excavation 100% Complete	AE	$ 685,000	$ -	$ -	$ -
SEAD 11 RA Report Approval	AE	$ 40,000	$ -	$ -	$ -
SEAD 11 PRAP Approval	AE	$ 25,000	$ -	$ -	$ -
SEAD 11 ROD Approval	AE	$ 25,000	$ -	$ -	$ -
SEAD 11 LTM Plan Approval	AE	$ 10,000	$ -	$ -	$ -
Submit SEAD 11 Year 1 LTM Report	AE	$ 22,505	$ -	$ -	$ -
Submit SEAD 11 Year 2 LTM Report	AE	$ 22,505	$ -	$ -	$ -
Submit SEAD 11 Year 3 LTM Report	AE	$ 22,505	$ -	$ -	$ -
Submit SEAD 11 Year 4 LTM Report	AE	$ 22,505	$ -	$ -	$ -
Submit SEAD 11 Year 5 LTM Report	AE	$ 22,505	$ -	$ -	$ -
Approval of SEAD 11 5-Year Report	AE	$ 27,006	$ -	$ -	$ -
Response Complete SEAD 11	AE	$ 22,505	$ -	$ -	$ -
SEAD 121C Mobilization (5%)	AD	$ 30,050	$ 30,050	$ -	$ 30,050
SEAD 121C Insurance/Bonds	AD	$ 68,477	$ 68,477	$ -	$ 68,477
SEAD 121C Submittal of WBS and Schedule	AD	$ 3,222	$ 3,222	$ -	$ 3,222
SEAD 121C Approval of QPP/Work Plan	AD	$ 5,555	$ 5,555	$ -	$ 5,555
SEAD 121C RA WP Approval	AD	$ 30,000	$ -	$ -	$ -
SEAD 121C Excavation 50% Complete	AD	$ 174,100	$ -	$ -	$ -
SEAD 121C Excavation 100% Complete	AD	$ 139,601	$ -	$ -	$ -
SEAD 121C RA Report Approval	AD	$ 40,000	$ -	$ -	$ -
SEAD 121C PRAP Submittal	AD	$ 30,000	$ -	$ -	$ -
SEAD 121C ROD Approval	AD	$ 30,000	$ -	$ -	$ -
SEAD 121C LTM Plan Approval	AD	$ 30,000	$ -	$ -	$ -
Submit SEAD 121C Year 1 LTM Report	AD	$ 2,777	$ -	$ -	$ -
Submit SEAD 121C Year 2 LTM Report	AD	$ 2,777	$ -	$ -	$ -
Submit SEAD 121C Year 3 LTM Report	AD	$ 2,777	$ -	$ -	$ -
Submit SEAD 121C Year 4 LTM Report	AD	$ 2,777	$ -	$ -	$ -
Submit SEAD 121C Year 5 LTM Report	AD	$ 2,777	$ -	$ -	$ -
Approval of SEAD 121C 5-Year Report	AD	$ 3,333	$ -	$ -	$ -
Response Complete 121C	AD	$ 2,777	$ -	$ -	$ -
		$ 10,820,000	$ 1,722,144	$ 10,980	$ 1,733,124

LTM's - 5yr Review

MEMORANDUM FOR RECORD

SUBJECT: Environmental Liabilities **Date:** 5 March 09

This memorandum serves as formal documentation of the information used to develop the Cost-To-Complete (CTC) estimate for the 2009 data call. There is not regulatory agreement at this time for the monitoring plan. The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of monitoring, 5-year reviews, site close out, and LUCs.

Site: SEAD-13 Inhibited Red Fuming Nitric Acid Site (IRFNA)

Source:

1. Final ROD For Seventeen SWMUs Requiring Institutional Controls, SEADs-13,39,40,43/56/69,44A,44B,52,62,64B,64C,64D,67,122B,122E; July 2007
2. Professional judgment based on site knowledge
3. Work authorization directive dated 10 Jan 2008; first year funded, 19 yrs to program

RACER Assumptions:

Five-Year Review (RA-O):
1. 4 review cycles
2. Review cycle begins Sept 2007, first review in 2012
3. Low complexity
4. Tasks include Document Review, Interviews and Site Inspections
5. Report for Five Year Review to include all default parameters

Site Closeout Documentation (RA-O):
1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years

Well abandonment (RA-O):
1. Number of wells: 14
2. Depth of wells: 15 ft
3. Diameter of wells: 2"
4. Unconsolidated
5. Overdrill/removal

Land Use Controls (second RA-O phase)
1. Tasks include Implementation, Monitoring & Enforcement, and Modification/Termination
2. Implementation parameters used are Deed Notification and Restrictive Covenants (all with Low complexity)
3. Monitoring & Enforcement parameters used are Report & Certifications annually

Cost Summary SEAD-13

GW Monitoring for 19 yrs (ROD cost x FY07 escalation) 2,012,000 x 1.0240 = 2,060,288 2,060,288 – 95,000 (first yr funded)	1,965,288
5-Year Reviews (RACER) 4 events over 20 years	88,590
Site Closeout (RACER)	28,985
Well Abandonment (RACER)	25,362
Land Use Controls (RACER) for 19 years	192,848
Total Site Cost	**$2,301,073**

Cost Difference > 10% from 2007 Report? Yes

Reason: Updated RACER estimate.

Prepared by: Janet R. Fallo Janet Fallo 3/5/08
Signature Date

Reviewed by: Stephen M. Absolom Stephen M Absolom 3/5/08
Signature Date

FINAL DECISION DOCUMENT
MINI RISK ASSESSMENT
SEAD-13, INHIBITED RED FUMING NITRIC ACID (IRFNA) DISPOSAL AREA

Prepared For:

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK 14541
and
US ARMY CORPS OF ENGINEERS
HUNTSVILLE, ALABAMA 35816

Prepared By:

PARSONS
100 Summer St, 8th Fl.
Boston, Massachusetts 02110

Contract Number DACA87-95-D-0031
Delivery Order # 0023
736994-01002

July 2004

TABLE OF CONTENTS

5.0 RECOMMENDATIONS

This section presents the recommendations of the Army and supporting data for the Inhibited Red-Fuming Nitric Acid Disposal Site (SEAD-13). The Army recommends the following:

- Remedial action for soil, sediment, and surface water is not required;
- Groundwater use restriction to prevent the ingestion of groundwater is required until contaminant concentrations meet NYSDEC Class GA groundwater standards and EPA MCLs;
- An annual groundwater monitoring program will be developed and implemented; and
- Five-year reviews will be performed, in accordance with Section 121(c) of the CERCLA, until data shows that they are no longer required.

The groundwater use restriction would eliminate contact with groundwater as an exposure pathway for human health risk, thereby reducing risk to within acceptable levels for potential human receptors. With the exception of groundwater ingestion, there are no other unacceptable risks at SEAD-13. The land use restriction could involve a restriction on the deed, local building code modification, etc., to prohibit the use of the groundwater for drinking purposes. A restriction on the use of groundwater for drinking purposes together with a groundwater monitoring program is recommended due to the presence of elevated levels of nitrate/nitrite-nitrogen in the groundwater at SEAD-13-East. In accordance with Section 121(c) of the CERCLA, the monitoring program will be reviewed after five years.

The Army's decision to place a land use restriction on SEAD-13 and no further action for the other media is based on the results of the Expanded Site Investigation (ESI) in 1993/1994 and supplemental sampling, conducted from 2000 to 2002, summarized in **Section 2.0**, and the mini risk assessment conducted in **Sections 3.0** and **4.0** of this report. Conclusions of the field investigation and risk assessment supporting the Army's recommendation are as follows:

- Results of field investigations associated with the ESI and supplemental sampling identified four wells at SEAD-13-East with nitrate/nitrite-nitrogen concentrations above the NYS Ambient Water Quality Standard (AWQS) for groundwater classified as GA. The Army recommends annual groundwater monitoring, which would include five-year reviews (see **Section 5.1** below).
- The results of the surface water investigation indicated that nitrate/nitrite-nitrogen is below criteria established for nitrate in drinking water sources in New York State (10 mg/L) (see **Section 5.1** below).
- Total carcinogenic risk from all exposure routes is within the EPA target range for all receptors at SEAD-13 (see **Section 5.2** below).

- If groundwater use is prevented, total non-carcinogenic risks to receptors due to the SEAD-13 site are reduced to within acceptable limits. (see **Section 5.2** below).
- Assumptions used for the estimation of risks for SEAD-13 were conservative due to the use of maximum concentration of a constituent as the exposure point concentration (EPC) instead of the Upper 95th Confidence Limit (UCL) of the mean; therefore, the risk is likely overstated (see **Section 5.2** below).
- Ecological risk assessment results showed that there are no COCs in surface soil, surface water, or sediment that could pose a risk to receptors at SEAD-13 (see **Section 5.2** below).

5.1 EXPANDED SITE INVESTIGATION RESULTS SUPPORTING THE RECOMMENDED ACTION

Results from the Expanded Site Investigation and supplemental investigation that support the Army's recommendation outlined above are provided in this section.

Results of field investigations associated with the ESI and supplemental sampling identified four wells at SEAD-13-East with Nitrate/Nitrite concentrations above the NYS GA standard

During the field investigations at SEAD-13, samples from four groundwater wells (MW13-2, MW13-11, MW13-13, and MW13-14) had nitrate/nitrite-nitrogen concentrations above the NYS AWQS Class GA Standard of 10 mg/L. During the ESI, the concentration of nitrate/nitrite-nitrogen in the groundwater sample collected from MW13-2 on the east side of the Duck Pond (SEAD-13-East) was 460 mg/L. Nitrate/nitrite-nitrogen was not detected in the well upgradient of this location (MW13-1), and levels of nitrate/nitrite-nitrogen in wells downgradient of MW13-2 (MW13-3 and MW13-7 located between MW13-2 and the Duck Pond), could not be measured since they were dry. Monitoring wells on the west side of the Duck Pond had nitrate/nitrite concentrations meeting the NYS AWQS Class GA Standards (10 mg/L).

During the supplemental groundwater sampling in 2001 and 2002, three additional wells (MW13-11, MW13-13, and MW13-14) were installed at SEAD-13-East. In the most recent sampling round, April 2002, the groundwater samples collected from each well (except MW13-1) at SEAD-13-East had nitrate levels that exceeded the NYS criteria (445 mg/L, 119 mg/L, 731 mg/L, and 139 mg/L from MW13-2, MW13-11, MW13-13, and MW13-14, respectively). Therefore, the Army recommends annual groundwater monitoring and five-year reviews. The details of the groundwater monitoring program will be provided in a Remedial Design Plan.

The results of the surface water investigation indicated that nitrate/nitrite-nitrogen is below the NYS AWQS Standard of 10 mg/L for nitrate in drinking water.

Water level measurements and EM-31 results indicated that groundwater flows west on the east of the pond and east on the west side of the pond; i.e., groundwater discharges directly into the pond. Although groundwater flows towards the pond, nitrate/nitrite-nitrogen concentrations in samples collected from the Duck Pond were very low (0.02-0.11 mg/L). The only NYS AWQS standard that exists for surface waters is 10 mg/L for drinking water sources. As the Duck Pond is not a drinking water source, this standard does not apply. However, levels measured within the pond were well below this standard. This indicates that if any discharge into the pond occurs, it is not significantly impacting the nitrate/nitrite-nitrogen levels within the pond.

The potential for impacts to existing drinking water sources is remote.

The potential for the nitrate/nitrite-nitrogen levels observed in four wells (MW13-2, MW13-11, MW13-13, and MW13-14) at SEAD-13-East to affect existing drinking water sources was evaluated, and the following is concluded. Drinking water wells on the east of the site will not be affected since they are 4,000 feet upgradient of MW 13-2. Drinking water wells located downgradient of the site will most likely not be affected as well, since the closest well is 7,000 feet away from the site and the Duck Pond lies between SEAD-13 and this downgradient drinking water well. As stated above, the pond appears to be unaffected by the presence of nitrate/nitrite-nitrogen levels detected in the groundwater wells in SEAD-13-East. Therefore, it is unlikely a well downgradient of the pond would be affected.

5.2 MINI RISK ASSESSMENT RESULTS SUPPORTING THE RECOMMENDED ACTION

Results from the mini risk assessment that support the Army's recommendation outlined above are provided in this section.

Total carcinogenic risk from all exposure routes is within the EPA target range for all receptors at SEAD-13.

The mini risk assessment conducted at SEAD-13 concluded that the total carcinogenic risk from all exposure routes is within the EPA target range of 10^{-4} and 10^{-6} for all receptors of both future land use scenarios considered, and, therefore, the site does not pose a cancer risk to any receptor. These future land uses were conservation/recreation and residential.

If groundwater use is prevented, total non-carcinogenic risks to receptors due to constituents present at the SEAD-13 site are reduced to within acceptable limits.

The mini risk assessment conducted at SEAD-13 concluded that the total non-cancer hazard index (HI) from all exposure routes is less than 1 for the construction worker, but exceeds 1 for the park worker (HI=4) and the recreational visitor (HI=2). The elevated HI for both receptors is due to ingestion of

groundwater, with nitrate/nitrite-nitrogen, aluminum, and manganese in groundwater as the largest contributors of risk for both land uses. When the groundwater pathway is eliminated, the total hazard indices for these receptors are 0.008 and 0.006, meeting the EPA hazard index criteria of less than 1.

Assumptions used for the estimation of risks for SEAD-13 were conservative.

Two possible land uses were considered for the mini risk assessment at SEAD-13: conservation/recreation land use and residential development land use. Conservation/recreation land use is the land use recommended by the Local Redevelopment Authority (LRA) for the SEAD-13 site. Residential land use, which resulted in higher non-carcinogenic risks, was considered to provide a conservative baseline for the site even though residential development at this site is unlikely. Therefore, it is unlikely that the risk calculated under the residential scenario would be exhibited, since such land use is improbable.

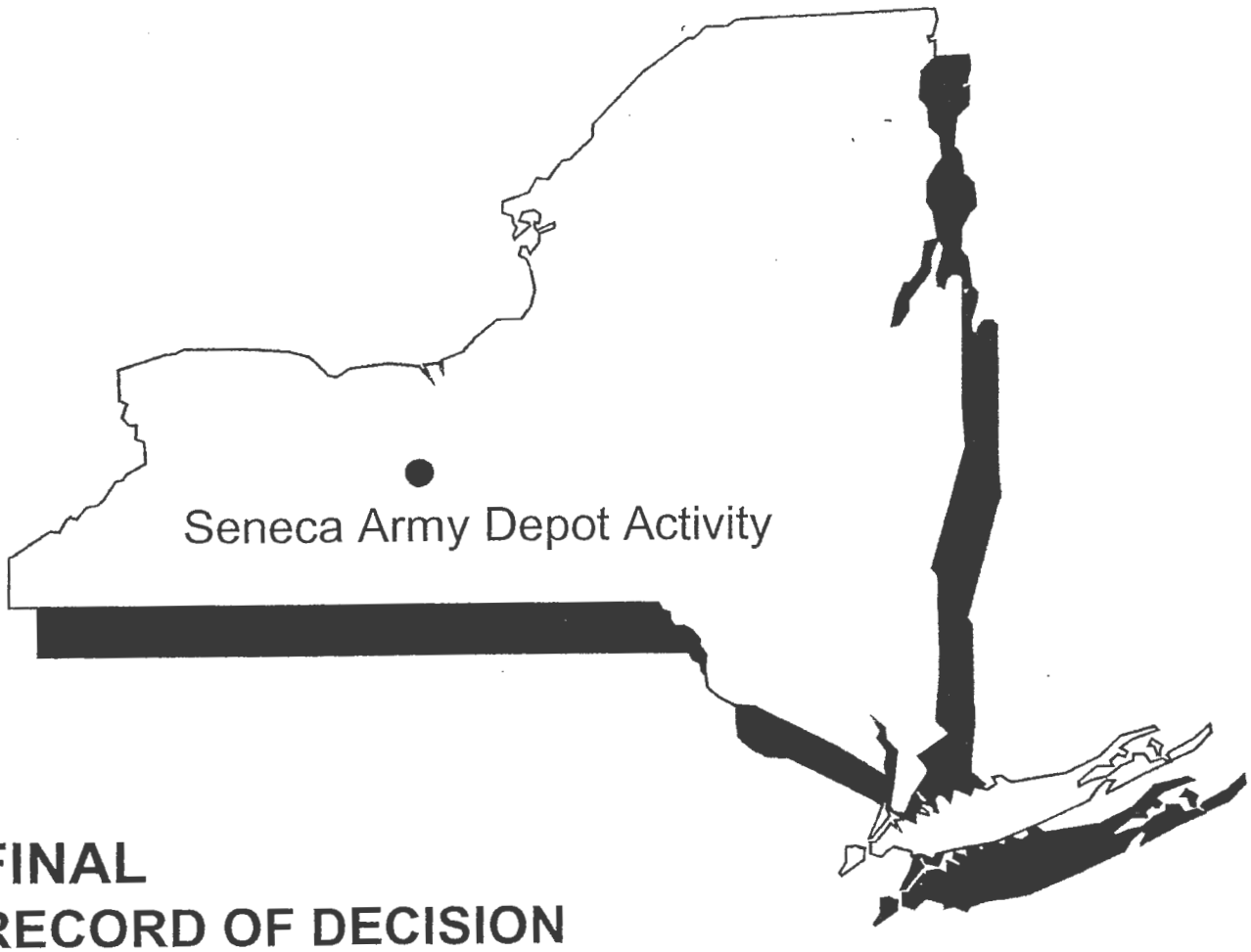
Another example of conservative assumptions used in the mini risk assessment was the use of maximum concentration of a constituent as the EPC instead of the Upper 95th Confidence Limit (UCL) of the mean. The maximum value was used due to the limited number of samples collected during the field investigations. The use of the maximum concentrations implies chronic exposure to the maximum concentration, which would likely overestimate the level of risk at the site.

Ecological risk assessment results showed negligible risks to receptors at SEAD-13.

Ecological risk assessment results showed negligible ecological risk to receptors in surface soil, surface water, and sediment. The only constituents exhibiting a hazard quotient greater than 1 in the soil were 4-methyphonol, bis(2-ethylhexyl)phthalate, di-n-butylphthalate, and hexachlorobenzene. However, biased soil sampling and the use of maximum values and NOAELs in the risk calculations result in highly conservative numerical hazard quotient estimates. Therefore, none of these SVOCs are considered to pose a risk to terrestrial receptors. For surface water, the SLERA calculated HQs greater than 1 for phenol, aluminum, and iron. None of these COPCs are considered to pose a threat to aquatic receptors, sine there is no evidence that the site is impacted by phenol, and since the samples of aluminum and iron, which occur naturally at SEDA, were characterized as turbid. In sediment, HQs calculated for 4-methylphenol and eight metals were greater than 1; however, this risk is overstated since conservative assumptions were used regarding the bioavailability of the metals to aquatic receptors. For these reasons, there is no ecological risk posed by constituents at SEAD-13.

US Army, Engineering & Support Center
Huntsville, AL

Seneca Army Depot Activity
Romulus, NY



FINAL
RECORD OF DECISION
FOR SEVENTEEN SWMUs REQUIRING LAND USE CONTROLS (SEADs 13, 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64B, 64C, 64D, 67, 122B, and 122E)
SENECA ARMY DEPOT ACTIVITY (SEDA)

EPA Site ID# NY0213820830
NY Site ID# 8-50-006
CONTRACT NO. DACA87-02-D-0005
DELIVERY ORDER NO. 0026

PARSONS
March 2007

1.0 DECLARATION OF THE RECORD OF DECISION

Site Names and Location

Seneca Army Depot Activity
CERCLIS ID# NY0213820830
New York Site ID# 8-50-0006
Romulus, Seneca County, New York

This Record of Decision (ROD) formalizes and documents the U.S Army's (Army's) and U.S Environmental Protection Agency's (USEPA's) selected remedy for 17 historic solid waste management units (SWMUs) at the former Seneca Army Depot Activity (SEDA). Each of the Army's selected remedies for the 17 former SWMUs requires the definition and use of Land Use Controls (LUCs). The 17 former SWMUs discussed in this ROD include:

- SEAD-13, Inhibited Red-Fuming Nitric Acid (IRFNA) Disposal Site;
- SEAD-39, Building 121 Boiler Blowdown Leach Pit;
- SEAD-40, Building 319 Boiler Blowdown Leach Pit;
- SEAD-41, Building 718 Boiler Blowdown Leaching Pit;
- SEADs-43/56/69, Building 606 – Old Missile Propellant Test Laboratory/Herbicide and Pesticide Storage/Disposal Area;
- SEAD-44A, Quality Assurance Test Laboratory;
- SEAD-44B, Quality Assurance Test Laboratory;
- SEAD-52, Buildings 608 and 612 – Ammunition Breakdown Area;
- SEAD-62, Nicotine Sulfate Disposal Area near Buildings 606 and 612;
- SEAD-64B, Garbage Disposal Area;
- SEAD-64C, Garbage Disposal Area;
- SEAD-64D, Garbage Disposal Area;
- SEAD-67, Dump Site East of Sewage Treatment Plant No. 4;
- SEAD-122B, Small Arms Range, Airfield Parcel; and
- SEAD-122E, Plane Deicing Area.

These SWMUs are also referred to below as "Areas of Concern" or "AOCs" or individually as an "Area of Concern" or "AOC."

Statement of Basis and Purpose

This decision document presents the Army's and the USEPA's selected remedy for SEADs 13, 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64B, 64C, 64D, 67, 122B, and 122E (or the AOCs), located at the Seneca Army Depot Activity (SEDA or the Depot) in the Towns of Romulus and Varick, Seneca County, New York. The decisions were developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended, 42 U.S.C. §9601 et seq., and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP),

40 CFR Part 300. The Base Realignment and Closure (BRAC) Environmental Coordinator, the Chief, Alpha Branch, Army BRAC Division, and the USEPA Region 2 have been delegated the authority to approve this Record of Decision (ROD).

This ROD is based on the Administrative Record that has been developed by the Army in accordance with Section 113(k) of CERCLA. The Administrative Record is available for public review at the Seneca Army Depot Activity, 5786 State Route 96, Building 123, Romulus, NY 14541. The Administrative Record Index identifies each of the items considered during the selection of the remedial action. This index is included in **Appendix A**.

The New York State Department of Environmental Conservation (NYSDEC) has concurred with the selected remedy. The NYSDEC Declaration of Concurrence is provided in **Appendix B** of this ROD.

Site Assessment

The response action selected for each SWMU identified in this ROD is necessary to protect human health or the environment from actual or threatened releases of hazardous substances into the environment or from actual or threatened releases of pollutants or contaminants from these SWMUs, which may present an imminent and substantial endangerment to public health or welfare.

Description of the Selected Remedy

The selected remedy for each of the 17 AOCs discussed in this ROD is either No Action (NA) or No Further Action (NFA) combined with the establishment, maintenance, and monitoring of Land Use Controls (LUCs). AOCs where the selected remedy is NA with LUCs include:

- SEAD-13, Inhibited Red-Fuming Nitric Acid (IRFNA) Disposal Site;
- SEADs-43/56/69, Building 606 – Old Missile Propellant Test Laboratory/Herbicide and Pesticide Storage/Disposal Area;
- SEAD-44B, Quality Assurance Test Laboratory;
- SEAD-52, Buildings 608 and 612 – Ammunition Breakdown Area;
- SEAD-62, Nicotine Sulfate Disposal Area near Buildings 606 and 612;
- SEAD-64C, Garbage Disposal Area; and
- SEAD-122E, Plane Deicing Area.

AOCs where the Army's selected remedy is NFA with LUCs include:

- SEAD-39, Building 121 Boiler Blowdown Leach Pit;
- SEAD-40, Building 319 Boiler Blowdown Leach Pit;
- SEAD-41, Building 718 Boiler Blowdown Leaching Pit;
- SEAD-44A, Quality Assurance Test Laboratory;
- SEAD-64B, Garbage Disposal Area;
- SEAD-64D, Garbage Disposal Area;
- SEAD-67, Dump Site East of Sewage Treatment Plant No. 4; and,
- SEAD-122B, Small Arms Range, Airfield Parcel.

At 12 of the AOCs (i.e., SEADs 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64C, and 67), LUCs previously documented by the Army will be imposed, monitored, and maintained until the concentrations of hazardous substances remaining at the site allow for the unlimited exposure and unrestricted use. It is also recommended that other LUCs previously not documented be imposed at five AOCs (i.e., SEADs 13, 64B, 64C, 122B and 122E) that are subject of this ROD.

The Army has previously documented and imposed LUCs within three portions of the former Depot: in the southeastern corner of the Depot where the Five Points Correctional Facility ("Prison Area") currently is located; in the east central potion of the Depot where the Planned Industrial/Office Development (PID Area) and Warehousing Area is located; and in the north-central portion (i.e., "North End Barracks" Area) of the Depot where the Hillside Children's Center is currently located. One or more of the 12 AOCs defined above (i.e., SEADs 39, 40, 41, 43/56/69, 44A, 44B, 52, 62, 64C, and 67) are located within land covered by existing LUCs within these three parcels of the former Depot. Within this ROD, the Army formalizes and documents its intention to impose the existing LUCs on the AOCs located within each of these parcels under CERCLA. Land within the "Prison Area" and the area currently occupied by the Hillside Children's Center have been transferred to the community [i.e., to the people of the State of New York and Seneca County Industrial Development Agency (SCIDA), respectively] under deeds that have been recorded by the Seneca County Clerk. Land within the PID and Warehousing Area of the Depot has not yet been transferred to the community, but LUCs including a residential activity use restriction and a groundwater use/access restriction have been identified and documented within the "Final Record of Decision for Sites Requiring Institutional Controls in the Planned Industrial/Office Development or Warehousing Area, Seneca Army Depot Activity" (September 2004).

New LUCs are proposed for the remaining five AOCs (SEADs 13, 64B, 64D, 122B, and 122E) discussed within this ROD. The groundwater use/access restriction proposed for SEAD-13 and SEAD-64D, and the residential use/activity restriction proposed for SEAD-122E result from the Army's determination that potential risks to human health or the environment exist due to the presence of hazardous substances at the historic SWMUs. The Army further recommends that the residential use/activity restriction proposed for SEAD-122E be imposed throughout the area occupied by the former Sampson / Seneca Army Depot Airfield to facilitate its transfer to the SCIDA; this LUC would encompass the entire parcel known as the Airfield. The LUC proposed for implementation at SEAD-64B (no unauthorized excavation and maintenance of cover) results from historic requirements of New York State Solid Waste Management Regulations; this LUC will also be applied along with the groundwater access/use restriction at SEAD-64D.

The specific LUCs selected for each AOC are summarized in **Table 1-1** and described more completely as follows:

The foregoing represents the selection of a remedial action by the U.S. Department of the Army and the U.S. Environmental Protection Agency, with the concurrence of the New York State Department of Environmental Conservation.

Concur and recommend for immediate implementation:

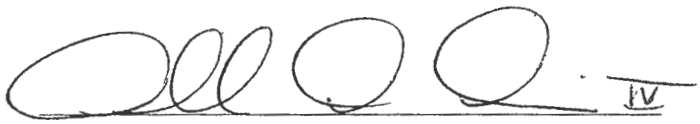
Stephen M Absolom 3/12/07

STEPHEN M. ABSOLOM
BRAC Environmental Coordinator

Date

The foregoing represents the selection of a remedial action by the U.S. Department of the Army and the U.S. Environmental Protection Agency, with the concurrence of the New York State Department of Environmental Conservation.

Concur and recommend for immediate implementation:



1 MAY 07

ADDISON D. DAVIS, IV
Deputy Assistant Secretary of the Army
Environment, Safety and Occupational Health

Date

The foregoing represents the selection of a remedial action by the U.S. Department of the Army and the U.S. Environmental Protection Agency, with the concurrence of the New York State Department of Environmental Conservation.

Concur and recommend for immediate implementation:

7/3/07

GEORGE PAVLOU
Director, Emergency and Remedial Response Division
U.S. Environmental Protection Agency, Region II

Date

Estimate Documentation Report

System:

RACER Version: 10.2.0
Database Location: C:\Documents and Settings\Andy W\Application Data\Earth Tech\RACER 10.2\Racer.mdb

Folder:

Folder Name: Seneca

Project:

Project ID: SEAD-13
Project Name: SEAD-13
Project Category: Residential/Resort

Location
State / Country: NEW YORK
City: SENECA ARMY DEPOT

Location Modifier	Default	User
	1.114	1.114

Options
Database: System Costs
Cost Database Date: 2009
Report Option: Fiscal

Description

SEAD-13 Inhibited Red Fuming Nitric Acid (IRFNA) disposal site.

The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of monitoring, site close out, and LUCs.

Site: SEAD-13 Inhibited Red Fuming Nitric Acid Site (IRFNA)

Source:
1. Final Decision Document/Mini Risk Assessment for SEAD-13 IFRNA Disposal Site (July 2004)
2. Draft Proposed Plan No Action/No Further Action for SWMU's SEAD-13, 39, 40, 43, 44A, 44B, 56, 67, and 122B at the Seneca Army Depot Activity, March 2005
3. Draft PRAP For Seventeen SWMUs Requiring Institutional Controls,

SEADs- 13,39,40,43/56/69,44A,44B,52,62,64B,64C,64D,67,122B,122E; October 2005
4. Professional judgment based on site knowledge

RACER Assumptions:
Monitoring Groundwater (RA-O)
1. Monitor groundwater for FY2010 through 2027 FYfor nitrate/nitrite
2. Monitor 5 wells (4 wells with elevated concentrations plus 1 up-gradient well)
3. Annual analysis (began Sept 2006), QC level 4, standard turnaround times
4. Annual analysis of groundwater with 5-Year Reviews for 17 years or until contaminants are within acceptable levels
5. Data management includes full plans, reports, data evaluation/validation, and submits analysis electronically

Five-Year Review (RA-O):
1. 4 review cycles
2. Review cycle began Sept 2006, first review in 2011
3. Low complexity
4. Tasks include Document Review, Interviews and Site Inspections
5. Report for Five Year Review to include all default parameters

Site Closeout Documentation (RA-O):
1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years
5. Well abandonment includes sub-contractor costs for fieldwork

Land Use Controls (second RA-O phase)
1. Tasks include Implementation, Monitoring & Enforcement, and Modification/Termination
2. Implementation parameters used are Deed Notification and Restrictive Covenants (all with Low complexity)
3. Monitoring & Enforcement parameters used are Report & Certifications annually

Estimate Documentation Report

Site Documentation:

Site ID: SEAD-13
Site Name: IRFNA Disposal Site
Site Type: None

Media/Waste Type
Primary: Groundwater
Secondary: N/A

Contaminant
Primary: Other
Secondary: None

Phase Names
SI: ☐
RI/FS: ☐
RD: ☐
IRA: ☐
RA(C): ☐
RA(O): ☑
LTM: ☑
Site Closeout: ☐

Documentation
Description: Inhibited Red Fuming Nitric Acid Disposal Site- the location where the limestone lined pits were used for the neutralization process to dispose of the IRFNA. Process left a high nitrate/nitrite plume in the groundwater.

FY2008 estimate updated to FY09 cost database; GW monitoring interval reduced by 1 year since phase is underway.

Support Team: Stephen M. Absolom - BEC, Seneca Army Depot
References: Final ROD For Seventeen SWMUs Requiring Institutional Controls, SEADs-13,39,40,43/56/69,44A,44B,52,62,64B,64C,64D,67,122B,122E; July 2007

Estimator Information
Estimator Name: Andrew Weinberg
Estimator Title: Senior Geologist
Agency/Org./Office: Bechtel-S Corp.
Business Address: 203 E. Milton St.
Austin, TX 78704
Telephone Number: 512-344-9657
Email Address: aweinberg@bechtel-s.com
Estimate Prepared Date: 01/21/2009

Estimator Signature: _____ **Date:** _____

Estimate Documentation Report

Reviewer Information

Reviewer Name: Steve Absolom
Reviewer Title: Installation Manager
Agency/Org./Office: Seneca Army Depot Activity
Business Address: .
Telephone Number: (607) 869-1309
Email Address: stephen.m.absolom@us.army.mil
Date Reviewed: 02/09/2009

Reviewer Signature: _____ **Date:** _____

Estimated Costs:

Phase Names		Direct Cost	Marked-up Cost
RA(O)- LUCs		$80,158	$220,429
RA(O)		$213,640	$439,758
	Total Cost:	$293,798	$660,188

Estimate Documentation Report

Phase Documentation:

Phase Type: Operations & Maintenance
Phase Name: RA(O)- LUCs
Description: Administrative Land Use Controls; Monitoring and Enforcement FY2010 through FY2027; Termination in FY2027.

Start Date: October, 2009
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate
Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
ADMINISTRATIVE LAND USE CONTROLS	Yes	100	0

Total Marked-up Cost: $220,429

Technologies:

Estimate Documentation Report

Technology Name: **Administrative Land Use Controls (# 1)**
User Name: **ADMINISTRATIVE LAND USE CONTROLS**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Rename Model		ADMINISTRATIVE LAND USE CONTROLS	n/a
Planning Documents		No	n/a
Implementation		No	n/a
Monitoring & Enforcement		Yes	n/a
Monitoring & Enforcement: Start Date		2009	n/a
Modification/Termination		Yes	n/a
Modification/Termination: Start Date		2027	n/a
Type of Site		Transferring Government Installation	n/a
Monitoring & Enforcement			
Required Parameters			
Duration of Monitoring/Enforcement		19	Years
Notice Letters		No	n/a
Guard Service/Security		No	n/a
Reports & Certifications		Yes	n/a
Reports & Certifications: Frequency		Annually	n/a
Site Visits/Inspections		No	n/a
Modify/Termination			
Required Parameters			
Document Evaluation		Yes	n/a
Document Evaluation: Number		1	EA
Document Evaluation: Plan Complexity		Low	n/a
Modify LUC Documents		Yes	n/a
Modify LUC Documents: Number		1	EA
Modify LUC Documents: Plan Complexity		Low	n/a
Amend Decision Documents		Yes	n/a
Amend Decision Documents: Number		1	EA
Amend Decision Documents: Plan Complexity		Low	n/a
Termination Letters		Yes	n/a
Termination Letters: Number		1	EA
Termination Letters: Plan Complexity		Low	n/a

Estimate Documentation Report

Comments:

Estimate Documentation Report

Phase Documentation:

Phase Type: Operations & Maintenance
Phase Name: RA(O)
Description: 17 years groundwater monitoring
5 year reviews (4)
Site close-out and well abandonment in final year of RA(O)

Start Date: March, 2026
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate

Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
MONITORING	Yes	100	0
Site Close-Out Documentation	Yes	100	0
Five-Year Review	Yes	100	0
Well Abandonment	Yes	100	0

Total Marked-up Cost: $439,758

Technologies:

Estimate Documentation Report

Technology Name: **Monitoring (# 1)**
User Name: **MONITORING**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Model Name		MONITORING	n/a
Groundwater		Yes	n/a
Surface Soil		No	n/a
Surface Water		No	n/a
Subsurface Soil		No	n/a
Sediment		No	n/a
Soil Gas		No	n/a
Air		No	n/a
Site Distance (One-way)		60	MI
Safety Level		D	n/a
Groundwater			
Required Parameters			
Average Sample Depth		15	FT
Samples per Event (First Year)		5	n/a
Samples per Event (Out Years)		5	n/a
Number of Events (First Year)		1	n/a
Number of Events (Out Years)		1	n/a
Number of Years (Out Years)		16	n/a
Secondary Parameters			
Primary Analytical Template	None	System Water - Metals	n/a
Secondary Analytical Template	None	None	n/a
Turnaround Time	Standard (21 Days)	Standard (21 Days)	n/a
Data Package/QC	Stage 1	Stage 1	n/a
Sampling Method	Existing Wells - Low Flow Pump	Existing Wells - Low Flow Pump	n/a
Number of Wells/Day	8	8	EA
Contain Purge Water	Yes	Yes	n/a
QA/QC			
Secondary Parameters			
Split Samples	1: 10	1: 10	EA
Field Duplicate Samples	1: 10	1: 10	EA

Estimate Documentation Report

Technology Name: **Monitoring (# 1)**
User Name: **MONITORING**

Description	*Default*	*Value*	*UOM*
QA/QC			
Secondary Parameters			
Rinse Blanks (per Round)	1	1	EA
Trip Blanks (per Day)	0	0	EA
Matrix Spikes/Matrix Spike Duplicates	1: 20	1: 20	EA
Data Management			
Secondary Parameters			
Monitoring Plan	Standard	Standard	n/a
Lab Data Review	Stage 1	Stage 1	n/a
Submit Data Electronically	Yes	Yes	n/a
Monitoring Reports	Abbreviated	Abbreviated	n/a

Comments: Assumptions for monitoring (RA-O):
1. Monitor gw for 20 years for nitrate/nitrite.
2. Monitor 5 wells (4 wells with elevated concentrations plus 1 upgradient well)
3. Analysis for 5 samples plus QA/QC
4. Annual analysis of GW until levels are in compliance.
5. Full plans, reports, evaluation/data analysis and elect. submission of data package.

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Meetings		Yes	n/a
Work Plans and Reports		Yes	n/a
Documents		Yes	n/a
Site Close-Out Complexity		Low	n/a
Meetings			
Required Parameters			
Kick Off/Scoping Meetings		Yes	n/a
Kick Off/Scoping Meetings: Number of Meetings	1	1	EA
Kick Off/Scoping Meetings: Travel		Yes	n/a
Kick Off/Scoping Meetings: Travelers		1	EA
Kick Off/Scoping Meetings: Days		5	Days
Kick Off/Scoping Meetings: Air Fare		0	$
Review Meetings		Yes	n/a
Review Meetings: Number of Meetings	1	1	EA
Review Meetings: Travel		No	n/a
Regulatory Review Meetings		Yes	n/a
Regulatory Review Meetings: Number of Meetings	1	1	EA
Regulatory Review Meetings: Travel		No	n/a
Work Plans & Reports			
Required Parameters			
Work Plans		Yes	n/a
Draft Work Plan		Yes	n/a
Final Work Plan		Yes	n/a
Reports		Yes	n/a
Draft Close-Out Report		Yes	n/a
Draft Final Close-Out Report		Yes	n/a
Final Close-Out Report		Yes	n/a
Progress Reports		Yes	n/a
Project Duration	8	8	months
Documents			
Required Parameters			

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
Documents			
Required Parameters			
Draft Decision Document		Yes	n/a
Draft Final Decision Document		Yes	n/a
Final Decision Document		Yes	n/a
Long Term Document Storage		Yes	n/a
Number of Boxes		4	EA
Duration of Storage		30	Yrs

Comments:

Estimate Documentation Report

Technology Name: **Five-Year Review (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Site Complexity		Low	n/a
Document Review		Yes	n/a
Interviews		Yes	n/a
Site Inspection		Yes	n/a
Report		Yes	n/a
Travel		No	n/a
Rebound Study		No	n/a
Start Date		September-2007	n/a
No. Reviews		4	EA
Document Review			
Required Parameters			
5-Year Review Check List		Yes	n/a
Record of Decision		Yes	n/a
Remedial Action Design & Construction		Yes	n/a
Close-Out Report		Yes	n/a
Operations & Maintenance Manuals & Reports		Yes	n/a
Consent Decree or Settlement Records		Yes	n/a
Groundwater Monitoring & Reports		Yes	n/a
Remedial Action Required		Yes	n/a
Previous 5-Year Review Reports		Yes	n/a
Interviews			
Required Parameters			
Current and Previous Staff Management		Yes	n/a
Community Groups		Yes	n/a
State Contacts		Yes	n/a
Local Government Contacts		Yes	n/a
Operations & Maintenance Contractors		Yes	n/a
PRPs		Yes	n/a
Remedial Design Consultant		Yes	n/a
Site Inspection			
Required Parameters			

Estimate Documentation Report

Technology Name: **Five-Year Review (# 1)**

Description	*Default*	*Value*	*UOM*
Site Inspection			
Required Parameters			
General Site Inspection		Yes	n/a
Containment System Inspection		Yes	n/a
Monitoring Systems Inspection		Yes	n/a
Treatment Systems Inspection		Yes	n/a
Regulatory Compliance		Yes	n/a
Site Visit Documentation (Photos, Diagrams, etc.)		Yes	n/a
Report			
Required Parameters			
Introduction		Yes	n/a
Remedial Objectives		Yes	n/a
ARARs Review		Yes	n/a
Summary of Site Visit		Yes	n/a
Areas of Non Compliance		Yes	n/a
Technology Recommendations		Yes	n/a
Statement of Protectiveness		Yes	n/a
Next Review		Yes	n/a
Implementation Requirements		Yes	n/a

Comments:

Estimate Documentation Report

Technology Name: **Well Abandonment (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Safety Level		D	n/a
Abandon Wells			
Required Parameters			
Technology/Group Name		Well Group	n/a
Number of Wells		14	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a

Comments:

Estimate Documentation Report

System:

RACER Version: 10.2.0
Database Location: C:\Documents and Settings\Andy W\Application Data\Earth Tech\RACER 10.2\Racer.mdb

Folder:

Folder Name: Seneca

Project:

Project ID: SEAD-13
Project Name: SEAD-13
Project Category: Residential/Resort

Location
State / Country: NEW YORK
City: SENECA ARMY DEPOT

Location Modifier	Default	User
	1.114	1.114

Options
Database: System Costs
Cost Database Date: 2009
Report Option: Fiscal

Description

SEAD-13 Inhibited Red Fuming Nitric Acid (IRFNA) disposal site.

The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of monitoring, site close out, and LUCs.

Site: SEAD-13 Inhibited Red Fuming Nitric Acid Site (IRFNA)

Source:
1. Final Decision Document/Mini Risk Assessment for SEAD-13 IFRNA Disposal Site (July 2004)
2. Draft Proposed Plan No Action/No Further Action for SWMU's SEAD-13, 39, 40, 43, 44A, 44B, 56, 67, and 122B at the Seneca Army Depot Activity, March 2005
3. Draft PRAP For Seventeen SWMUs Requiring Institutional Controls,

Estimate Documentation Report

SEADs- 13,39,40,43/56/69,44A,44B,52,62,64B,64C,64D,67,122B,122E; October 2005
4. Professional judgment based on site knowledge

RACER Assumptions:
Monitoring Groundwater (RA-O)
1. Monitor groundwater for FY2010 through 2027 FYfor nitrate/nitrite
2. Monitor 5 wells (4 wells with elevated concentrations plus 1 up-gradient well)
3. Annual analysis (began Sept 2006), QC level 4, standard turnaround times
4. Annual analysis of groundwater with 5-Year Reviews for 17 years or until contaminants are within acceptable levels
5. Data management includes full plans, reports, data evaluation/validation, and submits analysis electronically

Five-Year Review (RA-O):
1. 4 review cycles
2. Review cycle began Sept 2006, first review in 2011
3. Low complexity
4. Tasks include Document Review, Interviews and Site Inspections
5. Report for Five Year Review to include all default parameters

Site Closeout Documentation (RA-O):
1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years
5. Well abandonment includes sub-contractor costs for fieldwork

Land Use Controls (second RA-O phase)
1. Tasks include Implementation, Monitoring & Enforcement, and Modification/Termination
2. Implementation parameters used are Deed Notification and Restrictive Covenants (all with Low complexity)
3. Monitoring & Enforcement parameters used are Report & Certifications annually

Estimate Documentation Report

Site Documentation:

Site ID: SEAD-13
Site Name: IRFNA Disposal Site
Site Type: None

Media/Waste Type
Primary: Groundwater
Secondary: N/A

Contaminant
Primary: Other
Secondary: None

Phase Names
SI: ☐
RI/FS: ☐
RD: ☐
IRA: ☐
RA(C): ☐
RA(O): ☑
LTM: ☑
Site Closeout: ☐

Documentation
Description: Inhibited Red Fuming Nitric Acid Disposal Site- the location where the limestone lined pits were used for the neutralization process to dispose of the IRFNA. Process left a high nitrate/nitrite plume in the groundwater.

FY2008 estimate updated to FY09 cost database; GW monitoring interval reduced by 1 year since phase is underway.

Support Team: Stephen M. Absolom - BEC, Seneca Army Depot
References: Final ROD For Seventeen SWMUs Requiring Institutional Controls, SEADs-13,39,40,43/56/69,44A,44B,52,62,64B,64C,64D,67,122B,122E; July 2007

Estimator Information
Estimator Name: Andrew Weinberg
Estimator Title: Senior Geologist
Agency/Org./Office: Bechtel-S Corp.
Business Address: 203 E. Milton St.
Austin, TX 78704
Telephone Number: 512-344-9657
Email Address: aweinberg@bechtel-s.com
Estimate Prepared Date: 01/21/2009

Estimator Signature: _____ **Date:** _____

Estimate Documentation Report

Reviewer Information

Reviewer Name: Steve Absolom
Reviewer Title: Installation Manager
Agency/Org./Office: Seneca Army Depot Activity
Business Address: .
Telephone Number: (607) 869-1309
Email Address: stephen.m.absolom@us.army.mil
Date Reviewed: 02/09/2009

Reviewer Signature: _____ **Date:** _____

Estimated Costs:

Phase Names		Direct Cost	Marked-up Cost
RA(O)- LUCs		$80,158	$220,429
RA(O)		$213,640	$439,758
	Total Cost:	$293,798	$660,188

Estimate Documentation Report

Phase Documentation:

Phase Type: Operations & Maintenance
Phase Name: RA(O)- LUCs
Description: Administrative Land Use Controls; Monitoring and Enforcement FY2010 through FY2027; Termination in FY2027.

Start Date: October, 2009
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate
Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
ADMINISTRATIVE LAND USE CONTROLS	Yes	100	0

Total Marked-up Cost: $220,429

Technologies:

Estimate Documentation Report

Technology Name: **Administrative Land Use Controls (# 1)**
User Name: **ADMINISTRATIVE LAND USE CONTROLS**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Rename Model		ADMINISTRATIVE LAND USE CONTROLS	n/a
Planning Documents		No	n/a
Implementation		No	n/a
Monitoring & Enforcement		Yes	n/a
Monitoring & Enforcement: Start Date		2009	n/a
Modification/Termination		Yes	n/a
Modification/Termination: Start Date		2027	n/a
Type of Site		Transferring Government Installation	n/a
Monitoring & Enforcement			
Required Parameters			
Duration of Monitoring/Enforcement		19	Years
Notice Letters		No	n/a
Guard Service/Security		No	n/a
Reports & Certifications		Yes	n/a
Reports & Certifications: Frequency		Annually	n/a
Site Visits/Inspections		No	n/a
Modify/Termination			
Required Parameters			
Document Evaluation		Yes	n/a
Document Evaluation: Number		1	EA
Document Evaluation: Plan Complexity		Low	n/a
Modify LUC Documents		Yes	n/a
Modify LUC Documents: Number		1	EA
Modify LUC Documents: Plan Complexity		Low	n/a
Amend Decision Documents		Yes	n/a
Amend Decision Documents: Number		1	EA
Amend Decision Documents: Plan Complexity		Low	n/a
Termination Letters		Yes	n/a
Termination Letters: Number		1	EA
Termination Letters: Plan Complexity		Low	n/a

Estimate Documentation Report

Comments:

Estimate Documentation Report

Phase Documentation:

Phase Type: Operations & Maintenance
Phase Name: RA(O)
Description: 17 years groundwater monitoring
5 year reviews (4)
Site close-out and well abandonment in final year of RA(O)

Start Date: March, 2026
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate

Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
– MONITORING	Yes	100	0
Site Close-Out Documentation	Yes	100	0
Five-Year Review	Yes	100	0
Well Abandonment	Yes	100	0

Total Marked-up Cost: $439,758

Technologies:

Estimate Documentation Report

Technology Name: **Monitoring (# 1)**
User Name: **MONITORING**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Model Name		MONITORING	n/a
Groundwater		Yes	n/a
Surface Soil		No	n/a
Surface Water		No	n/a
Subsurface Soil		No	n/a
Sediment		No	n/a
Soil Gas		No	n/a
Air		No	n/a
Site Distance (One-way)		60	MI
Safety Level		D	n/a
Groundwater			
Required Parameters			
Average Sample Depth		15	FT
Samples per Event (First Year)		5	n/a
Samples per Event (Out Years)		5	n/a
Number of Events (First Year)		1	n/a
Number of Events (Out Years)		1	n/a
Number of Years (Out Years)		16	n/a
Secondary Parameters			
Primary Analytical Template	None	System Water - Metals	n/a
Secondary Analytical Template	None	None	n/a
Turnaround Time	Standard (21 Days)	Standard (21 Days)	n/a
Data Package/QC	Stage 1	Stage 1	n/a
Sampling Method	Existing Wells - Low Flow Pump	Existing Wells - Low Flow Pump	n/a
Number of Wells/Day	8	8	EA
Contain Purge Water	Yes	Yes	n/a
QA/QC			
Secondary Parameters			
Split Samples	1: 10	1: 10	EA
Field Duplicate Samples	1: 10	1: 10	EA

Estimate Documentation Report

Technology Name: **Monitoring (# 1)**
User Name: **MONITORING**

Description	*Default*	*Value*	*UOM*
QA/QC			
Secondary Parameters			
Rinse Blanks (per Round)	1	1	EA
Trip Blanks (per Day)	0	0	EA
Matrix Spikes/Matrix Spike Duplicates	1: 20	1: 20	EA
Data Management			
Secondary Parameters			
Monitoring Plan	Standard	Standard	n/a
Lab Data Review	Stage 1	Stage 1	n/a
Submit Data Electronically	Yes	Yes	n/a
Monitoring Reports	Abbreviated	Abbreviated	n/a

Comments: Assumptions for monitoring (RA-O):
1. Monitor gw for 20 years for nitrate/nitrite.
2. Monitor 5 wells (4 wells with elevated concentrations plus 1 upgradient well)
3. Analysis for 5 samples plus QA/QC
4. Annual analysis of GW until levels are in compliance.
5. Full plans, reports, evaluation/data analysis and elect. submission of data package.

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Meetings		Yes	n/a
Work Plans and Reports		Yes	n/a
Documents		Yes	n/a
Site Close-Out Complexity		Low	n/a
Meetings			
Required Parameters			
Kick Off/Scoping Meetings		Yes	n/a
Kick Off/Scoping Meetings: Number of Meetings	1	1	EA
Kick Off/Scoping Meetings: Travel		Yes	n/a
Kick Off/Scoping Meetings: Travelers		1	EA
Kick Off/Scoping Meetings: Days		5	Days
Kick Off/Scoping Meetings: Air Fare		0	$
Review Meetings		Yes	n/a
Review Meetings: Number of Meetings	1	1	EA
Review Meetings: Travel		No	n/a
Regulatory Review Meetings		Yes	n/a
Regulatory Review Meetings: Number of Meetings	1	1	EA
Regulatory Review Meetings: Travel		No	n/a
Work Plans & Reports			
Required Parameters			
Work Plans		Yes	n/a
Draft Work Plan		Yes	n/a
Final Work Plan		Yes	n/a
Reports		Yes	n/a
Draft Close-Out Report		Yes	n/a
Draft Final Close-Out Report		Yes	n/a
Final Close-Out Report		Yes	n/a
Progress Reports		Yes	n/a
Project Duration	8	8	months
Documents			
Required Parameters			

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
Documents			
Required Parameters			
Draft Decision Document		Yes	n/a
Draft Final Decision Document		Yes	n/a
Final Decision Document		Yes	n/a
Long Term Document Storage		Yes	n/a
Number of Boxes		4	EA
Duration of Storage		30	Yrs

Comments:

Estimate Documentation Report

Technology Name: **Five-Year Review (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Site Complexity		Low	n/a
Document Review		Yes	n/a
Interviews		Yes	n/a
Site Inspection		Yes	n/a
Report		Yes	n/a
Travel		No	n/a
Rebound Study		No	n/a
Start Date		September-2007	n/a
No. Reviews		4	EA
Document Review			
Required Parameters			
5-Year Review Check List		Yes	n/a
Record of Decision		Yes	n/a
Remedial Action Design & Construction		Yes	n/a
Close-Out Report		Yes	n/a
Operations & Maintenance Manuals & Reports		Yes	n/a
Consent Decree or Settlement Records		Yes	n/a
Groundwater Monitoring & Reports		Yes	n/a
Remedial Action Required		Yes	n/a
Previous 5-Year Review Reports		Yes	n/a
Interviews			
Required Parameters			
Current and Previous Staff Management		Yes	n/a
Community Groups		Yes	n/a
State Contacts		Yes	n/a
Local Government Contacts		Yes	n/a
Operations & Maintenance Contractors		Yes	n/a
PRPs		Yes	n/a
Remedial Design Consultant		Yes	n/a
Site Inspection			
Required Parameters			

Estimate Documentation Report

Technology Name: **Five-Year Review (# 1)**

Description	*Default*	*Value*	*UOM*
Site Inspection			
Required Parameters			
General Site Inspection		Yes	n/a
Containment System Inspection		Yes	n/a
Monitoring Systems Inspection		Yes	n/a
Treatment Systems Inspection		Yes	n/a
Regulatory Compliance		Yes	n/a
Site Visit Documentation (Photos, Diagrams, etc.)		Yes	n/a
Report			
Required Parameters			
Introduction		Yes	n/a
Remedial Objectives		Yes	n/a
ARARs Review		Yes	n/a
Summary of Site Visit		Yes	n/a
Areas of Non Compliance		Yes	n/a
Technology Recommendations		Yes	n/a
Statement of Protectiveness		Yes	n/a
Next Review		Yes	n/a
Implementation Requirements		Yes	n/a

Comments:

Estimate Documentation Report

Technology Name: **Well Abandonment (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Safety Level		D	n/a
Abandon Wells			
Required Parameters			
Technology/Group Name		Well Group	n/a
Number of Wells		14	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a

Comments:

WORK AUTHORIZATION DIRECTIVE (WAD)
BASE REALIGNMENT AND CLOSURE (BRAC) ENVIRONMENTAL RESTORATION AND FUNDS RELEASE DOCUMENT

CEMP-NAD 10 January 2008

DIRECTIVE NO. BR-SEN-08-11

ISSUED THRU: CENAD-PD-IIS-S (TUMMINELLO)
TO: CENAN-PP-E (BATTAGLIA)

ISSUED FOR: BRAC ER at Seneca AD, NY.

1. Reference DA FAD, 10 January 2008, advice number # 08-0002-01855.

2. You are authorized Base Closure Account (BCA) environmental restoration funds to execute the following project(s).

BRAC ROUND: 97		increase X /decrease__ reprog_
APPRN: 97 X/2013 0510.40N1 2008 BCA	**DIV/DIST:** NAN	**ASN:** 8011
PROJECT	AMSCO	+/- ALLOCATION
Long Term Monitoring - IRFNA Site	61366R39	+ $95,000.00
POC at CENAN-PP-E is Randy Battaglia, 607-869-1523. POC at CEMP-NAD is Dave Koran, 202-761-0076.		

3. These funds are for the above specified projects only. The funds may not be transferred to other projects without approval and authorization of this office.

4. These funds must be obligated within 30 days of receipt. If these funds cannot be obligated in 30 days this office is to be notified immediately.

5. Accounting and Reporting Instructions:
   a. Report all financial data on a monthly basis via the Integrated Command Accounting and Reporting (ICAR) System.
   b. Report excess funds to CEMP-NAD as soon as they are identified.
   c. Provide a copy of this WAD to your Resource Management Office.

CF: TUMMINELLO

SEAD

Phase	2009	2010	2011	2012	2013	2014	2015	Outyears
GW	10	10	10	10	10	10	10	1305
Sys					22			69
PO								29
LVC	10	10	10	10	10	10	10	123
Wildlife								25

Estimate Documentation Report

System:

RACER Version: 10.0.2
Database Location: C:\Documents and Settings\e3ppmjrf\Application Data\Earth Tech\RACER 10.0\Racer.mdb

Folder:

Folder Name: Seneca 2008

Project:

Project ID: SEAD-13
Project Name: SEAD-13
Project Category: Residential/Resort

Location
State / Country: NEW YORK
City: SENECA ARMY DEPOT

Location Modifier	Default	User
	1.055	1.055

Options
Database: System Costs
Cost Database Date: 2007
Report Option: Fiscal

Description

SEAD-13 Inhibited Red Fuming Nitric Acid (IRFNA) disposal site.

The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of monitoring, site close out, and LUCs.

Site: SEAD-13 Inhibited Red Fuming Nitric Acid Site (IRFNA)

Source:
1. Final Decision Document/Mini Risk Assessment for SEAD-13 IFRNA Disposal Site (July 2004)
2. Draft Proposed Plan No Action/No Further Action for SWMU's SEAD-13, 39, 40, 43, 44A, 44B, 56, 67, and 122B at the Seneca Army Depot Activity, March 2005
3. Draft PRAP For Seventeen SWMUs Requiring Institutional Controls,

SEADs- 13,39,40,43/56/69,44A,44B,52,62,64B,64C,64D,67,122B,122E; October 2005
4. Professional judgment based on site knowledge

RACER Assumptions:
Monitoring Groundwater (RA-O)
1. Monitor groundwater for 20 years for nitrate/nitrite
2. Monitor 5 wells (4 wells with elevated concentrations plus 1 up-gradient well)
3. Annual analysis (begins Sept 2006), QC level 4, standard turnaround times
4. Annual analysis of groundwater with 5-Year Reviews for 20 years or until contaminants are within acceptable levels
5. Data management includes full plans, reports, data evaluation/validation, and submits analysis electronically

Five-Year Review (RA-O):
1. 4 review cycles
2. Review cycle begins Sept 2006, first review in 2011
3. Low complexity
4. Tasks include Document Review, Interviews and Site Inspections
5. Report for Five Year Review to include all default parameters

Site Closeout Documentation (RA-O):
1. Site Closeout is low complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years
5. Well abandonment includes sub-contractor costs for fieldwork

Land Use Controls (second RA-O phase)
1. Tasks include Implementation, Monitoring & Enforcement, and Modification/Termination
2. Implementation parameters used are Deed Notification and Restrictive Covenants (all with Low complexity)
3. Monitoring & Enforcement parameters used are Report & Certifications annually

Estimate Documentation Report

Site Documentation:

Site ID: SEAD-13
Site Name: IRFNA Disposal Site
Site Type: None

Media/Waste Type

Primary: Groundwater
Secondary: N/A

Contaminant

Primary: Other
Secondary: None

Phase Names

SI: ☐
RI/FS: ☐
RD: ☐
IRA: ☐
RA(C): ☐
RA(O): ☑
LTM: ☑
Site Closeout: ☐

Documentation

Description: Inhibited Red Fuming Nitric Acid Disposal Site- the location where the limestone lined pits were used for the neutralization process to dispose of the IRFNA. Process left a high nitrate/nitrite plume in the groundwater.
Support Team: Stephen M. Absolom - BEC, Seneca Army Depot
References: Final ROD For Seventeen SWMUs Requiring Institutional Controls, SEADs-13,39,40,43/56/69,44A,44B,52,62,64B,64C,64D,67,122B,122E; July 2007

Estimator Information

Estimator Name: Janet Fallo
Estimator Title: Project Manager
Agency/Org./Office: U.S. Army Corps of Engineers
Business Address: 5786 State Rt 96
Bldg 125
PO Box 9
Romulus, NY 14541-0009
Telephone Number: 607-869-1248
Email Address: janet.r.fallo@usace.army.mil
Estimate Prepared Date: 02/14/2008

Estimator Signature: _____ **Date:** _____

Estimate Documentation Report

Reviewer Information

Reviewer Name: Steve Absolom
Reviewer Title: Installation Manager
Agency/Org./Office: Seneca Army Depot Activity
Business Address: .
Telephone Number: (607) 869-1309
Email Address: stephen.m.absolom@us.army.mil
Date Reviewed: 02/09/2007

Reviewer Signature: _____ **Date:** _____

Estimated Costs:

Phase Names		Direct Cost	Marked-up Cost
RA(O)- LUCs		$71,080	$192,848
RA(O)		$58,873	$142,936
	Total Cost:	$129,952	$335,785

Estimate Documentation Report

Phase Documentation:

Phase Type: Operations & Maintenance
Phase Name: RA(O)- LUCs
Description: Administrative Land Use Controls.

Start Date: September, 2006
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate
Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
ADMINISTRATIVE LAND USE CONTROLS	Yes	100	0

Total Marked-up Cost: $192,848

Technologies:

Estimate Documentation Report

Technology Name: **Administrative Land Use Controls (# 1)**
User Name: **ADMINISTRATIVE LAND USE CONTROLS**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Rename Model		ADMINISTRATIVE LAND USE CONTROLS	n/a
Planning Documents		No	n/a
Implementation		Yes	n/a
Implementation: Start Date		2006	n/a
Monitoring & Enforcement		Yes	n/a
Monitoring & Enforcement: Start Date		2006	n/a
Modification/Termination		Yes	n/a
Modification/Termination: Start Date		2026	n/a
Type of Site		Transferring Government Installation	n/a
Implementation			
Required Parameters			
Modify Installation (or City) Master Plan		No	n/a
Deed Notification		Yes	n/a
Deed Notification: Number		1	EA
Deed Notification: Task Complexity		Low	n/a
Negotiating Easements		No	n/a
Restrictive Covenants		Yes	n/a
Restrictive Covenants: Number		1	EA
Restrictive Covenants: Task Complexity		Low	n/a
Equitable Servitudes		No	n/a
Access Control Signs		No	n/a
Utility Notification Service		No	n/a
Geographic Information Systems (GIS)/Overlay Maps		No	n/a
Develop Finding of Suitablility to Transfer (FOST)		No	n/a
Monitoring & Enforcement			
Required Parameters			
Duration of Monitoring/Enforcement		19	Years
Notice Letters		No	n/a
Guard Service/Security		No	n/a
Reports & Certifications		Yes	n/a

Estimate Documentation Report

Technology Name: **Administrative Land Use Controls (# 1)**
User Name: **ADMINISTRATIVE LAND USE CONTROLS**

Description	*Default*	*Value*	*UOM*
Monitoring & Enforcement			
Required Parameters			
Reports & Certifications: Frequency		Annually	n/a
Site Visits/Inspections		No	n/a
Modify/Termination			
Required Parameters			
Document Evaluation		Yes	n/a
Document Evaluation: Number		1	EA
Document Evaluation: Plan Complexity		Low	n/a
Modify LUC Documents		Yes	n/a
Modify LUC Documents: Number		1	EA
Modify LUC Documents: Plan Complexity		Low	n/a
Amend Decision Documents		Yes	n/a
Amend Decision Documents: Number		1	EA
Amend Decision Documents: Plan Complexity		Low	n/a
Termination Letters		Yes	n/a
Termination Letters: Number		1	EA
Termination Letters: Plan Complexity		Low	n/a

Comments:

Estimate Documentation Report

Phase Documentation:

Phase Type: Operations & Maintenance
Phase Name: RA(O)
Description: Site Close-out
Land Use Controls .

Start Date: March, 2026
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate

Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
Site Close-Out Documentation	Yes	100	0
Five-Year Review	Yes	100	0
Well Abandonment	Yes	100	0

Total Marked-up Cost: $142,936

Technologies:

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Meetings		Yes	n/a
Work Plans and Reports		Yes	n/a
Documents		Yes	n/a
Site Close-Out Complexity		Low	n/a
Meetings			
Required Parameters			
Kick Off/Scoping Meetings		Yes	n/a
Kick Off/Scoping Meetings: Number of Meetings	1	1	EA
Kick Off/Scoping Meetings: Travel		Yes	n/a
Kick Off/Scoping Meetings: Travelers		1	EA
Kick Off/Scoping Meetings: Days		5	Days
Kick Off/Scoping Meetings: Air Fare		0	$
Review Meetings		Yes	n/a
Review Meetings: Number of Meetings	1	1	EA
Review Meetings: Travel		No	n/a
Regulatory Review Meetings		Yes	n/a
Regulatory Review Meetings: Number of Meetings	1	1	EA
Regulatory Review Meetings: Travel		No	n/a
Work Plans & Reports			
Required Parameters			
Work Plans		Yes	n/a
Draft Work Plan		Yes	n/a
Final Work Plan		Yes	n/a
Reports		Yes	n/a
Draft Close-Out Report		Yes	n/a
Draft Final Close-Out Report		Yes	n/a
Final Close-Out Report		Yes	n/a
Progress Reports		Yes	n/a
Project Duration	8	8	months
Documents			
Required Parameters			

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
Documents			
Required Parameters			
Draft Decision Document		Yes	n/a
Draft Final Decision Document		Yes	n/a
Final Decision Document		Yes	n/a
Long Term Document Storage		Yes	n/a
Number of Boxes		4	EA
Duration of Storage		30	Yrs

Comments:

Estimate Documentation Report

Technology Name: **Five-Year Review (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Site Complexity		Low	n/a
Document Review		Yes	n/a
Interviews		Yes	n/a
Site Inspection		Yes	n/a
Report		Yes	n/a
Travel		No	n/a
Rebound Study		No	n/a
Start Date		September-2007	n/a
No. Reviews		4	EA
Document Review			
Required Parameters			
5-Year Review Check List		Yes	n/a
Record of Decision		Yes	n/a
Remedial Action Design & Construction		Yes	n/a
Close-Out Report		Yes	n/a
Operations & Maintenance Manuals & Reports		Yes	n/a
Consent Decree or Settlement Records		Yes	n/a
Groundwater Monitoring & Reports		Yes	n/a
Remedial Action Required		Yes	n/a
Previous 5-Year Review Reports		Yes	n/a
Interviews			
Required Parameters			
Current and Previous Staff Management		Yes	n/a
Community Groups		Yes	n/a
State Contacts		Yes	n/a
Local Government Contacts		Yes	n/a
Operations & Maintenance Contractors		Yes	n/a
PRPs		Yes	n/a
Remedial Design Consultant		Yes	n/a
Site Inspection			
Required Parameters			

Estimate Documentation Report

Technology Name: **Five-Year Review (# 1)**

Description	*Default*	*Value*	*UOM*
Site Inspection			
Required Parameters			
General Site Inspection		Yes	n/a
Containment System Inspection		Yes	n/a
Monitoring Systems Inspection		Yes	n/a
Treatment Systems Inspection		Yes	n/a
Regulatory Compliance		Yes	n/a
Site Visit Documentation (Photos, Diagrams, etc.)		Yes	n/a
Report			
Required Parameters			
Introduction		Yes	n/a
Remedial Objectives		Yes	n/a
ARARs Review		Yes	n/a
Summary of Site Visit		Yes	n/a
Areas of Non Compliance		Yes	n/a
Technology Recommendations		Yes	n/a
Statement of Protectiveness		Yes	n/a
Next Review		Yes	n/a
Implementation Requirements		Yes	n/a

Comments:

Estimate Documentation Report

Technology Name: **Well Abandonment (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Safety Level		D	n/a
Abandon Wells			
Required Parameters			
Technology/Group Name		Well Group	n/a
Number of Wells		14	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a

Comments:

MEMORANDUM FOR RECORD

SUBJECT: Environmental Liabilities **Date:** 08 April 2009

This memorandum serves as formal documentation of the information used to develop the Cost-To-Complete (CTC) estimate for the 2009 data call. Since this site is a Military Munitions Rule site, total OE costs reported have been captured in an OE EE/CA. The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the RD/RA HTRW component.

Site: SEAD-003-R-01, Former EOD Range (alias SEAD-57) and the 3.5" Rocket Range (alias SEAD-46)

Source:
1. Final Ordnance and Explosives Engineering Evaluation/Cost Analysis, January 2004.
2. Professional judgment based on site knowledge.
3. Corps of Engineers memo, 13 Mar 2008, S&A Rate
4. Corps of Engineers email, John Nohrstedt, 12 Jan 2009, Contracting Cost

Phase: LTM will be an Institutional Control in perpetuity. Initial duration is 30 years for a recurring review every 2 years.

RACER Assumptions:
Remedial Design/ Remedial Action:
RA: The HTRW component of this site is the soil contaminates with metals in and below the berm area at the EOD berm at SEAD-57. Assume that once the berm and soils below the berm have been removed and disposed of at an off-site landfill, the COC's will pose no threat to the groundwater. Therefore, no groundwater monitoring or 5-year reviews will be required for the HTRW removal. The berm is approximately 250' x 30' x 5' and the area around and under the berm are approximately 100 x 150 x 5' as shown in Figure 4-7 of the RI report.
RD: RACER calculated per the RA cost total for the HTRW component. Design percentage equals 10%.

COE Support Assumptions:
Procurement of Cost-Plus RD/RA more difficult. Contract monitoring for 1 year. Contract Closeout simple effort for Cost Plus.

Site Closeout Documentation (LTM phase):
1. Site Closeout is moderate complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports—all default values

4. Documents will be stored for 30 years

Well Abandonment (LTM phase):

1. Number of wells: 13
2. Depth of wells: 15 feet
3. Diameter of wells: 2"
4. Unconsolidated
5. Overdrill/removal

Cost Summary	**SEAD-003-R-01 (SEAD-46/57)**		
Remedial Design (RACER)			$39,621
Remedial Action			
Soil Contamination removal derived from RACER from previously noted assumptions			$434,500
LTM			
Site Closeout & Well Abandonment (RACER)			$77,883
OE Review site visits from EECA at $1,719 per visit for 15 visits			$25,783
Corps of Engineers Support (Source 4) $43,016			
Contract Procurement	$5,000		
Contract Monitoring	$5,000		
Contract Closeout	$1,000		
	$11,000		
S&A (Source 3) RD + RA + Closeout (39,621 + 434,500 + 77,883)0.058		$32,016	
Total Site Cost			**$620,803**

Cost Difference > 10% from 2008 Report? Yes

Reason: RACER update and Corps of Engineers support added

Prepared by: Randall Battaglia _____ 4/9/09
Signature Date

Reviewed by: Stephen M. Absolom _____ 4/9/09
Signature Date

Source 1

FINAL

ORDNANCE AND EXPLOSIVES ENGINEERING EVALUATION/ COST ANALYSIS REPORT

SENECA ARMY DEPOT ROMULUS, SENECA COUNTY, NEW YORK

Prepared For:

SENECA ARMY DEPOT ACTIVITY
and
U.S. ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT
and
HUNTSVILLE CENTER

Contract No. DACA87-95-D-0018
Delivery Order No. 0052

Prepared By:

PARSONS ENGINEERING SCIENCE, INC.
100 SUMMER ST
BOSTON, MA 02110

JANUARY 2004

EXECUTIVE SUMMARY

ES1 The 10,587-acre Seneca Army Depot Activity (SEDA) facility was constructed in 1941 and has been owned by the United States Government and operated by the Department of the Army since that date. From its inception in 1941 until 1995, SEDA's primary mission was the receipt, storage, maintenance, and supply of military items, including munitions and equipment. The Depot's mission changed in early 1995 when the Department of Defense (DOD) recommended closure of the Seneca Army Depot under its Base Realignment and Closure (BRAC) process. This recommendation to close Seneca Army Depot Activity was approved by Congress on September 28, 1995 and the Depot was officially closed in July 2000.

ES2 In accordance with the requirements of the BRAC process, the Seneca County Board of Supervisors established the Seneca Army Depot Local Redevelopment Authority (LRA) in October 1995. The primary responsibility assigned to the LRA was to plan and oversee the redevelopment of the Depot. The Reuse Plan and Implementation Strategy for Seneca Army Depot was adopted by the LRA and approved by the Seneca County Board of Supervisors on October 22, 1996. Under this plan and subsequent amendment, areas within the Depot were classified as to their most likely future use. These areas included: housing, institutional, industrial, an area for the existing navigational LORAN transmitter, recreational/conservation, and an area designated for a future prison.

ES3 In July of 1998, the U.S. Army Corps of Engineers (USACE) conducted a site visit and historical data collection effort. The findings are documented in the Archives Search Report (ASR). The ASR initially subdivided the depot into 27 Areas of Interest (AOIs) for ordnance contamination based on physical attributes, homogeneity, and current and historical land use. The ASR evaluated each AOI to determine whether the area should or should not be investigated for ordnance and explosives/ unexploded ordnance (OE/UXO). Each AOI was classified as requiring further investigation or not requiring further investigation based on a review of historical documents, aerial photography, and employee interviews. Most of the AOIs were also visited by USACE to determine whether any traces of OE were readily apparent.

ES4 The ASR classified 15 of the areas as uncontaminated. Subsequently, one of the areas recommended for further investigation, SEAD-43, was classified as a no further action site after a geophysical and intrusive investigation in 1999. The remaining 11 AOIs discussed in the ASR were classified as sites where OE might present a safety risk. This Engineering Evaluation and Cost Assessment project was undertaken in order to determine the nature and extent of possible OE contamination at these sites.

ES5 The EE/CA fieldwork used geophysical survey techniques and intrusive investigations to estimate the density of the ordnance in different areas, which was then compared with the current and future activities and anticipated users. Data collected from this characterization project were also used to develop alternatives designed to reduce the risk of possible exposure to UXO within AOIs. These alternatives were then evaluated to determine their effectiveness, implementability, and cost.

ES6 Results of this comparison indicate that there are portions of SEDA where alternatives requiring removal of UXO will be necessary to ensure public safety. The results also indicate that implementation of site-wide institutional controls will be necessary to manage residual risk. Several AOIs within SEDA will not require any OE removal operations to make the property safe for the proposed future uses.

ES7 OE response action alternatives were evaluated for each of the 11 AOIs at SEDA that were investigated during this EE/CA investigation. Each potential alternative was initially screened against the general evaluation criteria of effectiveness, implementability, and cost. The screening of alternatives was used to identify candidate OE response alternatives for further qualitative evaluation. Each of the alternatives remaining after this screening were then compared to each other as far as effectiveness, implementability, and cost. Once the remaining alternatives at each AOI had been compared, one alternative was chosen as the most appropriate response to the existing OE hazard.

ES8 The following response actions have been chosen for the AOIs investigated during the Seneca OE EE/CA:

- NFA – SEAD-53 (Igloo Area) ditches, Demo Range, Indian Creek Burial Area. These sites are no longer under consideration as ordnance sites
- Institutional Controls – Base wide, no individual areas
- Clearance to Depth of 6" – SEADs-16 and –17 (Deactivation Furnaces), EOD Area #2
- Clearance to Depth of Instrument Detection – EOD Area #3, SEAD-44A (QA Function Test Area), SEAD-46 (3.5" Rocket Range), Grenade Range
- Clearance to Depth by Means of Excavation and Mechanical Sorting – SEAD-45 (Open Detonation Area), SEAD-57 (Former EOD Range)

Complete descriptions of each of these alternatives are contained in Section 7.

Table G-23
SEAD-4 (3.5" Rocket Range)
Cost Estimate for Alternative 3:
Clearance to 6"

This estimate assumes:
Clearance to 6" of 370 acres in SEAD-45
A 700' x 700' fence surrounding the demo berm in SEAD-57

Item	Unit	Unit Cost	Amount	Initial Cost	Life Cycle Cost (30 yrs)	Total Cost
UXO Clearence to 6"[1]	acre	$3,400	370	$1,258,000	$0	$1,258,000
UXO Sweep Contractor[2]	linear feet	$2	5,700	$11,400	$0	$11,400
Fencing Installed[3]	linear feet	$10	5,700	$57,000	$171,000	$228,000
Signs Installed	1 sign (per 500' of fence)	$93	11	$1,060	$6,840	$7,900
A-E Field Oversight		15% of UXO Clearance/IC		$199,119	$0	$199,119
A-E Project Management		8% of UXO Clearance/IC		$106,197	$0	$106,197
Moderate Brush Cutting[4]	acre	$426	185	$78,810	0	$78,810
Heavy Brush Cutting[4]	acre	$603	185	$111,555	0	$111,555
			Subtotal:	$1,711,586	$177,840	$1,889,426
CEHNC Oversite		15% of subtotal		$256,738	$0	$256,738
					Total Cost Estimate:	$2,146,164
					Contingency (25%):	$536,541
						$2,682,705
					Cost per. Acre =	*$6,464*

Assumptions
[1]Cost for UXO clearance includes all ODC and mobilization costs, and equipment
[2]Estimate includes surface sweep of area to be performed prior to having fence installed
[3]Cost to install fencing is $10 per linear foot of 8 foot chain link with three strands of barbed wire
[4]Brush cutting costs taken from ECHOS 1996 and adjusted for inflation using Engineering News Record Construction Cost Index History

Table G-24
Seneca Army Depot Activity
Costs for Recurring Reviews
30 Year Period

Reviews
30 yr duration
Every 2 yrs for all site

This estimate assumes:
Recurring review Depot wide every 2 years
2 man crew on site for 4 days
Report to be files upon completion of review

Item	Unit	Unit Cost	Amount	Per Review Cost	Total Cost	(30 yrs)[1]
Mob/Demob		$1,500	2	$3,000		$18,427
Per Diem	day	$124	8	$992		$6,093
Reviewers (2)	hour	$65	100	$6,500		$39,924
A-E Field Oversight		15% of UXO Clearance/IC		$1,574		$9,667
A-E Project Management		8% of UXO Clearance/IC		$839		$5,155
			Subtotal:	$12,905		$79,266
CEHNC Oversite		15% of subtotal		$1,936		$11,890
				Total Cost Estimate:		$91,156
				Contingency (25%):		$22,789
						$113,944

$113,944 F.Y. 04 Cost
1.1314 ESCALATION FACTOR
128,916 F.Y. 09 Cost

$\frac{\$128,916}{5 \text{ sites}} = \$25,783/\text{site}$

$\frac{\$25,783}{15 \text{ site visits}} = \$1,719$ per site visit
Every 2 years for 30 years.

Assumptions
[1]30 Year costs assume present value costs with a discount factor of 7%

SOURCE 3

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

CERM-P (37)

13 MAR 2008

MEMORANDUM FOR MAJOR SUBORDINATE COMMANDS (MSC)

SUBJECT: Fiscal Year (FY) 2008 Supervision and Administration (S&A) Rate Changes

1. References:

a. CERM-P memorandum, 27 July 2005, Subject: S&A Accounting Procedures for Modularity Projects.

b. CERM-P memorandum, 20 September 2006, Subject: FY 2006 S&A Rate Changes.

2. Effective 1 April 2008 the Operation and Maintenance (O&M) and the Defense Environmental Restoration Program (DERP) S&A rate for the Continental United States (CONUS) is reduced for new Fiscal Year 2008 (FY08) contract awards from six and one-half percent to five and eight-tenths percent. The intent of this change is to adjust the S&A rate to match the current expense and income activity; the level of service or effort should remain unchanged. Any O&M losses to your S&A checkbook that result from the rate change will be reimbursed from the national S&A account. The Major Subordinate Command (MSC) maximum checkbook carryover will be increased to three months' expense and reflected in the next update to the consolidated command guidance.

S&A RATE

3. The one percent furniture rate in reference "a" was not intended to be restricted to modularity projects. It may be used for any MILCON or O&M project. This change in the O&M rate does not affect modularity/relocatable projects as they continue to be charged the MILCON rate per reference "a".

CERM-P (37)
SUBJECT: FY 2008 Supervision and Administration (S&A) Rate Changes

4. Since these changes significantly affect S&A schedules the FY08 S&A performance will be measured against your mid-year schedules due 25 April 2008. Special instructions are provided in the enclosed standing operating procedures to assist in implementation of these changes. These changes will be codified in the next update to the consolidated command guidance.

5. Point of contact for this action is Mr. Philip Blount, CERM-P, (202) 761-8908.

FOR THE COMMANDER:

Encl

Wesley C. Miller
Director of Resource Management

Absolom, Stephen M Mr CIV USA

Source 4

From: Nohrstedt, John HNC [John.Nohrstedt@usace.army.mil]
Sent: Monday, January 12, 2009 4:18 PM
To: Absolom, Stephen M Mr CIV USA
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Cost per year for contracting to monitor a contractor:
5 hrs/month X 12 months = 60 hrs
Approximately $5,000 to $7,000

Cost of Monitoring 1 year

Cost for contracting Task Order Close out:
Firm Fixed Price - 5 to 10 hrs - Approx. $500 to $1000
Cost Plus - 10 to 25 hrs - Approx. $1000 to $2,500

Cost of Closeout

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA [mailto:stephen.m.absolom@us.army.mil]
Sent: Monday, January 12, 2009 8:07 AM
To: Nohrstedt, John HNC; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,
What will the cost per year be to monitor the TO if it is a multiple year task order.
Also need to a cost for TO Close out.
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362
-----Original Message-----
From: Nohrstedt, John HNC [mailto:John.Nohrstedt@usace.army.mil]
Sent: Friday, January 09, 2009 12:35 PM
To: Absolom, Stephen M Mr CIV USA; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Below are the man-hours to prepare and issue a simple task order:

Prepare SOW and IGE	- 6 to 10 hrs
Review	- 0.5 to 2 hr
Issue RFP	- 2 to 3 hrs
Review Proposal	- 2 to 4 hrs
Tech Evaluation	- 4 to 8 hrs
Negotiation	- 2 to 4 hrs
Review Revised Proposal	- 2 to 3 hrs
Tech Eval. of revised	- 0.5 to 2 hrs
Issue Award	- 4 to 6 hrs

TOTAL - 23 to 42 hours

The cost would be approximately $3,000 to $5,000 Cost of Procurement

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA
[mailto:stephen.m.absolom@us.army.mil]
Sent: Friday, January 09, 2009 9:14 AM
To: Battaglia, Randy W NAN02; Nohrstedt, John HNC
Subject: Contracting Cost

Steve,
I am starting to update my CTC for this year. One area not preivously included in the costing is the establishment of a new Task/Delivery order. Can you give me a Cost to be included in my CTC for the COE to prepare and issue a task order? Please note that your email will be included in the CTC file so it needs to be accurate as possible.

Thanks
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362

Estimate Documentation Report

System:

RACER Version: 10.2.0
Database Location: C:\Documents and Settings\Andy W\Application Data\Earth Tech\RACER 10.2\Racer.mdb

Folder:

Folder Name: Seneca

Project:

Project ID: SEAD-003-R-01
Project Name: SEAD-003-R-01
Project Category: Conservation

Location
State / Country: NEW YORK
City: SENECA ARMY DEPOT

Location Modifier	Default	User
	1.114	1.114

Options
Database: System Costs
Cost Database Date: 2009
Report Option: Fiscal

Description

SEAD-003-R-01 Explosive Ordnance Range (EOD) Range (alias SEAD-57) This site also includes the 3.5" Rocket Range (alias SEAD-46)

Since this site is a Military Munitions Rule site, total OE costs reported have been captured in an OE EE/CA. The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the RD/RA HTRW component.

Site: SEAD-003-R-01, Former EOD Range (alias SEAD-57) and the 3.5" Rocket Range (alias SEAD-46)

Changes from FY08 Estimate:
- costs updated to FY09 database.

Source:

Estimate Documentation Report

1. Final Ordnance and Explosives Engineering Evaluation/Cost Analysis, January 2004.
2. Completion Report, Munitions Response and CERCLA Closure, SEAD 002-R-01, SEAD 57, SEAD 46, and SEAD 007-R-01, April 2007
3. Professional judgment based on site knowledge.

Phase: LTM will be an Institutional Control in perpetuity. Initial duration is 30 years for a recurring review every 2 years.

RACER Assumptions:
Remedial Design/ Remedial Action:
RA: The HTRW component of this site is the soils contaminates with metals in and below the berm area at the EOD berm at SEAD-57. Assume that once the berm and soils below the berm have been removed and disposed of at an off-site landfill, the COC's will pose no threat to the groundwater. Therefore, no gw monitoring or 5-year reviews will be required for the HTRW removal. The berm is approximately 250' x 30' x 5' and the area around and under the berm are approximately 100 x 150 x 5' as shown in Figure 4-7 of the RI report.
RD: RACER calculated per the RA cost total for the HTRW component. Design percentage equals 10%.

Estimate Documentation Report

Site Documentation:

Site ID: SEAD-57
Site Name: EOD Range
Site Type: None

Media/Waste Type
Primary: Soil
Secondary: N/A

Contaminant
Primary: Metals
Secondary: None

Phase Names
SI: ☐
RI/FS: ☐
RD: ☑
IRA: ☐
RA(C): ☑
RA(O): ☐
LTM: ☑
Site Closeout: ☐

Documentation
Description: SEAD-003-R-01 The EOD Range will require HTRW contamination addressed in addition to the OE during the removal action.
Support Team: Stephen M. Absolom - SEDA BEC
Randy Battaglia- US Army Corps of Engineers, Project Engineer
References: 1. Final Ordnance and Explosives Engineering Evaluation/Cost Analysis, January 2004.
2. Completion Report, Munitions Response and CERCLA Closure, SEAD 002-R-01, SEAD 57, SEAD 46, and SEAD 007-R-01, April 2007
3. Professional judgment based on site knowledge.

Estimator Information
Estimator Name: Andrew Weinberg
Estimator Title: Senior Geologist
Agency/Org./Office: Bechtel-S Corp.
Business Address: 203 E. Milton St.
Austin, TX 78704
Telephone Number: 512-344-9657
Email Address: aweinberg@bechtel-s.com
Estimate Prepared Date: 01/28/2009

Estimator Signature: _____ **Date:** _____

Estimate Documentation Report

Reviewer Information

Reviewer Name: Steve Absolom
Reviewer Title: Installation Manager
Agency/Org./Office: Seneca Army Depot Activity
Business Address:
Telephone Number: (607) 869-1309
Email Address: stephen.m.absolom@us.army.mil
Date Reviewed: 02/09/2009

Reviewer Signature: _____ **Date:** _____

Estimated Costs:

Phase Names		Direct Cost	Marked-up Cost
RD		$0	$39,621
RA(C)		$308,831	$434,500
LTM		$35,138	$77,883
	Total Cost:	$343,969	$552,004

Estimate Documentation Report

Phase Documentation:

Phase Type: Design Percent Method
Phase Name: RD
Description: Design for the removal of the berm and below the berm soils contaminated with metals, costed at 10% of RA(C) cost.

Total Capital Costs are the marked up costs for the items listed below, excluding the Professional Labor Management, Administrative Land Use Controls, and Operations and Maintenance technologies. Only the first year costs are included for cost-over-time technologies.

Phase Name	Phase Date	Design Approach	Total Capital Cost	Design %	Design Costs	Design Cost Year
RA(C)	September, 2012	Ex Situ Removal - Off-site Treatment or Disposal	$396,205	10.00	$39,621	2011

Total Design Cost: $39,621

Estimate Documentation Report

Phase Documentation:

Phase Type: Remedial Action
Phase Name: RA(C)
Description: Removal of contaminated soils in and below the berm.

Approach: Ex Situ
Start Date: September, 2012
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate

Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
Excavation	Yes	100	0
Off-site Transportation and Waste Disposal	Yes	100	0
Decontamination Facilities	Yes	100	0
Professional Labor Management	Yes	100	0
Load and Haul	Yes	100	0

Total Marked-up Cost: $434,500

Technologies:

Estimate Documentation Report

Technology Name: **Excavation (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Estimating Method		Length / Width / Depth	n/a
Length		150	FT
Width		100	FT
Depth		5	FT
Soil Type		Silt/Silty-Clay Mixture	n/a
Safety Level		D	n/a
Excavation			
Secondary Parameters			
Existing Cover	Soil/Gravel	Soil/Gravel	n/a
Replacement Cover	Soil/Seeding	Soil/Seeding	n/a
Sidewall Protection	None	None	n/a
% of Excavated Material To Be Used as Backfill	0	0	%
Source of Additional Fill	Off Site	Off Site	n/a
Backfill Hauling Distance (one way)	10	10	MI
Dewatering Required	No	No	n/a
Analytical			
Secondary Parameters			
Primary Analytical Template	System Soil - Metals	System Soil - Metals	n/a
Secondary Analytical Template	None	None	n/a
Number of Sampling Points/Locations	28	28	EA
Number of Composites Submitted to Lab	7	7	EA
Turnaround Time	Standard (21 Days)	Standard (21 Days)	n/a
Submit Data Electronically	Yes	Yes	n/a
Data Package / QC	Stage 1	Stage 1	n/a
Lab Data Review	Stage 1	Stage 1	n/a
Sampling Reports	Abbreviated	Abbreviated	n/a

Comments: This is to remove the soils below the berm footprint that is to be removed. The depth of the excacation is 5'. The area to be excavcavated is 100' by 150' wide.

Estimate Documentation Report

Technology Name: **Off-site Transportation and Waste Disposal (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Waste Type		Non-Hazardous	n/a
Waste Form		Solid	n/a
Condition of Waste		Bulk to remain as bulk	n/a
Volume of Bulk Solid Waste		185	CY
Stabilization		Not Required	n/a
Transportation Type		Truck	n/a
Truck Distance (One-way)		75	MI
Safety Level		D	n/a

Comments: For disposal of the contaminated soil below the berm surface.

Estimate Documentation Report

Technology Name: **Decontamination Facilities (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
New Decontamination Facility Pad Construction		Yes	n/a
Equipment Rating		Medium Equipment Rating	n/a
Equipment Decontamination Operations		Yes	n/a
Equipment Decontamination Operations: Duration		24	weeks
Personnel Decontamination Trailers		No	n/a
Personnel Decontamination Trailers: Average Crew Size		0	per shift
Personnel Decontamination Trailers: Duration		0	weeks
Safety Level		D	n/a
Decon Pad			
Secondary Parameters			
Area of Decontamination Pad	800	800	SF
Use Flexible Membrane Liner	Yes	Yes	n/a
Percentage of Time Decontamination Pad in Use	25	25	%
Work Shifts			
Secondary Parameters			
Equipment Decontamination		One Shift per Day	n/a
Personnel Decontamination		n/a	n/a

Comments:

Technology Name: **Professional Labor Management (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Markedup Construction Cost ($)		193,410	$
Percentage	19.8	19.7999992370605	%
Dollar Amount		38,295	$

Comments:

Estimate Documentation Report

Technology Name: **Load and Haul (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Truck Type		Highway	n/a
Volume		1,400	CY
One-way Haul Distance		75	MI
Dump Charge		65	$/CY
Safety Level		D	n/a

Comments: To remove berm, above ground mound. Approx. size is 250' x 30 ' x 5' with slighlty sloped sides. This will need to be removed and disposed of off-site.

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM
Description: Site Closeout for SEAD-003-R-01.

Start Date: September, 2014
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate

Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
Site Close-Out Documentation	Yes	100	0
Well Abandonment	Yes	100	0

Total Marked-up Cost: $77,883

Technologies:

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Meetings		Yes	n/a
Work Plans and Reports		Yes	n/a
Documents		Yes	n/a
Site Close-Out Complexity		Moderate	n/a
Meetings			
Required Parameters			
Kick Off/Scoping Meetings		Yes	n/a
Kick Off/Scoping Meetings: Number of Meetings	1	1	EA
Kick Off/Scoping Meetings: Travel		No	n/a
Review Meetings		Yes	n/a
Review Meetings: Number of Meetings	1	1	EA
Review Meetings: Travel		No	n/a
Regulatory Review Meetings		Yes	n/a
Regulatory Review Meetings: Number of Meetings	1	1	EA
Regulatory Review Meetings: Travel		No	n/a
Work Plans & Reports			
Required Parameters			
Work Plans		Yes	n/a
Draft Work Plan		Yes	n/a
Final Work Plan		Yes	n/a
Reports		Yes	n/a
Draft Close-Out Report		Yes	n/a
Draft Final Close-Out Report		Yes	n/a
Final Close-Out Report		Yes	n/a
Progress Reports		Yes	n/a
Project Duration	10	10	months
Documents			
Required Parameters			
Draft Decision Document		Yes	n/a
Draft Final Decision Document		Yes	n/a
Final Decision Document		Yes	n/a

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
Documents			
Required Parameters			
Long Term Document Storage		Yes	n/a
Number of Boxes		5	EA
Duration of Storage		30	Yrs

Comments:

Technology Name: **Well Abandonment (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Safety Level		D	n/a
Abandon Wells			
Required Parameters			
Technology/Group Name		Well Group	n/a
Number of Wells		13	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a

Comments:

STATEMENT OF WORK

MUNITIONS RESPONSE AND CERCLA CLOSURE

At

SENECA ARMY DEPOT, NY

CONTRACT: FA8903-04-D-8675
TASK ORDER: 0026
Project Numbers: AMSCO 61366R62, AMSCO 61366R01, AND AMSCO 61366R02

5 August 2005

SEAD-003-R-01
= SEAD-46, 57

1.0 SCOPE

This task order statement of work (SOW) defines the scope of construction and environmental activities necessary to remediate the Seneca Army Depot Activity (SEDA), NY.

1.2 General

Several geophysical investigations have been conducted at SEAD 46, SEAD 002-R-01, SEAD 57, and SEAD 007-R-01 to provide detailed coordinates of subsurface anomalies and define site boundaries for further investigation and/or removal actions. It is anticipated that after Munitions Response actions are completed, the soils remaining on the sites will be suitable for inclusion in a Preliminary Remedial Action Plan (PRAP) and Record of Decision (ROD) documenting that no further actins are required under CERCLA.

The SEAD OE EE/CA, February 2004 and the Geophysical Investigation SEAD 46 and 57, April 2005 is available to the Contractor to estimate the types and amounts of effort required. The subsurface objects/anomalies are to be presumed to be MPPEH (UXO, DMM, MC) at SEAD 57 and SEAD 007-R-01. SEAD 46 and SEAD 002-R-01 are presumed to contain Munitions Debris only and will be conducted with On-call Construction Support requirements unless MPPEH items are encountered as work progresses. The USACE will provide a DOD approved Explosives Safety Plan for incorporation into the contractor's Site Safety Plan under this concept.

The scope of work is to complete the subsurface investigations previously referenced, reacquire known and new targets, excavate the locations (max 2'radius, 4' depth) until a target object is identified, record the results while providing appropriate QC and Safety oversight of the UXO teams. In addition, soil excavation, MMR clearance, and soil transport and disposal is necessary for saturated response areas (metal contamination). General project requirements include; review and incorporation of the Final Reports and SEAD OE EE/CA, February 2004 and Geophysical Investigations Munitions Destruction Areas, SEAD 46 and 57, development of detailed project work plans and cost proposals, mobilization, mowing and grubbing as necessary, general site security, performance of appropriate intrusive investigations for all anomalies over 50 Mv response, excavation, clearance, and disposal of soil and debris in areas with more than 600 anomalies per acre, sampling and analysis of excavated and surface soils for disposition and closure of the sites, and preparation of all draft and final project reports including the PRAP and ROD, data, surveys and mapping.

1.2. Background

The work required under this scope of work falls under the Base Realignment and Closure (BRAC) program. Unexploded ordnance is a safety hazard and may constitute danger to site personnel and the local population if improperly managed. All activities involving work in areas potentially containing MPPEH shall be conducted in full compliance with USACE, DA and DOD requirements regarding personnel, equipment, and safety procedures. 29 CFR 1910 and

COMPLETION REPORT

MUNITIONS RESPONSE

SEAD 002-R-01, SEAD 57, SEAD 46 AND SEAD 007-R-01

SENECA ARMY DEPOT ACTIVITY,
ROMULUS, NEW YORK

April 2007

Prepared by:

PARSONS
150 Federal Street
Boston, MA 02110

TABLES OF CONTENTS

3.0 ORDNANCE AND EXPLOSIVES DEMILITARIZATION AND DISPOSAL

All MD and scrap metal items collected by UXO technicians on a daily basis were transferred to a staging area, inspected by both the SUXOS and UXO QC Supervisor, and placed into a locked storage area for temporary storage. Additional inspections were performed by the Senior UXO Supervisor (SUXOS), and again by the Senior QC (UXOQCS) Supervisor prior to being transferred to drums where a 1348-1A form was issued, Section 3.2 describes the final disposal procedures for all explosives and MD scrap metal

3.1 INTENTIONAL DETONATIONS

Demolition operations for MPPEH were conducted at the Open Detonation Hill (OD) to the north of the former Open Burning Grounds (OBG). In accordance with "Procedures for Demolition of Multiple Rounds (Consolidate Shots) on UXO Sites", dated August 1998 and approved by DDESB on 27 October 1998. Explosives Consumption Records are included in Appendix D. A table showing the suspected MPPEH items and the date they were vented is included as Table 2-2. Venting with a shape charge was used to distinguish MEC from MD.

All demolition explosives were transferred from the Army to Parsons/USA Environmental and kept in a secure storage bunker provided by the Army. All explosives were inspected weekly while in storage and transported in accordance with the State of New York's Department of Labor, Industrial Rule 39 and the Department of Treasury, Bureau of Alcohol, Tobacco, and Firearms (ATF) regulations.

3.2 OTHER DEMILITARIZATION PROCEDURES

All projectiles and intact MD were demilitarized by either explosive venting or by the removal/deformation of the rotating bands and fuse wells following inspections.

Following venting of all MPPEH items, thermal treatment of small arms, and/or physical demilitarization procedures, all items were disposed of off-site. A total of 4,180 pounds of cultural debris scrap metal, 618 pounds of aluminum MD and 2,689 pounds of ferrous MD scrap metal was disposed off-site. A 1348-1A form, chain of custody form, and certificate of destruction for this material is included in Appendix D.

Demobilization

Demobilization occurred in November 2006 following completion of the 10% QC inspection for all six sites.

3.3 CONCLUSIONS

Between May 2006 and November 2006, Parsons performed munitions removal operations in accordance with the ESS requirements. In general, the results of the munitions removal project performed at Seneca Amy Depot for SEAD 46, SEAD 57, SEAD 007-R-01 and SEAD 002-R-01 indicate that all MPPEH has been cleared from these sites. A total of two of the 11,739 identified anomalies which were investigated were found to be MEC. This indicates that these sites were free of MEC with the exception of an area north of SEAD 57 buffer area and not part of this project. The

Army believes that no additional munitions response activities are required at these sites. The conclusions from each individual site are provided below.

SEAD 57 (Former EOD Range) and the SEAD-57 Buffer Area

The only MEC items encountered during this project were found north of SEAD 57 including one fused unfired 37mm projectile in Grid 57 K-16 and one MKII grenade located in 57K-18 as shown on Figure 1-4c. Most ferrous MD items at SEAD 57 were found north of Building T011 and were not found within the high density 1,000 foot kick out radius from the SEAD 57 berm. Figure 1-4c identifies all ferrous and aluminum MD items that were recovered as part of the SEAD 57 investigation. The ferrous MD items are shown in this figure. The pattern of the aluminum MD clearly radiates out from the center of the SEAD 57 berm in a circular pattern. The 43 other MPPEH items (listed on Table 2-2) found at SEAD 57 were all determined to be MD upon venting of the items during the disposal process. SEAD 57 is considered cleared of MPPEH.

SEAD 46 (Former 3.5-inch Rocket Range)

During the investigation of SEAD 46, 22 MPPEH items were found from the 1,611 geophysical anomalies investigated. All 22 items were found to be MD after they were vented. No MEC items were found at SEAD 46. The locations of the MD suggest that the SEAD 46 berm was not used as a target for anything other than small arms practice. The MD items are actually found in areas located away from the berm. Based on the discovery of inert landmines and a sign that identifies the area as a practice minefield for EOD and military training exercises, this was most likely the use of the site. There is no evidence that it was used as a rocket range as previously identified. Based on the results of the past three investigations SEAD 46 is considered cleared of MPPEH.

SEAD 002-R-01 (EOD Areas 2 and 3)

Two MPPEH items (an electric Squibb) were found at EOD Area 2 and it was later determined to be expended. The second item, a M16 APERS, was found by the survey team conducting a boundary survey of the pond low water mark. This item was found without a fuse but due to the mud and debris that filled the case, the item was vented to dispose of any explosive residue that may have remained. It was determined to be inert. At EOD Area 3, no MPPEH items were found during the geophysical anomaly investigation or the expanded handheld investigation of the unmapped area. SEAD 002-R-01 is considered cleared of MPPEH.

SEAD 007-R-01 (Grenade Range)

During the anomaly investigation of the Grenade Range, a total of 221 MPPEH items were found. All MPPEH were related to the M73 Practice LAW Rocket. The 40mm practice grenade found at this site has an inertia driven expelling system with no explosive material. The M73 Practice LAW Rocket has a 1.5 gram spotting charge. The 1.5 gram spotting charge is designed to produce only a flash, smoke, and noise at the time of impact initiated by an inertia driven firing pin. Of the 221 M73 Sub-caliber rounds found, none were found to have the rocket motor intact, all had been functioned previously. Based on these reasons, all of the MPPEH items were reclassified as MD. All 221 of

these rounds were brought to the demolition area and disposed of by detonation. SEAD 007-R-01 is considered cleared of MPPEH.

Local Training Areas

Six individual MD items were found in the Local Training Areas B through L. The items were 37mm and 57mm TPT (target practice) rounds that contained no explosives. The remaining MD items were all small arms ammunition (50 cal.) both ball and incendiary ammunition that were thermally treated before disposal. The Local Training Areas B-7 through L-7are considered free of MPPEH.

CONTRACT

ORDER FOR SUPPLIES OR SERVICES

1. CONTRACT/PURCH ORDER/AGREEMENT NO.	2. DELIVERY ORDER/ CALL NO.	3. DATE OF ORDER/CALL (YYYYMMMDD)	4. REQUISITION/PURCH REQUEST NO.	5. PRIORITY
FA8903-04-D-8675	0026	16 FEB 2006	SEE SCHEDULE	DO-G3

6. ISSUED BY ~~HSW/PKV-W~~ CODE FA8903
AIR FORCE MATERIEL COMMAND
311TH HUMAN SYSTEMS WING/PKV-W
3300 SIDNEY BROOKS
BROOKS CITY BASE TX 78235-5112
EDWIN CUSTODIO (210)536-4493
Edwin.Custodio@hqafcee.brooks.af.mil

7. ADMINISTERED BY *(If Other than 6)* CODE FA8903
DEPARTMENT OF THE AIR FORCE
AFMC 311 HUMAN SYSTEMS WING/PKV-W
3300 SIDNEY BROOKS
BROOKS CITY BASE TX 78235-5112

SCD: C PAS: (NONE)

8. DELIVERY FOB
X DESTINATION
OTHER *(See Schedule if other)*

9. CONTRACTOR CODE 1BVK6 FACILITY
NAME AND ADDRESS
PARSONS INFRASTRUCTURE & TECHNOLOGY GROUP INC
100 W WALNUT ST
PASADENA CA 91124-0001
(626) 440-2000

10. DELIVER TO FOB POINT BY *(Date)*
(YYYYMMMDD) SEE SCHEDULE

11. X IF BUSINESS IS
SMALL
SMALL DISADVANTAGED
WOMEN-OWNED

12. DISCOUNT ITEMS
N

13. MAIL INVOICES TO ADDRESS IN BLOCK
See Field 15 (Payment Office) and Section G

14. SHIP TO CODE
SEE SCHEDULE

15. PAYMENT WILL BE MADE BY CODE W916TX
PR W1J5 USACE FIN CTR
5722 INTEGRITY DRIVE
BLDG 787; PARENT CODE 2100
MILLINGTON TN 38054-5005

EFT:T

MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.

16. TYPE OF ORDER
DELIVERY/CALL [X] This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.
PURCHASE [ ] Reference your ____ furnish the following on items specified herein.

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR | SIGNATURE | TYPED NAME AND TITLE | DATE SIGNED(YYYYMMMDD)

[ ] If this box is marked, supplier must sign Acceptance and return the following number of copies:

17. ACCOUNTING AND APPROPRIATION DATA/LOCAL USE
SEE SCHEDULE

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/SERVICES	20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT

*If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.

24. UNITED STATES OF AMERICA
//signed//
BY: CLIFFORD R. TRIMBLE 16 FEB 2006
CONTRACTING/ORDERING OFFICER

25. TOTAL $2,304,100.00
29. DIFFERENCES

26. QUANTITY IN COLUMN 20 HAS BEEN
[ ] INSPECTED [ ] RECEIVED [ ] ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

DATE SIGNATURE AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

27. SHIP NO. **28. D.O. VOUCHER NO.** **30. INITIALS**

[ ] PARTIAL [ ] FINAL

32. PAID BY

33. AMOUNT VERIFIED CORRECT FOR

32. PAYMENT [ ] COMPLETE [ ] PARTIAL [ ] FINAL

34. CHECK NUMBER

35. BILL OF LADING

36. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT.

DATE SIGNATURE AND TITLE OF CERTIFYING OFFICER

37. RECEIVED AT	38. RECEIVED BY *(Print)*	39. DATE RECEIVED *(YYYYMMMDD)*	40. TOTAL CONTAINERS	41. S/R ACCOUNT NO.	42. S/R VOUCHER NO.

1. In accordance with the terms and conditions of the Basic Contract FA8903-04-D-8675 and this task order 0026, the contractor shall accomplish the effort described in the attached Statement of Work (SOW) dated 5 August 2005 at a total Cost Plus Fixed Fee amount of $2,304,100.00.

2. **SECTION B - Supplies/Services:**

Pursuant to FAR 52.232-20, entitled "Limitation of Cost", estimated cost is $2,180,163.00.

The estimated cost and fee for this Task Order is shown below. The applicable fixed fee set for target fee set forth below may be increased or decreased only by negotiation and modification of the contract for added or deleted work. As determined by the Contracting Officer, it shall be paid as it accrues, in regular installments based upon the percentage of the completion of work (or the expiration of the agreed-upon periods(s) for term contracts).

Cost:	$2,180,163.00
Fixed Fee:	$ 123,937.00
Total CPFF:	$2,304,100.00

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
0005		1	EST $2,304,100.00
		Lot	EST $2,304,100.00
	Noun:	ENVIRONMENTAL REMEDIATION AND CONSTRUCTION EFFORTS	
	NSN:	N - Not Applicable	
	Contract type:	U - COST PLUS FIXED FEE	
	Inspection:	DESTINATION	
	Acceptance:	DESTINATION	
	FOB:	DESTINATION	
	Item project mgr.:	IWA	
	Descriptive Data:		
	The contractor shall provide the necessary effort for environmental remediation in accordance with the Statement of Work, dated 5 August 2005.		
000501			
	Noun:	Funding Info Only	
	ACRN:	AA $194,644.00	
	PR/MIPR:	F1JFAA6019B0AC	$194,644.00
000502			
	Noun:	Funding Info Only	
	ACRN:	AB $144,007.00	
	PR/MIPR:	F1JFAA6019B0AC	$144,007.00
000503			
	Noun:	Funding Info Only	
	ACRN:	AC $150,686.00	
	PR/MIPR:	F1JFAA6019B0AC	$150,686.00

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000504			
	Noun:	Funding Info Only	
	ACRN:	AD $600,000.00	
	PR/MIPR:	F1JFAA6019B0AC	$600,000.00
000505			
	Noun:	Funding Info Only	
	ACRN:	AE $781,893.00	
	PR/MIPR:	F1JFAA6019B0AC	$781,893.00
000506			
	Noun:	Funding Info Only	
	ACRN:	AF $283,790.00	
	PR/MIPR:	F1JFAA6019B0AC	$283,790.00
000507			
	Noun:	Funding Info Only	
	ACRN:	AG $149,080.00	
	PR/MIPR:	F1JFAA6019B0AC	$149,080.00
0006		1 Lot	NSP NSP
	Noun:	DATA	
	ACRN:	U	
	NSN:	N - Not Applicable	
	Contract type:	U - COST PLUS FIXED FEE	
	Inspection:	DESTINATION	
	Acceptance:	DESTINATION	
	FOB:	DESTINATION	
	Item project mgr.:	IWA	
	Descriptive Data:		
	The contractor shall provide data in accordance with CDRL Tables in Exhibits A, B, and C, and as implemented by direction provided in the SOW. This CLIN is Not Separately Priced (NSP). The prices associated with this CLIN are included in CLIN 0005.		

3. **SECTION C - Description/Specs/Work Statement**: Work is to be performed in accordance with the Statement of Work (SOW) dated 5 August 2005 "Munitions Response and CERCLA Closure at Seneca Army Depot, NY". Projects: AMSCO 61366R62, AMSCO 61366R01, AMSCO 61366R02

4. **SECTION D - Packaging and Marking**:

a. D-001 entitled, "PRESERVATION, PACKAGING, PACKING AND MARKING REQUIREMENTS (FEB 1997)":

PKV-D1 MARKING OF SHIPMENTS (ALTERNATE I)(SEP 2000)".

(a) The contractor shall mark all shipments under this contract in accordance with MIL-STD-129 entitled "Marking for Shipment and Storage".

(b) Each shipment of material and/or data/reports shall be clearly marked to show the following information:

SHIP TO: AFCEE/IWA
3300 Sidney Brooks
Brooks-City Base, TX 78235-5112

MARK FOR: Contract Number: FA8903-04-D-8675
Task Order No: 0026
Data Item No: (see block 1 of CDRL Table for data item no.)
Title/Subtitle (as applicable): (see blocks 2 & 3 for title and/or subtitle)

b. All shipments submitted under this order shall be forwarded prepaid.

5. **SECTION E - Inspection and Acceptance**:

Inspection and acceptance (including the pre-final) will be performed by the Contracting Officer's designated representative. Final inspection and acceptance location is at Seneca Army Depot, NY.

6. **SECTION F - Schedule Data**:

ITEM	SUPPLIES SCHEDULE DATA	QTY	SHIP TO	MARK FOR	TRANS PRI	DATE
0005		1	F1JFAA			28 Feb 2007
	Noun:	ENVIRONMENTAL REMEDIATION AND CONSTRUCTION EFFORTS				
	ACRN:	9				
	Descriptive Data: The contractor shall deliver the remediation effort in accordance with the Statement of Work, dated 5 August 2005.					
0006		1	F1JFAA			28 Feb 2007
	Noun:	DATA				
	ACRN:	U				
	Descriptive Data: The contractor shall deliver data in accordance with the CDRL Tables, Exhibits A, B, and C, and as directed by the SOW.					

7. **SECTION G- Accounting and Appropriation Data:**

This task order is not Wide Area Work Flow (WAWF) eligible at this time.

a. Submit cost vouchers and invoices electronically to the AFCEE Contract Administrator with the pertinent supporting documentation, cost/schedule/status reports, as attachments in one e-mail to:

(1). AFCEE_ACW_INVOICES @brooks.af.mil
(2). cc: (Contracting Officer Representative) [COR]@brooks.af.mil
(3). cc: Base POC if applicable
(4). cc: AFCEE.MSCMSCS@brooks.af.mil

b. Ensure the subject line is in the following format:
FA8903-04-D-8675-0026, Invoice/Voucher #*, Seneca Army Depot NY, NONAF, CPFF
(#* use actual number)

c. All other documents are to be submitted per the CDRL tables.

d. Incomplete submissions will be rejected and returned.

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AA		$194,644.00
	97 X0510 40B1 E3199608801161366R6200025GZC8541CNAS190160 *Funding breakdown:* On CLIN 000501: $194,644.00 *PR/MIPR:* F1JFAA6019B0AC $194,644.00 *PR Long line:* 97 X0510 40B1 E3199608801161366R6200025GZC8541CNAS1901600008735 *Descriptive data:* MSR Control # Army 06-154/155/156 W16ROE53563491, Basic, Dtd 22 Dec 2005, expires 30 Nov 2008 $194,644.00 Project AMSCO 61366R62 PR Complete	
AB		$144,007.00
	97 X0510 40E1 E3199908801161366R6200025FBC8541CNAS190160 *Funding breakdown:* On CLIN 000502: $144,007.00 *PR/MIPR:* F1JFAA6019B0AC $144,007.00 *PR Long line:* 97 X0510 40E1 E3199908801161366R6200025FBC8541CNAS1901600008735 *Descriptive data:* MSR Control # Army 06-154/155/156 W16ROE53563491, Basic, Dtd 22 Dec 2005, expires 30 Nov 2008 $144,007.00 Project AMSCO 61366R62 PR Complete	
AC		$150,686.00
	97 X0510 0000 E3200008801161366R6200025FBC8541CNAS190160 *Funding breakdown:* On CLIN 000503: $150,686.00 *PR/MIPR:* F1JFAA6019B0AC $150,686.00 *PR Long line:* 97 X0510 0000 E3200008801161366R6200025FBC8541CNAS1901600008735 *Descriptive data:* MSR Control # Army 06-154/155/156 W16ROE53563491, Basic, Dtd 22 Dec 2005, expires 30 Nov 2008 $150,686.00 Project AMSCO 61366R62 PR Complete	

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount

AD $600,000.00

97 X0510 40G1 E3200108801161366R6200025FBC8541CNAS190160
Funding breakdown: On CLIN 000504: $600,000.00
PR/MIPR: F1JFAA6019B0AC $600,000.00
PR Long line: 97 X0510 40G1
E3200108801161366R6200025FBC8541CNAS1901600008735
Descriptive data:
MSR Control # Army 06-154/155/156
W16ROE53563491, Basic, Dtd 22 Dec 2005, expires 30 Nov 2008 $600,000.00
Project AMSCO 61366R62
PR Complete

AE $781,893.00

97 X0510 40K1 E3200508801161366R6200025FBC8541CNAS190160
Funding breakdown: On CLIN 000505: $781,893.00
PR/MIPR: F1JFAA6019B0AC $781,893.00
PR Long line: 97 X0510 40K1
E3200508801161366R6200025FBC8541CNAS1901600008735
Descriptive data:
MSR Control # Army 06-154/155/156
W16ROE53563491, Basic, Dtd 22 Dec 2005, expires 30 Nov 2008 $781,893.00
Project AMSCO 61366R62
PR Complete

AF $283,790.00

97 X0510 40K1 E3200508801161364R0200025FBFKBB50NAS190160
Funding breakdown: On CLIN 000506: $283,790.00
PR/MIPR: F1JFAA6019B0AC $283,790.00
PR Long line: 97 X0510 40K1
E3200508801161364R0200025FBFKBB50NAS1901600008735
Descriptive data:
MSR Control # Army 06-154/155/156
W16ROE53493245, Basic, Dtd 15 Dec 2005, expires 30 Dec 2007 $283,790.00
Project AMSCO 61364R02000
PR Complete

AG $149,080.00

97 X0510 40K1 E3200508801161366R0100025FBHF572DNAS190160
Funding breakdown: On CLIN 000507: $149,080.00
PR/MIPR: F1JFAA6019B0AC $149,080.00
PR Long line: 97 X0510 40K1
E3200508801161366R0100025FBHF572DNAS1901600008735
Descriptive data:
MSR Control # Army 06-154/155/156
W16ROE53493241, Basic, Dtd 15 Dec 2005, expires 30 Dec 2007 $149,080.00
Project AMSCO 61366R01000
PR Complete

MEMORANDUM FOR RECORD

SUBJECT: Environmental Liabilities **Date:** 08 April 2009

This memorandum serves as formal documentation of the information used to develop the Cost-To-Complete (CTC) estimate for site SEAD-006-R-01 for the 2009 data call. The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of the Groundwater Monitoring, the 5-Year Review, Site Closeout, Well Abandonment, and Land Use controls. Costs for SEAD-023 were added to the RI/FS phase as directed by AEC. This assumes GW monitoring ramps down from quarterly to annually at the 1st Five Year Review. It is also assumed GW monitoring will double the number of wells currently installed at SEAD-023. SEAD-23 monitoring program under this project will be carried under the RI/FS phase until completion of the IRA. After that, the work will be carried under the LTM phase.

Site: SEAD-006-R-01 RCRA Closure of the OB/OD Grounds (alias SEAD-115)

Source:
1. Concept Plan, Ordnance and Explosives for A RCRA Closure of the OB/OD Grounds at Seneca Army Depot Activity, Sept. 2002
2. Final Ordnance and Explosives Engineering Evaluation/Cost Analysis, January 2004
3. Draft RCRA Closure Plan Open Burn Tray in SWMU Unit –23 (SEAD-23, OB Grounds), December 2004
4. Final Record of Decision Former Open Burning Grounds Site, January 1999
5. Final Long Term Monitoring Plan for Open Burning Grounds, January 2007
6. Corps of Engineers Memo dated March 13, 2008, subject: Supervision and Administration Rate Changes
7. Contract DACA87-02-D-0005, Delivery Order # 36, DTD August 22, 2007
8. Email from John Norhstedt DTD January 12, 2009, Subject: Contracting Cost
9. Work Authorization Directive dated 12 August 2002
10. Military Interdepartmental Purchase Request 09 August 2005 AFCEE Fee
11. Email from Roger Walton dated 10 February 2009, subject Escalation Factors
12. Professional judgment based on site knowledge.

RACER Assumptions: .

Five-Year Review (RACER):
1. 6 review cycles
2. Reviews cycle begins October 2006 with first review in 2011
3 Moderate complexity
4. Tasks include Document Review, Interviews and Site Inspections
5. Report for Five Year Review to include all default parameters

Reduction because on magnitude of the project is
Expected based on professional judgment.

RA Total **$17,465,387**

LTM

OE Review (Source 2) $1,719/review for 15 reviews	$25,785	
Additional GW Monitoring at SEAD-006-R-01 6 wells, 15 ft, 2" diameter screened entire length Install 6 GW wells (from contract)	$25,834	
Monitor wells quarterly 1st 5 years, annually thereafter		
Years 1-5, $17,574/event x 4 events/yr x 5 years (SEAD-006-R-01)	$351,480	
Years 6-30, $17,574/event x 1 event/yr x 25 years (SEAD-006-R-01)	$439,350	
Years 8-30, $17,574/event x 1 event/yr x 23 years (for SEAD-23)	$404,202	
Annual Report $9,930/year x 30 years	$297,900	
Annual Report $9,930/year x 23 years (SEAD-23)	$228,390	
Monitoring subtotal	**$1,747,156**	
Site Closeout (RACER)	$60,453	
Land Use Controls from RACER (in perpetuity)	$461,008	
Site Closeout & Well Abandonment (RACER) (SEAD-23)	$71,158	
5-year Reviews (RACER)	$279,975	

LTM Cost **$2,645,535**

Assumption:
COE Support for GW Monitoring and LTM
Assume 5 year contracts duration over 30 years
resulting in 6 contract actions, closeouts, and 30 years

Site Closeout Documentation (LTM) (Source 8):
1. Site Closeout is moderate complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years

Well abandonment (LTM):
!. Number of wells: 10
2. Well depth: 15 feet
3. Well diameter: 2"
4. Unconsolidated
5. Overdrill/excavation

Cost Summary SEAD-006-R-01 (SEAD-115)

RI/FS

Monitoring OB Grounds, SEAD-023 (Sources 4 & 7)

Years 3-5 quarterly $210,888
$17,574/event x 4 events/yr x 3

Years 6-7 annually $35,148
$17,574/event x 2 years

Annual Report $9,930/year x 5 years $49,650

RI/FS Cost Total (OB Grounds, SEAD-023) $295,686

RA

IRA (Source 1) FY02 cost plus escalation $18,673,135
$16,021,506 x 1.1655 (FY02 escalation per AEC) (Source 11)

RCRA Closure of OB/OD Tray from RCRA plan (Source 3) $45,256

Funding previously provided for mapping (Source 9) ($3,500,000)

Remedial Design 5% of RA (0.05 x 15,218,391) $760,920
Industry Std. is 10%. However, with the low complexity and repetition of work & professional judgment, cost was decreased to 5%.

COE over site of RD/RA cost 5.8% $926,800

($760,920 + $15,218,391) x 0.058
$15,979,311

Procurement cost AFCEE 3.5% $559,276
($15,979,311 x 0.035)
AFCEE Fee is 4.5% (Source 10) However a 1%

of annual monitoring. Monitoring and 5-year review contracts are assumed to be firm fixed price and standard procurements.

COE Cost	
Contract Procurement $3,000/event x 6 events	$18,000
Contract Monitoring $5,000/year x 30 years	$150,000
Contract Closeout $1,000/event x 6 events	$6,000

S&A for LTM Support (Source 6)
0.058(GW monitoring (2 areas) + OE review + LUCs + 5yr Review + Site Closeout + GW Well Installation)
0.058(297,900 + 439,350 + 351,480 + 210,888 + 439,350 + 278,040 + 25,834 + 279,975 + 461,008 + 60,453 + 25,785 + 71,158) = 2,941,221
0.058 x 2,941,221 $170,591

COE Support **$344,591**

Total Site Cost **$20,751,199**

Cost Difference > 10% from 2008 Report? No

Prepared by: Randall Battaglia _____ 4/9/09
Signature Date

Reviewed by: Stephen M. Absolom _____ 4/9/09
Signature Date

Source 1

Conceptual Plan

Ordnance and Explosives for a RCRA Closure of the Open Burning and Open Detonation (OB/OD) Grounds,

Seneca Army Depot Activity

Romulus, New York

September, 2002

Submitted by
Seneca Army Depot Activity

1. Introduction

FS

This plan is submitted to gain conceptual approval for the placement of a Resource Conservation and Recovery Act (RCRA) cap in the Open Burn/Open Detonation (OB/OD) area at Seneca Army Depot Activity (SEDA). An overall site map showing the general location of the OB/OD grounds is provided as Figure 1. Both New York State and EPA Remedial Project Managers defer Ordnance and Explosives/Unexploded Ordnance (OE/UXO) requirements to the Department of Defense (DoD). If this concept is approved, the Army will submit a standard Explosives Safety Submission (ESS), providing the normally required level of detail to the Department of Defense Explosives Safety Board (DDESB) for approval.

As part of this closure process, a large disposal pile resulting from previous response actions in the OB area will be consolidated and contained beneath the proposed RCRA Cap. The overall closure approach is to level this pile on the OD area where clearance of potential OE is costly and a four-foot thick RCRA cap is the proposed remedy. The large quantity of range residue, demil residue, fragments, and non-OE scrap metal at the OD grounds likely creates a situation where capping, and not removal, is the proposed remedy. The remainder of the OB/OD area will have anomalies investigated and removed to depth such that at the end of the project the area can be certified for surface recreation. This general concept is presented in Figure 2. The essence of this proposed remedy is that a 4-foot cap of clean fill is the equivalent of clearance to 4 feet, which is the default clearance depth to allow unrestricted surface recreation (Chapter 12 of DoD 6055.9 STD, July 1999).

This preliminary determination is requested so that SEDA can begin planning and interfacing with the regulators and the community with a high degree of confidence that the proposed approach is conceptually acceptable internally within the DoD

2. Facility Background

SEDA is a 10,600-acre US Army facility located in Seneca County, New York, Figure 1. It is bounded on the west by State Route 96A and on the east by State Route 96. The cities of Geneva and Rochester are located to the northwest (14 and 50 miles, respectively); Syracuse is 53 miles to the northeast and Ithaca is 31 miles to the south. The surrounding area is generally used for farming.

Open detonation/open burning operations have been conducted from the early 1940s until recently in the munitions destruction area (90 acres) in the northwest portion of the installation. The OD grounds occupy an area of approximately 60 acres within the northern portion of this site and the OB grounds cover an adjacent 30 acres.

At the OB/OD grounds a variety of rounds were demilitarized and there is no Chemical Warfare Materials (CWM) known or suspected at this site.

improvements in separation and handling were achieved over time during the clearance of the OB grounds, for the debris pile it may be more cost effective to use the alternate approach of consolidation and capping at the OD grounds than is now being proposed (see Section 4 – cost evaluation).

After the initial removal of OE materials from the OB grounds, the entire area (30 acres) was then subjected to geophysical survey and the anomalies that were discovered were flagged. SEDA has just recently completed the investigation and removal of all anomalies to a depth of at least two feet. Initial indications are that based on the type and depth of anomalies being found that clearance of the entire 30 acres to a depth of 4 feet has been accomplished.

An initial survey for OE has been performed at the OD grounds as part of the Ordnance and Explosive Engineering Evaluation and Cost Analysis (May 2000, Parsons Engineering Science, Inc.). An Expanded Site Inspection (ESI) was performed in 1995 to evaluate potential releases of hazardous substances at the OD grounds.

4. Cost Analysis

Alternatives for the handling of the oversized material were evaluated in the "Seneca Validation Report for Mt. Molle Disposal Pile", June 14, 2002. The report focused on the handling of this material separately from the actions at the OD grounds. However since these two areas are an integrated Solid Waste management Unit (SWMU) and overall cost efficiencies can be obtained by handling the oversized material with the OD grounds closure, new alternatives are now being considered. Two alternatives for addressing the oversized material and the OD closure together are summarized below and costs presented for each.

Approve
Optio

Alternative 1. Segregate OE materials from oversize pile and dispose according to current procedures. Clear the approximately 76 acres of the central area of the OD area using methods refined during OB grounds clearance. Clearance will be performed such that future use of the area can be unrestricted surface activity. In general this involves: excavating the top 1 foot of soil over the entire area and separating out OE materials; after the top 1 foot is removed, performing a geophysical survey to identify remaining anomalies; intrusively investigating identified anomalies, removing and demilitarizing OE materials found; replacing excavated soils and final grading. During this process soils contaminated with metals will be segregated, stabilized and disposed off-site.

Alternative 2. Cap central area of OD grounds (approximately 76 acres) and consolidate pile of oversized material under the cap at the OD grounds. The cap will meet RCRA requirements for closure of the OD grounds and will have a thickness (four feet) to enable future use as unrestricted surface recreation.

Tables 1 and 2 present the costs for Alternatives 1 and 2 respectively. The total capital cost of Alternative 1 is approximately $17,721,000 and the total capital cost for

Table 1
OD Clearance and Mt. Molle Treatment

SENECA ARMY DEPOT

Item Description	Cost
Process Material to Separate out Dangerous Items	$5,845,000
Stabilize HTRW Contaminated Soil	$1,740,000
Load HTRW Soils	$463,386
Transport and Dispose of HTRW Soils	$5.236,000
Clear Soil of Dangerous Items	$1,100,000
Geophysically Map New Conditions (Final Clearance Survey)	$98,800
Investigate Anomalies	$760,000
Treatment of OE/OES (Dangerous) Items	$726,880
Grade and Vegetate Area	$1,500
Work Plan Preparation	$50,000
Oversize Material From OB Seperation and Processing	$1,699,528
Total Remedial Action	$17,721,094
Per Acre Cost	$233,172

Not part of this pr
COST

17,721,094
- 1 699,528
16,021,566

16,021,566 FY02 cost

DEPARTMENT OF THE ARMY
HEADQUARTERS, U.S. ARMY OPERATIONS SUPPORT COMMAND
1 ROCK ISLAND ARSENAL
ROCK ISLAND, IL 61299-6000

REPLY TO
ATTENTION OF:

AMSOS-SF

12 SEP 2002

MEMORANDUM FOR

US Army Material Command (Elaine Andregg), 5001 Eisenhower Avenue, Alexandria, VA 22333-0001
Defense Ammunition Center, SOSAC-ES (Jean Gallagher) 1C Tree Road, Building 35, McAlester, OK 74501-9053
Commander's Representative, SOSSE-BEC, Seneca Army Depot Activity, 5786 State Rte 96, P.O. Box 9, Romulus, New York, 14541-0009

Capping
Disapprov

SUBJECT: OB/OD Concept Plan

1. AMSOS-SF non-concurs in this concept for remediation of open burning (OB) / open detonation (OD) grounds at Seneca Army Depot Activity (SEDA) and elsewhere. This plan calls for "capping" (putting layers of soil over) OB/OD grounds instead of removing ordnance and explosives (OE) and unexploded ordnance (UXO). In essence, this plan advocates burial of OE/UXO as remediation in lieu of removal and treatment. We strongly disagree with that premise. Our objective must be to remove and treat OE/UXO.

2. We have even more objections to the SEDA-proposed application of this plan. SEDA proposes to bring OE/UXO from their cleanup of the OB ground to the OD ground, spread it out on the OD ground, then cover it all with soil. Deliberate introduction of OE/UXO into the "cap" is not acceptable in our view.

3. This plan conflicts with mandatory provisions of DOD 6055.9-STD, "Ammunition and Explosives Safety Standards", August 1999. Paragraph C12.2.2.2 prohibits burial of OE/UXO as remediation. It reads: "Permanent contamination of real property by final disposal of ammunition and explosives or chemical agents is prohibited. This prohibition extends to disposal by land burial; by discharge onto watersheds or into sewers, streams, lakes or waterways". Furthermore, paragraph 12.3.2.4 requires removal of OE/UXO. It reads: "Ammunition, explosives or chemical agents shall be removed until an acceptable level of protection is reached".

Source 2

FINAL

ORDNANCE AND EXPLOSIVES ENGINEERING EVALUATION/ COST ANALYSIS REPORT

SENECA ARMY DEPOT ROMULUS, SENECA COUNTY, NEW YORK

Prepared For:

SENECA ARMY DEPOT ACTIVITY
and
U.S. ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT
and
HUNTSVILLE CENTER

Contract No. DACA87-95-D-0018
Delivery Order No. 0052

Prepared By:

PARSONS ENGINEERING SCIENCE, INC.
100 SUMMER ST
BOSTON, MA 02110

JANUARY 2004

EXECUTIVE SUMMARY

ES1 The 10,587-acre Seneca Army Depot Activity (SEDA) facility was constructed in 1941 and has been owned by the United States Government and operated by the Department of the Army since that date. From its inception in 1941 until 1995, SEDA's primary mission was the receipt, storage, maintenance, and supply of military items, including munitions and equipment. The Depot's mission changed in early 1995 when the Department of Defense (DOD) recommended closure of the Seneca Army Depot under its Base Realignment and Closure (BRAC) process. This recommendation to close Seneca Army Depot Activity was approved by Congress on September 28, 1995 and the Depot was officially closed in July 2000.

ES2 In accordance with the requirements of the BRAC process, the Seneca County Board of Supervisors established the Seneca Army Depot Local Redevelopment Authority (LRA) in October 1995. The primary responsibility assigned to the LRA was to plan and oversee the redevelopment of the Depot. The Reuse Plan and Implementation Strategy for Seneca Army Depot was adopted by the LRA and approved by the Seneca County Board of Supervisors on October 22, 1996. Under this plan and subsequent amendment, areas within the Depot were classified as to their most likely future use. These areas included: housing, institutional, industrial, an area for the existing navigational LORAN transmitter, recreational/conservation, and an area designated for a future prison.

ES3 In July of 1998, the U.S. Army Corps of Engineers (USACE) conducted a site visit and historical data collection effort. The findings are documented in the Archives Search Report (ASR). The ASR initially subdivided the depot into 27 Areas of Interest (AOIs) for ordnance contamination based on physical attributes, homogeneity, and current and historical land use. The ASR evaluated each AOI to determine whether the area should or should not be investigated for ordnance and explosives/ unexploded ordnance (OE/UXO). Each AOI was classified as requiring further investigation or not requiring further investigation based on a review of historical documents, aerial photography, and employee interviews. Most of the AOIs were also visited by USACE to determine whether any traces of OE were readily apparent.

ES4 The ASR classified 15 of the areas as uncontaminated. Subsequently, one of the areas recommended for further investigation, SEAD-43, was classified as a no further action site after a geophysical and intrusive investigation in 1999. The remaining 11 AOIs discussed in the ASR were classified as sites where OE might present a safety risk. This Engineering Evaluation and Cost Assessment project was undertaken in order to determine the nature and extent of possible OE contamination at these sites.

ES5 The EE/CA fieldwork used geophysical survey techniques and intrusive investigations to estimate the density of the ordnance in different areas, which was then compared with the current and future activities and anticipated users. Data collected from this characterization project were also used to develop alternatives designed to reduce the risk of possible exposure to UXO within AOIs. These alternatives were then evaluated to determine their effectiveness, implementability, and cost.

ES6 Results of this comparison indicate that there are portions of SEDA where alternatives requiring removal of UXO will be necessary to ensure public safety. The results also indicate that implementation of site-wide institutional controls will be necessary to manage residual risk. Several AOIs within SEDA will not require any OE removal operations to make the property safe for the proposed future uses.

ES7 OE response action alternatives were evaluated for each of the 11 AOIs at SEDA that were investigated during this EE/CA investigation. Each potential alternative was initially screened against the general evaluation criteria of effectiveness, implementability, and cost. The screening of alternatives was used to identify candidate OE response alternatives for further qualitative evaluation. Each of the alternatives remaining after this screening were then compared to each other as far as effectiveness, implementability, and cost. Once the remaining alternatives at each AOI had been compared, one alternative was chosen as the most appropriate response to the existing OE hazard.

ES8 The following response actions have been chosen for the AOIs investigated during the Seneca OE EE/CA:

- NFA – SEAD-53 (Igloo Area) ditches, Demo Range, Indian Creek Burial Area. These sites are no longer under consideration as ordnance sites
- Institutional Controls – Base wide, no individual areas
- Clearance to Depth of 6" – SEADs-16 and –17 (Deactivation Furnaces), EOD Area #2
- Clearance to Depth of Instrument Detection – EOD Area #3, SEAD-44A (QA Function Test Area), SEAD-46 (3.5" Rocket Range), Grenade Range
- Clearance to Depth by Means of Excavation and Mechanical Sorting – SEAD-45 (Open Detonation Area), SEAD-57 (Former EOD Range)

Complete descriptions of each of these alternatives are contained in Section 7.

Table G-23
SEAD-4 (3.5" Rocket Range)
Cost Estimate for Alternative 3:
Clearance to 6"

This estimate assumes:
Clearance to 6" of 370 acres in SEAD-45
A 700' x 700' fence surrounding the demo berm in SEAD-57

Item	Unit	Unit Cost	Amount	Initial Cost	Life Cycle Cost (30 yrs)	Total Cost
UXO Clearence to 6"[1]	acre	$3,400	370	$1,258,000	$0	$1,258,000
UXO Sweep Contractor[2]	linear feet	$2	5,700	$11,400	$0	$11,400
Fencing Installed[3]	linear feet	$10	5,700	$57,000	$171,000	$228,000
Signs Installed	1 sign (per 500' of fence)	$93	11	$1,060	$6,840	$7,900
A-E Field Oversight		15% of UXO Clearance/IC		$199,119	$0	$199,119
A-E Project Management		8% of UXO Clearance/IC		$106,197	$0	$106,197
Moderate Brush Cutting[4]	acre	$426	185	$78,810	0	$78,810
Heavy Brush Cutting[4]	acre	$603	185	$111,555	0	$111,555
			Subtotal:	$1,711,586	$177,840	$1,389,426
CEHNC Oversite		15% of subtotal		$256,738	$0	$256,738

Total Cost Estimate:	$2,146,164
Contingency (25%):	$536,541
	$2,682,705
Cost per. Acre =	*$6,464*

Assumptions
[1]Cost for UXO clearance includes all ODC and mobilization costs, and equipment
[2]Estimate includes surface sweep of area to be performed prior to having fence installed
[3]Cost to install fencing is $10 per linear foot of 8 foot chain link with three strands of barbed wire
[4]Brush cutting costs taken from ECHOS 1996 and adjusted for inflation using Engineering News Record Construction Cost Index History

Table G-24
Seneca Army Depot Activity
Costs for Recurring Reviews
30 Year Period

Reviews
30 yr duration
Every 2 yrs for all site.

This estimate assumes:
Recurring review Depot wide every 2 years
2 man crew on site for 4 days
Report to be files upon completion of review

Item	Unit	Unit Cost	Amount	Per Review Cost	Total Cost	(30 yrs)[1]
Mob/Demob		$1,500	2	$3,000		$18,427
Per Diem	day	$124	8	$992		$6,093
Reviewers (2)	hour	$65	100	$6,500		$39,924
A-E Field Oversight		15% of UXO Clearance/IC		$1,574		$9,667
A-E Project Management		8% of UXO Clearance/IC		$839		$5,155
			Subtotal:	$12,905		$79,266
CEHNC Oversite		15% of subtotal		$1,936		$11,890

Total Cost Estimate:	$91,156
Contingency (25%):	$22,789
	$113,944

$113,944 F.Y. 04 Cost
1.1314 ESCALATION FACTOR
128,916 F.Y. 09 Cost

$\frac{\$128,916}{5 \text{ sites}} = \$25,783/\text{site}$

$\frac{\$25,783}{15 \text{ site visits}} = \$1,719$ per site visit
Every 2 years for 30 years.

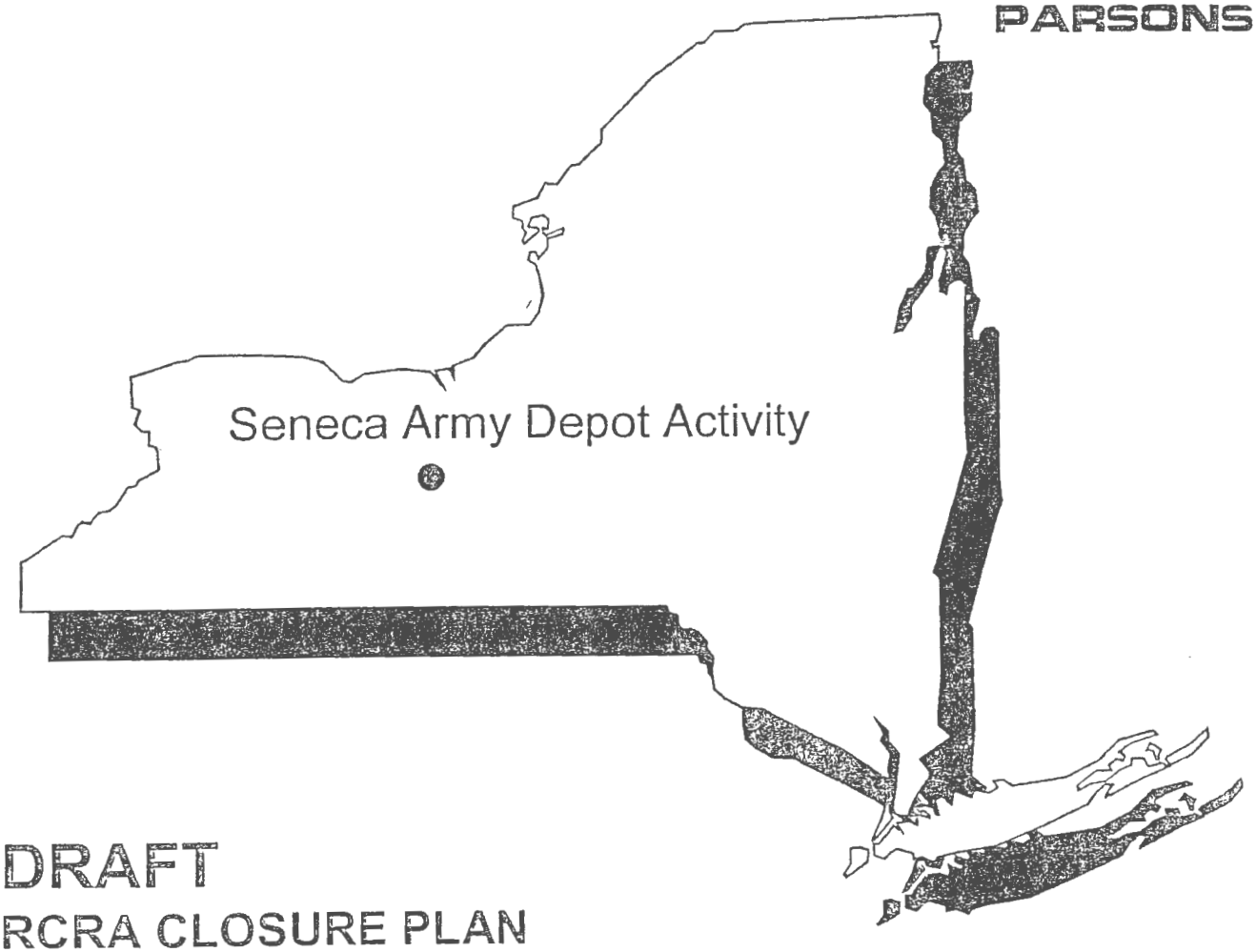
Assumptions
[1]30 Year costs assume present value costs with a discount factor of 7%

Source 3

US Army, Engineering & Support Center
Huntsville, AL

Seneca Army Depot Activity
Romulus, NY

PARSONS



DRAFT

RCRA CLOSURE PLAN
OPEN BURN TRAY
IN SOLID WASTE MANAGEMENT UNIT – SEAD-23

SENECA ARMY DEPOT ACTIVITY

EPA Site ID# NY0213820830
NY Site ID# 8-50-006
CONTRACT NO. DACA87-02-D-0031
DELIVERY ORDER NO. 0025

December 2004

registered in New York. Documentation supporting the independent registered professional engineer's certification must be furnished to the commissioner upon request until the commissioner releases the Army from the financial assurance requirements for closure under NYCRR § 373-3.8(d).

2.3.8 Schedule

The Army plans to begin closure of the Open Burn Tray when OE removal operations have been completed at the Depot. The anticipated timetable for closure of this facility is depicted in **Figure 2-2**. As shown, closure and certification of the closure of the Open Burn Tray is expected to be completed within 150 days of the Army's notification of its intention to close the tray.

2.3.9 Closure Costs

An estimate of the costs to close the Open Burn Tray has been developed using MCACES. Costs projected for this activity have been derived based on the Army retaining a third-party consultant to oversee the proposed closure of the tray and to collect the necessary samples for analysis, and a third-party organization being retained to complete all of the required decontamination and hazardous waste removal operations. All decontamination wastes will be disposed of properly.

(C
COST

The estimated cost for closing the Open Burn Tray is approximately $40,000. This cost is exclusive of the removal and disposal of any residual drummed quantities of hazardous waste other than wastes generated during the proposed decontamination process. Details of this estimate are summarized in **Table 2-1**. This estimate assumes that one of the four roll-offs of concrete pad rubble will need to be disposed of as hazardous waste, however, the cost will not be appreciably greater (approx. $1,400) if all four must be disposed of as hazardous. Details of the estimate are provided in **Appendix A** of this closure plan.

$40,000
1.1314
$ 45,256

FY 04
ESCALATION

Source 4

FINAL RECORD OF DECISION (ROD)
FORMER OPEN BURNING (OB) GROUNDS SITE
SENECA ARMY DEPOT ACTIVITY (SEDA)
ROMULUS, NY

Prepared For:
United States Army Corps of Engineers

Prepared By:
Parsons Engineering Science, Inc.
30 Dan Road
Canton, MA 02021-2809
January 1999
CONTRACT NO. DACA87-92-D-0022

Delivery Order 0010

DESCRIPTION OF THE SELECTED REMEDY

The selected remedy outlined in this ROD addresses potential exposure to elevated levels of metals, such as lead, in the on-site soils and sediment in Reeder Creek. The following describes the significant aspects of the remedy:

- The OB Grounds was used for surface burning of explosive trash and propellants. The concern for OE below the surface, at depth, at this site is small. Although OE is not expected to be found at depth at this site, through a combination geophysics, excavation, sifting, removal and soil cover, the Army will nevertheless remediate OE to meet the Department of Defense Explosive Safety Board (DDESB) requirements for unrestricted use or put into place land use restrictions as may be required by the DDESB.
- Excavation of soils with lead concentrations above 500 mg/kg and sediments from Reeder Creek with concentrations of copper and lead above the NYSDEC criteria of the 16 mg/kg and 31 mg/kg, respectively.
- Treatment of soils exceeding the Toxicity Characteristic Leaching Procedure (TCLP), estimated to be approximately 3,800 CY of the excavated soil, via solidification /stabilization will be performed to remove the RCRA characteristic of toxicity. This will allow the soil to be landfilled, in accordance with the requirements of the Land Disposal Restrictions (LDR) of RCRA.
- Disposal of the excavated and solidified soil in an off-site Subtitle D landfill. The total quantity of soil to be disposed of is estimated to be 17,900 CY, including the 3,800 CY of solidified soil.
- Construction of a soil cover of at least 9 inches of compacted soils in the areas of the OB Grounds with soils remaining on the site with lead concentrations above 60 ppm. The area to be covered is estimated to be approximately 27.5 acres, which encompasses most of the area of the OB Grounds. The PRAP incorrectly identified the area to be covered as 43.8 acres. The cap will be vegetated with indigenous grasses to prevent erosion and to prevent direct contact and incidental soil ingestion by terrestrial wildlife. The monitoring program will ensure that the 9-inch soil/vegetative cover is maintained after the remedy is complete.
- Control of surface water runoff, as necessary, to prevent erosion of the vegetative cover and solids loading to the creek. This will be accomplished with vegetation, regrading of site topography and drainage swales.
- Conducting a monitoring program for site groundwater and sediment in Reeder Creek. This program will monitor metals. For groundwater, the level of detection will be to below 15 ug/L, the federal action level for lead in groundwater. For sediment, the detection limit for lead will be to 10 mg/kg. Should a significant exceedance be noted, the exceedance will be

confirmed through additional sampling and, if confirmed, appropriate corrective measures will be implemented to eliminate the threat posed by the exceedance. For groundwater, this action may include metals removal via filtering. A similar process will apply for a sediment exceedance observed in Reeder Creek. First, the source of the exceedance will be identified and confirmed. If the exceedance is determined to originate from the OB Grounds site, then maintenance of or improvements to the existing erosion control systems will be instituted to reduce the threat due to erosion of on-site soils to the Creek. This may include revegatation or the construction of drainage control swales or structures.

STATE CONCURRENCE

NYSDEC has concurred with the selected remedy. **Appendix B** of this Record of Decision contains a copy of the Declaration of Concurrence.

DECLARATION

The selected remedy is consistent with CERCLA and to the extent practicable the NCP, is protective of human health and the environment, complies with federal and state requirements that are legally applicable or relevant and appropriate to the remedial action, and is cost effective. The remedy uses a permanent solution for soil contamination. This remedy will not result in hazardous substances, above cleanup goals, remaining at SEDA. Because these alternatives would result in hazardous substances, pollutants or contaminants remaining on-site above levels that allow for unlimited use and unrestricted exposure, CERCLA requires that the lead agency review the remedial action no less than every five years after its initiation. If justified by the review, remedial actions may be implemented to remove or treat the wastes.

Source 5

FINAL

LONG-TERM MONITORING PLAN FOR OPEN BURNING (OB) GROUNDS SENECA ARMY DEPOT ACTIVITY ROMULUS, NEW YORK

Prepared for

U.S. Army, Engineering & Support Center, Huntsville

4820 University Square

Huntsville, AL 35816

and

Seneca Army Depot Activity

5786 State Route 96

PO Box 9

Romulus, New York 14541

Prepared by

PARSONS
150 Federal Street, 4th Floor
Boston, MA 02110-1713

Contract DACA87-02-D-0005, Delivery Order 29
USEPA Site ID: NY0213820830; NY Site ID: 8-50-006

January 2007

7.0 SUMMARY OF MONITORING PROGRAM

This section presents a brief summary of the activities to be performed and requirements of the groundwater and vegetated soil cap monitoring program. This section has been prepared to serve as a brief summary of the Plan requirements for current and future field crews and office personnel who will conduct the work associated with the OB Grounds monitoring program. This section is only intended to provide a brief summary for staff personnel. Supervisory and management personnel are expected to review the entire Plan.

7.1 WATER LEVEL MONITORING

Water levels will be obtained from all wells at the OB Grounds during groundwater sampling events. Levels will be collected on a quarterly basis during the baseline period, which will last for at least the first year. Groundwater level monitoring may be reduced after the first year if the wells are shown to be in compliance with the ROD requirements. The locations of the wells to be installed at the OB Grounds are shown on **Figure 5-1**. All water level measurements will be obtained in accordance with the procedures identified in the SOPs included in the Sampling and Analysis Plan (Parsons 2005, included by reference only).

7.2 WATER QUALITY MONITORING

Number of wells = 6

sampling frequency quarterly for the first ye

Water quality monitoring will be performed at six wells. These wells are shown on **Figure 5-1**. Samples will be obtained on a quarterly basis for at least the first year and analyzed for the parameters listed on **Table 5-1**. Sampling frequency after the first year may be revised depending on the results and evaluation of data collected during the first year.

Samples will be collected in accordance with the procedures described in the SOPs contained the Sampling and Analysis Plan. Quality control samples will be obtained in accordance with the requirements set forth in the QAPP, which is included in the Sampling and Analysis Plan. Laboratory analyses and data validation will be performed in accordance with the procedures set forth in the QAPP.

7.3 VEGETATED SOIL CAP AND DRAINAGE SWALE INSPECTIONS

The vegetated, compacted soil cap overlying the lead contaminated soil that has been left at the former OB Grounds site will initially be inspected and documented once per quarter for one year, concurrent to the quarterly groundwater monitoring events. Inspection of the surface will include observations pertinent to the integrity of the soil and indigenous vegetative covering, and the condition of surface water run-off channels, infiltration galleries, and swales. Any significant

breach of the vegetated, soil cap or erosion in the run-off and infiltration galleries will be repaired within one month of being noted. After collection of this initial data set and the decision regarding whether the cap is effective in isolating the lead-contaminated soil, the cap inspections will be reduced to an annual basis. After a total of five years of inspections, a decision will be made whether the inspections should be terminated or continued into the next five-year period.

7.4 DATA EVALUATION AND REPORTING

All of the water quality and water level monitoring data obtained pursuant to this plan will be reported in OB Grounds Monitoring Program Reports. During the period of baseline (initial four samples) data collection, Monitoring Reports will be prepared quarterly.

During the baseline reporting period, each quarterly report will present new data and information developed during the most recent monitoring event (as is identified in **Section 5.6**, above), and will provide summary presentations of the data developed to date. Summary presentations will include:

1. trend plots of groundwater elevation data for each of the monitoring wells;
2. trend plots for all chemical concentration data developed for each of the monitoring wells;
3. trend plots for key indicator parameter data developed for each of the monitoring wells; and,
4. a chronological listing of any noted vegetated, soil cap breach or erosion and an indication of the correction action taken to alleviate the identified condition.

All data from the first year of monitoring will be reported in the annual OB Grounds Long-Term Monitoring Report. Upon completion of baseline monitoring, data will be reported in annual reports. Reports will be prepared and submitted to USEPA and NYSDEC on or before the first day of the second month after the end of the monitoring period (quarter or 12-month period) from which the data were obtained (i.e., the Groundwater Monitoring Report for data obtained in the fall quarter is to be submitted by February 1st of the following year). The contents of the annual report will include:

1. Complete tabulations, including the identification of maximum and minimum levels, of all groundwater elevation data developed to date;
2. Trend plots of groundwater elevation data for each of the monitoring wells;
3. A potentiometric map of site groundwater;
4. Complete tabulations of all chemical concentration data developed to date;
5. Complete tabulations of all indicator parameter data developed to date;

6. Summary presentations (e.g., sample population, maximums, minimums, median, mean, standard deviation, coefficient of variation, etc.) of all chemical concentration data developed to date for downgradient and background wells versus the regulatory criteria value;
7. Trend plots for all chemical concentration data developed for each of the monitoring wells;
8. Trend plots for key indicator parameter data developed for each of the monitoring wells;
9. A chronological listing of any noted vegetated, soil cap breach or erosion and an indication of the correction action taken to alleviate the identified condition; and,
10. A recommendation of any changes (e.g., changing frequency of data collection to semi-annual or annual, development of a sediment monitoring program, etc.) that are proposed to be implemented for the OB Grounds LTM Plan.

Groundwater data collected during the RI also indicated that, with the possible exception of two monitoring well locations, groundwater had not been impacted by metal contamination that was then present in the soil. Groundwater data from all but the two well locations indicated lead concentrations ranging from non-detectable to less than the 15 µg/L limit stipulated in the ROD. The two exceptions showed lead concentrations higher than 15 µg/L; however, these samples were highly turbid and results from filtered samples collected at these locations showed lead concentrations below 15 µg/L. Based on these findings, the Army indicated that the turbid nature of the samples resulted in the elevated concentrations of lead identified.

Based on the flow direction of groundwater, the existence of a groundwater divide, the lack of widespread metals contamination in groundwater at the OB Grounds, and the ROD requirement to prevent future degradation of Reeder Creek, the monitoring well network will consist of six wells, all of which will need to be constructed at the site. New wells are required due to abandonment of 32 historic wells during the OB Grounds remedial action (Weston Solutions, June 2005) and due to the lack of maintenance applied to the three remaining well installations at the OB Grounds. The locations of the six new proposed wells are shown on **Figure 5-1**, and they will be positioned as follows:

6 new wells

- Three wells will be installed on the east side of the OB Grounds, between the former grounds, the location of the buried lead contaminated soil, and Reeder Creek. These wells will be used to monitor the groundwater for possible future impacts to Reeder Creek.
- Two wells will be installed on the west side of the OB Grounds, west of the groundwater divide. These wells will be used to monitor groundwater flowing off the OB Grounds to the west southwest.
- One well will be installed south of the OB Grounds, outside the area that formerly contained contaminated soil. This well will serve as a background well for comparison to the five other wells installed at the site.

These wells will adequately monitor the OB Grounds to assess future degradation of groundwater in the area of the former OB Grounds and potential migration of affected groundwater towards Reeder Creek. Collection of groundwater levels and generation of potentiometric maps will be used to check the direction of groundwater flow and be used to evaluate the need for additional wells should the groundwater flow directions alter from that currently anticipated.

The exact details of the final monitoring well installations will be determined and documented once they are installed, and will be contingent on conditions found at the OB Grounds. However, based on details of the historic monitoring well network previously located at the OB Grounds, it is expected that all new wells placed at the former AOC will be installed in the till with the screen top set at a depth of 4 to 5 feet below grade surface (bgs), with the screen length extending down

into the underlying weathered shale horizon. Setting the top of the screen 4 to 5 feet bgs will allow for the construction of a permanent well installation consisting of a 2 foot thick concrete collar, overlying a 1 - 2 foot thick bentonite seal and a minimum of 1 foot of sand pack above the top of the screen. The screen length at each monitoring well location will be set to maximize coverage across the till and weathered shale horizons, and as such screen lengths may vary from 2 feet to 10 feet in length. All wells in the historic monitoring network at the OB Grounds had screen lengths of 5 feet.

5.3 MONITORING ANALYTE LIST

year one is quarterly, annual after that

The ROD stipulated that groundwater at the OB Grounds is required to contain less than 15 µg/L lead, and the sediment in Reeder Creek found to contain more that 16 mg/Kg copper and 31 mg/Kg lead was to be excavated. The ROD also required that these media be analyzed for metals. In accordance with these requirements, the samples of groundwater from the OB Grounds will be analyzed initially for total lead and total copper. If preliminary results suggest that turbidity is potentially affecting the sample results, groundwater analyses will also include the determination of total and dissolved lead and copper in the samples. The State of New York Contract Required Quantitation Limits for lead and copper are shown in **Table 5-1** below.

5.4 MONITORING FREQUENCY

As is indicated above, all wells proposed for monitoring groundwater at the OB Grounds will be new; therefore, the initial sampling frequency will be once per quarter for at least one year until it can be established that the wells meet or exceed the required concentrations limits, within the acceptable error tolerances specified in **Section 4.2** After collection of this initial data set and the decision regarding whether the wells meet the ROD-specified concentration limits, the Army anticipates that the sampling frequency will be reduced to once per year. After a total of five years of sampling, a decision will be made whether the sampling should be terminated or continued into the next five-year period.

The vegetated, compacted soil cap overlying the lead contaminated soil that has been left at the former OB Grounds site will initially be inspected and documented once per quarter, concurrent to the quarterly groundwater monitoring events. Inspection of the surface will include observations pertinent to the integrity of the soil and indigenous vegetative covering, and the condition of surface water run-off channels, infiltration galleries, and swales. Any identified breach of the vegetated, soil cap or erosion in the run-off and infiltration galleries will be repaired within one month of being noted. After collection of this initial data set and the decision regarding whether the cap is effective in isolating the lead-contaminated soil, the cap inspections will be reduced to an annual basis. After a total of five years of inspections, a decision will be made whether the inspections should be terminated or continued into the next five-year period.

Source 6

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

CERM-P (37)

13 MAR 2008

MEMORANDUM FOR MAJOR SUBORDINATE COMMANDS (MSC)

SUBJECT: Fiscal Year (FY) 2008 Supervision and Administration (S&A) Rate Changes

1. References:

a. CERM-P memorandum, 27 July 2005, Subject: S&A Accounting Procedures for Modularity Projects.

b. CERM-P memorandum, 20 September 2006, Subject: FY 2006 S&A Rate Changes.

2. Effective 1 April 2008 the Operation and Maintenance (O&M) and the Defense Environmental Restoration Program (DERP) S&A rate for the Continental United States (CONUS) is reduced for new Fiscal Year 2008 (FY08) contract awards from six and one-half percent to five and eight-tenths percent. The intent of this change is to adjust the S&A rate to match the current expense and income activity; the level of service or effort should remain unchanged. Any O&M losses to your S&A checkbook that result from the rate change will be reimbursed from the national S&A account. The Major Subordinate Command (MSC) maximum checkbook carryover will be increased to three months' expense and reflected in the next update to the consolidated command guidance.

S&A RATE

3. The one percent furniture rate in reference "a" was not intended to be restricted to modularity projects. It may be used for any MILCON or O&M project. This change in the O&M rate does not affect modularity/relocatable projects as they continue to be charged the MILCON rate per reference "a".

CERM-P (37)
SUBJECT: FY 2008 Supervision and Administration (S&A) Rate Changes

4. Since these changes significantly affect S&A schedules the FY08 S&A performance will be measured against your mid-year schedules due 25 April 2008. Special instructions are provided in the enclosed standing operating procedures to assist in implementation of these changes. These changes will be codified in the next update to the consolidated command guidance.

5. Point of contact for this action is Mr. Philip Blount, CERM-P, (202) 761-8908.

FOR THE COMMANDER:

Encl

Wesley C. Miller
Director of Resource Management

Contract Source #7

ORDER FOR SUPPLIES OR SERVICES

PAGE 1 OF 14

1. CONTRACT/PURCH. ORDER/ AGREEMENT NO.	2. DELIVERY ORDER/CALL NO.	3. DATE OF ORDER/CALL (YYYYMMMDD)	4. REQ./PURCH. REQUEST NO.	5. PRIORITY
DACA87-02-D-0005	0036	2007 Aug 22	W31RYO71375791	

6. ISSUED BY CODE W912DY
US ARMY ENGINEERING & SUPPORT CENTER
CEHNC-CT
4820 UNIVERSITY SQUARE
HUNTSVILLE AL 35816-1822

7. ADMINISTERED BY *(if other than 6)* CODE W912DY
CT-P/ACQUISITION SUPPORT TEAM
ATTN: DEMETRA HILL
256-895-1165
HUNTSVILLE AL

8. DELIVERY FOB
[X] DESTINATION
[ ] OTHER
(See Schedule if other)

9. CONTRACTOR CODE 1BVK6 FACILITY
NAME AND ADDRESS
PARSONS INFRASTRUCTURE & TECHNOLOGY GROU
CHARLES TERHUNE
100 W WALNUT STREET
PASADENA CA 91124

10. DELIVER TO FOB POINT BY (Date) *(YYYYMMMDD)*
SEE SCHEDULE

11. MARK IF BUSINESS IS
[ ] SMALL
[ ] SMALL DISADVANTAGED
[ ] WOMEN-OWNED

12. DISCOUNT TERMS

13. MAIL INVOICES TO THE ADDRESS IN BLOCK
See Item 15

14. SHIP TO CODE W912DY
US ARMY ENGINEERING & SUPPORT CENTER
NO CONTACT SPECIFIED
CEHNC-CT
4820 UNIVERSITY SQUARE
HUNTSVILLE AL 35816-1822

15. PAYMENT WILL BE MADE BY CODE 964145
US ARMY ENG & SUP CENTER - FINANCE OFFIC
US ARMY CORPS OF ENGRS FINANCE CTR
5722 INTEGRITY DRIVE
MILLINGTON TN 38054-5005

MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.

16. TYPE OF ORDER
DELIVERY/CALL [X] This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.
PURCHASE [ ] Reference your quote dated
Furnish the following on terms specified herein. REF:

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR | SIGNATURE | TYPED NAME AND TITLE | DATE SIGNED (YYYYMMMDD)

[X] If this box is marked, supplier must sign Acceptance and return the following number of copies: 1

17. ACCOUNTING AND APPROPRIATION DATA/ LOCAL USE
See Schedule

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/ SERVICES	20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT
	SEE SCHEDULE				

* If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.

24. UNITED STATES OF AMERICA
TEL: 256-895-1163
EMAIL: K
BY: KATHERINE H. ATKINS
Katharine H. Atkins
CONTRACTING / ORDERING OFFICER

25. TOTAL $116,181.00
26. DIFFERENCES

27a. QUANTITY IN COLUMN 20 HAS BEEN
[ ] INSPECTED [ ] RECEIVED [ ] ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE | c. DATE (YYYYMMMDD) | d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE

f. TELEPHONE NUMBER | g. E-MAIL ADDRESS

36. I certify this account is correct and proper for payment.
a. DATE (YYYYMMMDD) | b. SIGNATURE AND TITLE OF CERTIFYING OFFICER

28. SHIP NO. | 29. DO VOUCHER NO. | 30. INITIALS

[ ] PARTIAL [ ] FINAL

31. PAYMENT
[ ] COMPLETE [ ] PARTIAL [ ] FINAL

32. PAID BY

33. AMOUNT VERIFIED CORRECT FOR

34. CHECK NUMBER

35. BILL OF LADING NO.

37. RECEIVED AT	38. RECEIVED BY	39. DATE RECEIVED (YYYYMMMDD)	40. TOTAL CONTAINERS	41. S/R ACCOUNT NO	42. S/R VOUCHER NO.

Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
0001		UNDEFINED	Dollars, U.S.	UNDEFINED	UNDEFINED

SENECA ARMY DEPOT

CPFF

CONTRACTOR SHALL PROVIDE SERVICES IN ACCORDANCE WITH THE ATTACHED STATEMENT OF WORK, ENTITLED, "IMPLEMENTATION OF THE LONG-TERM MANAGEMENT PLAN FOR THE OPEN BURNING (OB) GROUNDS AND FIRE TRAINING AREAS, SENECA ARMY DEPOT ACTIVITY, ROMULUS, NEW YORK, AND ADDENDUM, FUNDING OPTIONS SUMMARY, DATED 8 MARCH 2007".

CONTRACTOR SHALL PROVIDE SERVICES FOR OPTION 1. TASK 3.1 LONG TERM MONITORING AT THE OB GROUNDS AND TASK 3.2 LONG TERM MONITORING AT THE FIRE TRAINING AREAS IN ACCORDANCE WITH THE ATTACHED ADDENDUM, FUNDING OPTIONS SUMMARY. OPTION 1 IS FUNDED AT $109,993.00 (COST) PLUS $6,188.00 (FEE) FOR A TOTAL AMOUNT OF $116,181.

THE PERIOD OF PERFORMANCE FOR THIS TASK ORDER IS 31 JULY 2007.

FOB: Destination

MILSTRIP: W31RYO71375791

PURCHASE REQUEST NUMBER: W31RYO71375791

MAX COST	$109,993.00
FIXED FEE	$6,188.00
TOTAL MAX COST + FEE	$116,181.00

ACRN AA $116,181.00

CIN: W31RYO713757910001

Section C - Descriptions and Specifications

SOW

ADDENDUM

IMPLEMENTATION OF THE LONG-TERM MANAGEMENT PLANFOR THE OPEN BURNING (OB) GROUNDS AND FIRE TRAINING AREASSENECA ARMY DEPOT ACTIVITY ROMULUS, NEW YORK

FUNDING OPTIONS SUMMARY

OPTION 1

3.1 Long Term Monitoring at the OB Grounds
- 3.1.1 (Task 1) Vegetative Cap and Drainage Swale Inspections.....$2,729
- 3.1.2 (Task 2) Perform Monitoring Well Installation.....$24,864
- 3.1.3 Quarterly Groundwater Monitoring
  - 3.1.3.1 (Task 3) Initial Quarterly Groundwater Monitoring Event.$16,908
    - 3.1.3.1.1 (Task 3.1) Water Level Monitoring
    - 3.1.3.1.2 (Task 3.2) Water Quality Monitoring
    - 3.1.3.1.3 (Task 3.3) Preparation of Quarterly Reports

Well INSTALLATION cost FY07

3.2 Long Term Monitoring at the Fire Training Areas
- 3.2.1 Quarterly Groundwater Monitoring
  - 3.2.1.1 (Task 7) Initial Quarterly Groundwater Monitoring Event...$23,474
    - 3.2.1.1.1 (Task 7.1) Water Level Monitoring
    - 3.2.1.1.2 (Task 7.2) Water Quality Monitoring
    - 3.2.1.1.3 (Task 7.3) Preparation of Quarterly Reports

3.4 (Task 12) PROJECT MANAGEMENT.....$48,206

OPTION 1 TOTAL	$116,181

OPTION 2

Long Term Monitoring at the OB Grounds

3.1.3.2 (Task 4.0) Second Quarterly Groundwater Monitoring Event.....$16,908
- 3.1.3.2.1 (Task 4.1) Water Level Monitoring
- 3.1.3.2.2 (Task 4.2) Water Quality Monitoring
- 3.1.3.2.3 (Task 4.3) Preparation of Quarterly Reports

Long Term Monitoring at the Fire Training Areas

3.2.1.2 (Task 8.0) Second Quarterly Groundwater Monitoring Event.....$23,474
- 3.2.1.2.1 (Task 8.1) Water Level Monitoring
- 3.2.1.2.2 (Task 8.2) Water Quality Monitoring
- 3.2.1.2.3 (Task 8.3) Preparation of Quarterly Reports

OPTION 2 TOTAL	$40,382

OPTION 3

24,864 COST FY07
1.039 ESCALATION
$ 25,834 F.Y. 09

Long Term Monitoring at the OB Grounds

3.1.3.2.3 (Task 5.0) Third Quarterly Groundwater Monitoring Event.....$16,908

- 3.1.3.2.3.1 (Task 5.1) Water Level Monitoring
- 3.1.3.2.3.2 Task 5.2) Water Quality Monitoring
- 3.1.3.2.3.3 (Task 5.3) Preparation of Quarterly Reports

Long Term Monitoring at the Fire Training Areas

3.2.1.3 (Task 9.0) Second Quarterly Groundwater Monitoring Event.....$23,474

- 3.2.1.3.1 (Task 9.1) Water Level Monitoring
- 3.2.1.3.2 (Task 9.2) Water Quality Monitoring
- 3.2.1.3.3 (Task 9.3) Preparation of Quarterly Reports

OPTION 3 TOTAL	$40,382

SEAP 23 Monitoring Event Cost

OPTION 4

Long Term Monitoring at the OB Grounds

3.1.3.4 (Task 6.0) Third Quarterly Groundwater Monitoring Event.....$16,908

- 3.1.3.4.1 (Task 6.1) Water Level Monitoring
- 3.1.3.4.2 Task 6.2) Water Quality Monitoring
- 3.1.3.4.3 (Task 63) Preparation of Quarterly Reports

Long Term Monitoring at the Fire Training Areas

3.2.1.4 (Task 9.0) Second Quarterly Groundwater Monitoring Event.....$23,474

- 3.2.1.4.1 (Task 9.1) Water Level Monitoring
- 3.2.1.4.2 (Task 9.2) Water Quality Monitoring
- 3.2.1.4.3 (Task 9.3) Preparation of Quarterly Reports

3.3 (Task 11) Preparation of the Annual Report.....$19,107

OPTION 4 TOTAL	$59,489

ANNUAL EVENT for Two sites

GRAND TOTAL $256,433

Sampling

16,908 / event

1.0394 ESCALATION Factor

$ 17,574. FY09

ANNUAL RPT.

19,107 ÷ 2 site = $ 9554

1.0394 ESC. FACTOR

$ 9930 FY09

SOURCE 8

Absolom, Stephen M Mr CIV USA

From: Nohrstedt, John HNC [John.Nohrstedt@usace.army.mil]
Sent: Monday, January 12, 2009 4:18 PM
To: Absolom, Stephen M Mr CIV USA
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

ANNUAL MONITORING

CLOSE OUT COST

Steve,

Cost per year for contracting to monitor a contractor:
5 hrs/month X 12 months = 60 hrs
Approximately $5,000 to $7,000

Cost for contracting Task Order Close out:
Firm Fixed Price - 5 to 10 hrs - Approx. $500 to $1000
Cost Plus - 10 to 25 hrs - Approx. $1000 to $2,500

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA [mailto:stephen.m.absolom@us.army.mil]
Sent: Monday, January 12, 2009 8:07 AM
To: Nohrstedt, John HNC; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,
What will the cost per year be to monitor the TO if it is a multiple year task order.
Also need to a cost for TO Close out.
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362
-----Original Message-----
From: Nohrstedt, John HNC [mailto:John.Nohrstedt@usace.army.mil]
Sent: Friday, January 09, 2009 12:35 PM
To: Absolom, Stephen M Mr CIV USA; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Below are the man-hours to prepare and issue a simple task order:

Prepare SOW and IGE	- 6 to 10 hrs
Review	- 0.5 to 2 hr
Issue RFP	- 2 to 3 hrs
Review Proposal	- 2 to 4 hrs
Tech Evaluation	- 4 to 8 hrs
Negotiation	- 2 to 4 hrs
Review Revised Proposal	- 2 to 3 hrs
Tech Eval. of revised	- 0.5 to 2 hrs
Issue Award	- 4 to 6 hrs

TOTAL - 23 to 42 hours

The cost would be approximately $3,000 to $5,000.

Procurement cost

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA
[mailto:stephen.m.absolom@us.army.mil]
Sent: Friday, January 09, 2009 9:14 AM
To: Battaglia, Randy W NAN02; Nohrstedt, John HNC
Subject: Contracting Cost

Steve,
I am starting to update my CTC for this year. One area not preivously included in the costing is the establishment of a new Task/Delivery order. Can you give me a Cost to be included in my CTC for the COE to prepare and issue a task order? Please note that your email will be included in the CTC file so it needs to be accurate as possible.

Thanks
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362

It is not done in RACER and attempting to put it in at this point will be particularly onerous.

Thanks.

Roger

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Source 9

WORK AUTHORIZATION DIRECTIVE (WAD)
BASE REALIGNMENT AND CLOSURE (BRAC) ENVIRONMENTAL RESTORATION AND FUNDS RELEASE DOCUMENT

CEMP-RI 12 August 2002

DIRECTIVE NO. BR-SEN-02-03

ISSUED THRU: CENAD-PM-M (JIMENEZ)
TO: CENAN-PP-E (BATTAGLIA)

ISSUED FOR: BRAC 95 ER at **Seneca AD, NY**.

1. Reference DA FAD, 9 August 2002, advice number 02-0002-00821.

2. You are authorized Base Closure Account (BCA) environmental restoration funds to execute the following project(s).

BRAC ROUND: (1, 91, 93, or 95) 95 increase X/decrease__reprog__

APPRN: 97 X/2007 0510.40H1 2 **DIV/DIST**: NAN **ASN:** 8011

PROJECT	AMSCO	+/-	ALLOCATION
Munitions Destruct Area	61366R62	+	$ 472,000
OB/OD Grounds	61366R69	+	3,500,000

SEND-006-R-01

POC at CENAN-PP-E is Randy Battaglia, 607-869-1523. POC at CEMP-RI is Bob Martin, 202-761-4904.

3. These funds are for the above specified projects only. The funds may not be transferred to other projects without approval and authorization of this office.

4. These funds must be obligated within 30 days of receipt. If these funds cannot be obligated in 30 days this office is to be notified immediately.

5. Accounting and Reporting Instructions:
   a. Report all financial data on a monthly basis via the Integrated Command Accounting and Reporting (ICAR) System.
   b. Report excess funds to CEMP-RI as soon as they are identified.
   c. Provide a copy of this WAD to your Resource Management Office.

CF: AMC (ANDEREGG); CENAN-PP-M (DOWNING)

Source ID

MILITARY INTERDEPARTMENTAL PURCHASE REQUEST — PAGE 001

FSC	CONTROL SYMBOL NO.	DATE PREPARED	MIPR NUMBER	AMEND NO.
		09-AUG-2005	W16ROE52217090	000

TO: AFCEE/ERB
AFCEE/MSR
3207 NORTH ROAD
ATTN: CHARLES A. RICE

BROOKS AFB ,TX 78235-5363

FROM: WP - FORT DRUM RESIDENCY
CENAN-CO-WD
USMA AREA OFFICE
FORT DRUM RESIDENCY
GRIFFIS TEAM
FORT DRUM NY 13602

ITEMS __ ARE __ ARE NOT INCLUDED IN THE INTERSERVICE SUPPLY SUPPORT PROGRAM AND REQUIRED INTERSERVICE SCREENING __ HAS __ HAS NOT BEEN ACCOMPLISHED.

ITEM NO.	DESCRIPTION (Federal stock number, nomenclature, specification and/or drawing No., etc.)	QTY	UNIT	ESTIMATED UNIT PRICE	ESTIMATED TOTAL PRICE
1	A10982-Contruction Contract Award by AFCEE - S&R/A [110648] --- Project No.: 110648	0	LS	.00	$200,799.00

FEE/COST

ACCOUNTING CLASSIFICATION 97 X 0510.40K1 E3 2005 08 8011 61366R31000 25FB 2J54LG NA S19016 0000871[illegible]
WORK CAT CODE: 72180 WORK CAT ELEM CODE: 99999 OBLIG. ADJ.: $.00

GOVERNMENT ORDER NUMBER W16ROE52217090
INITIAL ACCOUNTING CLASS 97 X 0510 40K1 08 61366R31000

FUNDS IN THE AMOUNT OF $200,799. ARE HEREBY PROVIDED FOR AFCEE EFFORTS IN SUPPORT OF MUNITION WASHOUT FACILITY - AMSCO 61366R31 @ SENECA AD. NY. PLEASE INSURE THAT FUNDS ARE ACCEPTED AS CATEGORY I. PLEASE BE AWARE THAT CONTRACT FUNDS FOR SUBJECT PROJECT ARE PROVIDED UNDER SEPARATE GOVERNMENT ORDER (W16ROE52217093 - AND SHOULD BE ACCEPTED AS DIRECT CITS-CATEGORY II).

AFCEE Support

Upon Acceptance of this Government Order the Performing Activity must include the full accounting classification data to include: Department Code, Transfer Department Code, Appropriation Fiscal Year, Appropriation Symbol, Appropriation Limitation, Operating Agency, Allotment Serial Number, Fiscal Station Number, and the account classification amount.

CONTINUED ON THE NEXT PAGE

AFCEE FEE

Project FEE / Project Cost = 200799 / 4,462,201 = 0.045 or 4.5% FEE

MILITARY INTERDEPARTMENTAL PURCHASE REQUEST — PAGE 002

FSC	CONTROL SYMBOL NO.	DATE PREPARED	MIPR NUMBER	AMEND NO.
		09-AUG-2005	W16ROE52217090	000

TO: AFCEE/ERB
AFCEE/MSR
3207 NORTH ROAD
ATTN: CHARLES A. RICE

BROOKS AFB ,TX 78235-5363

FROM: WP - FORT DRUM RESIDENCY
CENAN-CO-WD
USMA AREA OFFICE
FORT DRUM RESIDENCY
GRIFFIS TEAM
FORT DRUM NY 13602

ITEMS __ ARE __ ARE NOT INCLUDED IN THE INTERSERVICE SUPPLY SUPPORT PROGRAM AND REQUIRED INTERSERVICE SCREENING __ HAS __ HAS NOT BEEN ACCOMPLISHED.

ITEM NO.	DESCRIPTION (Federal stock number, nomenclature, specification and/or drawing No., etc.)	QTY	UNIT	ESTIMATED UNIT PRICE	ESTIMATED TOTAL PRICE

Please have the accepting official sign below and return to the FINANCIAL POC address. EXPIRATION DATE 30-APR-2006

RA TECHNICAL POC: RANDALL W BATTAGLIA — CENAN
RA FINANCIAL POC: JOHNNY W DOWNING — CENAN-PP-M — 917.790.8324
RA FINANCIAL POC ADDRESS: PPMD-MILITARY
26 FEDERAL PLAZA
ROOM 2119

NEW YORK NY 10278
PA TECHNICAL POC: LONNIE WOLFE: 210-536-5269 FAX: 210-536-4330
PA FINANCIAL POC: JESSE PEREZ: 210-536-2433

__ DIRECT FUND CITE
ACCEPTED __ REIMBURSABLE _____ DATE _____ TITLE_____

SEE ATTACHED PAGES FOR DELIVERY SCHEDULES, PRESERVATION AND PACKAGING INSTRUCTIONS, SHIPPING INSTRUCTIONS AND INSTRUCTIONS FOR DISTRIBUTION OF CONTRACTS AND RELATED DOCUMENTS.

GRAND TOTAL $200,799.00

TRANSPORTATION ALLOTMENT (Used if FOB Contractor's plant)

MAIL INVOICES TO (Payment will be made by)
USACE FINANCE CENTER
E3 - NEW YORK DISTRICT
5720 INTEGIRTY DRIVE

MILLINGTON TN 38054-5005

FUNDS FOR PROCUREMENT ARE PROPERLY CHARGEABLE TO THE ALLOTMENTS SET FORTH ABOVE, THE AVAILABLE BALANCES OF WHICH ARE SUFFICIENT TO COVERTHE ESTIMATED TOTAL PRICE.

ELECTRONICALLY SIGNED BY
YADIRA RIVERAVILLEGAS
OPERATING ACCOUNTANT — 09-AUG-2005

AUTHORIZING OFFICER
ANITA TULSIRAM
PROGRAM ANALYST

ELECTRONICALLY SIGNED BY
ANITA TULSIRAM

DATE
09-AUG-2005

DD FORM 448

MILITARY INTERDEPARTMENTAL PURCHASE REQUEST PAGE 001

FSC	CONTROL SYMBOL NO.	DATE PREPARED	MIPR NUMBER	AMEND NO.
		09-AUG-2005	W16ROE52217093	000

TO: AFCEE/ERB
AFCEE/MSR
3207 NORTH ROAD
ATTN: CHARLES A. RICE

BROOKS AFB ,TX 78235-5363

FROM: WP - FORT DRUM RESIDENCY
CENAN-CO-WD
USMA AREA OFFICE
FORT DRUM RESIDENCY
GRIFFIS TEAM
FORT DRUM NY 13602

ITEMS __ ARE __ ARE NOT INCLUDED IN THE INTERSERVICE SUPPLY SUPPORT PROGRAM AND REQUIRED INTERSERVICE SCREENING __ HAS __ HAS NOT BEEN ACCOMPLISHED.

ITEM NO.	DESCRIPTION (Federal stock number, nomenclature, specification and/or drawing No., etc.)	QTY	UNIT	ESTIMATED UNIT PRICE	ESTIMATED TOTAL PRICE
1	A10981-Contruction Contract Award by AFCEE [110648] --- Project No.: 110648	0	LS	.00	$4,462,201.00

ACCOUNTING CLASSIFICATION 97 X 0510.40K1 E3 2005 08 8011 61366R31000 25FB 6D7D60 NA S19016 00008735
WORK CAT CODE: 72180 WORK CAT ELEM CODE: 99999 OBLIG. ADJ.: $.00

GOVERNMENT ORDER NUMBER W16ROE52217093
INITIAL ACCOUNTING CLASS 97 X 0510 40K1 08 61366R31000

Direct Fund Cite of Customer Funds

FUNDS IN THE AMOUNT OF $4,462,201. ARE HEREBY PROVIDED FOR CONTRACT AWARD OF MUNITION WASHOUT FACILITY AMSCO 61366R31 @ SENECA AD, NY. PLEASE ACCEPT FUNDS AS DIRECT CITE - CATEGORY II. UPON AWARD - PLEASE PROVIDE A COPY OF THE CONTRACT TO TECHNICAL AND FINANCIAL POCS.

NOTE: PLEASE REFERENCE GOVT ORDER - W16ROE52217090 - FOR AFCEE EFFORTS ON PROJECT NOTED ABOVE.

Upon Acceptance of this Government Order the Performing Activity must include the full accounting classification data to include: Department Code, Transfer Department Code, Appropriation Fiscal Year, Appropriation Symbol, Appropriation Limitation, Operating Agency, Allotment Serial Number, Fiscal Station Number, and the account classification amount.

CONTINUED ON THE NEXT PAGE

Project COST

MILITARY INTERDEPARTMENTAL PURCHASE REQUEST — PAGE 002

FSC	CONTROL SYMBOL NO.	DATE PREPARED	MIPR NUMBER	AMEND NO.
		09-AUG-2005	W16ROE52217093	000

TO: AFCEE/ERB
AFCEE/MSR
3207 NORTH ROAD
ATTN: CHARLES A. RICE

BROOKS AFB ,TX 78235-5363

FROM: WP - FORT DRUM RESIDENCY
CENAN-CO-WD
USMA AREA OFFICE
FORT DRUM RESIDENCY
GRIFFIS TEAM
FORT DRUM NY 13602

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ITEM NO.	DESCRIPTION (Federal stock number, nomenclature, specification and/or drawing No., etc.)	QTY	UNIT	ESTIMATED UNIT PRICE	ESTIMATED TOTAL PRICE

Please have the accepting official sign below and return to the FINANCIAL POC address. EXPIRATION DATE 30-APR-2006

RA TECHNICAL POC: RANDALL W BATTAGLIA — CENAN
RA FINANCIAL POC: JOHNNY W DOWNING — CENAN-PP-M — 917.790.8324
RA FINANCIAL POC ADDRESS: PPMD-MILITARY
26 FEDERAL PLAZA
ROOM 2119

NEW YORK NY 10278
PA TECHNICAL POC: LONNIE WOLFE: 210-536-5269 FAX:210-536-4330
PA FINANCIAL POC: JESSE PEREZ: 210-536-2433

__ DIRECT FUND CITE
ACCEPTED __ REIMBURSABLE _____ DATE _____ TITLE _____

SEE ATTACHED PAGES FOR DELIVERY SCHEDULES, PRESERVATION AND PACKAGING INSTRUCTIONS, SHIPPING INSTRUCTIONS AND INSTRUCTIONS FOR DISTRIBUTION OF CONTRACTS AND RELATED DOCUMENTS.

GRAND TOTAL $4,462,201.00

TRANSPORTATION ALLOTMENT (Used if FOB Contractor's plant)

MAIL INVOICES TO (Payment will be made by)
USACE FINANCE CENTER
E3 - NEW YORK DISTRICT
5720 INTEGIRTY DRIVE

MILLINGTON TN 38054-5005

FUNDS FOR PROCUREMENT ARE PROPERLY CHARGEABLE TO THE ALLOTMENTS SET FORTH ABOVE, THE AVAILABLE BALANCES OF WHICH ARE SUFFICIENT TO COVERTHE ESTIMATED TOTAL PRICE.

ELECTRONICALLY SIGNED BY
YADIRA RIVERAVILLEGAS
OPERATING ACCOUNTANT — 09-AUG-2005

AUTHORIZING OFFICER
ANITA TULSIRAM
PROGRAM ANALYST

ELECTRONICALLY SIGNED BY
ANITA TULSIRAM

DATE
09-AUG-2005

DD FORM 448

SOURCE 11

Absolom, Stephen M Mr CIV USA

From: Walton, Roger H Mr CIV USA SA
Sent: Tuesday, February 10, 2009 7:54 AM
To: Absolom, Stephen M Mr CIV USA
Subject: Fw: Escalation Factors (UNCLASSIFIED)

Attachments: How to compute escalation for yrs not on table Feb 08.xls

How to
ıte escalation

I guess you caught me on a good day. The interpretation I gave you yesterday was correct per below.

For Government Use Only

----- Original Message -----
From: Diehl, Roxann N CIV USA
To: Walton, Roger H Mr CIV USA SA
Cc: Roxann Diehl; Sigler Stephanie (stephanie.j.sigler@us.army.mil)
Sent: Tue Feb 10 07:30:05 2009
Subject: RE: Escalation Factors (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

<<How to compute escalation for yrs not on table Feb 08.xls>>
Use this for calculation -- I know the directions say to only use for 5 years back, but this is the best we have.

Directions are at the top left of the spreadsheet -- basically, use the Base Year 2009 and move up to the FY you need - 2002 - use the Compound column (0.8580).

Formula is 1/0.8580 = 1.1655 -- this would be the escalation factor. ESCALATION FACTOR

This sheet is updated annually and is dated 30JAN08 -- I just checked and the new one is not yet posted.

If there are any questions, please let me know.

Thanks,

Roxann

From: Walton, Roger H Mr CIV USA SA
Sent: Monday, February 09, 2009 3:24 PM
To: Diehl, Roxann N CIV USA
Subject: Escalation Factors (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Rox,

Do have escalation factors that I can apply to a 2002 Engineering Estimate (FS Level) for a Seneca OB/OD project that BRACD has not funded as yet?

Estimate Documentation Report

System:

RACER Version: 10.2.0
Database Location: C:\Documents and Settings\Andy W\Application Data\Earth Tech\RACER 10.2\Racer.mdb

Folder:

Folder Name: Seneca

Project:

Project ID: SEAD-006-R-01
Project Name: SEAD-006-R-01
Project Category: Planned Industrial Area

Location
State / Country: NEW YORK
City: SENECA ARMY DEPOT

Location Modifier	Default	User
	1.055	1.055

Options
Database: System Costs
Cost Database Date: 2007
Report Option: Fiscal

Description

SEAD-006-R-01 RCRA Closure of the OB/OD Grounds (alias SEAD-115)

The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate Site Closeout Documentation costs. The cost to complete groundwater monitoring is estimated separately based on an existing contract.

Site: SEAD-006-R-01 RCRA Closure of the OB/OD Grounds (alias SEAD-115)

Source:
1. Concept Plan, Ordnance and Explosives for A RCRA Closure of the OB/OD Grounds at Seneca Army Depot Activity, Sept. 2002
2. Final Ordnance and Explosives Engineering Evaluation/Cost Analysis, January 2004.

3. Draft RCRA Closure Plan Open Burn Tray in SWMU Unit -23 (SEAD-23, OB Grounds), December 2004
4 Professional judgment based on site knowledge.

RACER Assumptions:

Site Closeout Documentation (LTM):
1. Site Closeout is moderate complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years

Well Abandonment (LTM):
1. Number of wells: 10
2. Depth of wells: 15 ft
3. Diameter of wells: 2"
4. Unconsolidated
5. Overdrill/removal

SEAD-23 Open Burning Grounds

The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate costs to complete for five year reviews, well abandonment, site closeout documentation, and land use controls. The cost to complete groundwater monitoring is estimated separately based on an existing contract.

Source:
1. Final Record of Decision, Former Open Burning Grounds Site, January 1999.
2. Draft Long Term Monitoring Plan for Open Burning Grounds, December 2005.
3. Professional judgment based on site knowledge.

RACER Assumptions:

Five Year Review (LTM)
1. Six review cycles, covers both SEAD-23 and SEAD-06-R-01
2. Review period begins October 2006 with first review in 2011
3. Moderate complexity
4. Tasks include Document Review, Interviews, and Site Inspections
5. Report for Five Year Review to include ann default parameters

Site Closeout Documentation (LTM):
1. Site Closeout is moderate complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years

Land Use Controls (second LTM phase)
1. Tasks include Implementation, Monitoring and Enforcement, and Modification/Termination
2. Implementation parameters used are Deed Ntotification and Restrictive Covenants (all with low complexity)
3. Monitoring and Enforcement parameters used are Report and

Estimate Documentation Report

Certifications annually
4. Modification/Termination parameters used are Document Evaluation, Modify LUCIP, Amend Decision Documents, and Termination Letters (all with low complexity)

Well Abandonment (LTM):
1. Number of wells: 10
2. Depth of wells: 15 ft
3. Diameter of wells: 2"
4. Unconsolidated
5. Overdrill/removal

Estimate Documentation Report

Site Documentation:

Site ID: SEAD-006-R-01
Site Name: RCRA Closure of OB/OD Grounds
Site Type: None

Media/Waste Type
Primary: Groundwater
Secondary: Sediment/Sludge

Contaminant
Primary: Metals
Secondary: None

Phase Names
SI: ☐
RI/FS: ☐
RD: ☐
IRA: ☐
RA(C): ☐
RA(O): ☐
LTM: ☑
Site Closeout: ☐

Documentation
Description: RCRA Closure of both OB/OD Grounds (SEAD-006-R-01) and the OB Ground (SEAD-23).

Changes from FY2008 estimate include:
1. Deleting groundwater monitoring costs from RACER estimate
2. Updating costs to FY09 database

Support Team: Stephen M. Absolom - SEDA BEC
Randy Battaglia - US Army Corps of Engineers, Project Engineer

References: 1. Concept Plan, Ordnance and Explosives for RCRA Closure of the OB/OD Grounds at Seneca Army Depot Activity, Sept. 2002
2. Final Ordnance and Explosives Engineering Evaluation/Cost Analysis, January 2004.
3. Draft RCRA Closure Plan Open Burn Tray in SWMU Unit -23 (SEAD-23, OB Grounds), December 2004
4 Professional judgment based on site knowledge.

Estimator Information
Estimator Name: Andrew Weinberg
Estimator Title: Senior Geologist
Agency/Org./Office: Bechtel-S Corp.
Business Address: 203 E. Milton St.
Austin, TX 78704
Telephone Number: 512-344-9657

Estimate Documentation Report

Email Address: aweinberg@bechtel-s.com
Estimate Prepared Date: 01/28/2009

Estimator Signature: _____ **Date:** _____

Reviewer Information

Reviewer Name: Steve Absolom
Reviewer Title: Installation Manager
Agency/Org./Office: Seneca Army Depot Activity
Business Address: .
Telephone Number: (607) 869-1309
Email Address: stephen.m.absolom@us.army.mil
Date Reviewed: 02/09/2009

Reviewer Signature: _____ **Date:** _____

Estimated Costs:

Phase Names	Direct Cost	Marked-up Cost
LTM #1 GW	$103,885	$274,975
LTM #3 LUC	$168,480	$461,008
LTM #2 CO	$27,938	$60,453
LTM #4 CO	$31,953	$71,158
Total Cost:	$332,256	$867,594

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM #1
Description: Five year review for combined Sites SEAD-06-R-01 and SEAD-23.

Start Date: October, 2006
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate
Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
Five-Year Review	Yes	100	0

Total Marked-up Cost: $274,975

Technologies:

Estimate Documentation Report

Technology Name: **Five-Year Review (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Site Complexity		Moderate	n/a
Document Review		Yes	n/a
Interviews		Yes	n/a
Site Inspection		Yes	n/a
Report		Yes	n/a
Travel		Yes	n/a
Rebound Study		No	n/a
Start Date		December-2011	n/a
No. Reviews		6	EA
Document Review			
Required Parameters			
5-Year Review Check List		Yes	n/a
Record of Decision		Yes	n/a
Remedial Action Design & Construction		Yes	n/a
Close-Out Report		Yes	n/a
Operations & Maintenance Manuals & Reports		Yes	n/a
Consent Decree or Settlement Records		Yes	n/a
Groundwater Monitoring & Reports		Yes	n/a
Remedial Action Required		Yes	n/a
Previous 5-Year Review Reports		Yes	n/a
Interviews			
Required Parameters			
Current and Previous Staff Management		Yes	n/a
Community Groups		Yes	n/a
State Contacts		Yes	n/a
Local Government Contacts		Yes	n/a
Operations & Maintenance Contractors		Yes	n/a
PRPs		Yes	n/a
Remedial Design Consultant		Yes	n/a
Site Inspection			
Required Parameters			

Estimate Documentation Report

Technology Name: **Five-Year Review (# 1)**

Description	*Default*	*Value*	*UOM*
Site Inspection			
Required Parameters			
General Site Inspection		Yes	n/a
Containment System Inspection		Yes	n/a
Monitoring Systems Inspection		Yes	n/a
Treatment Systems Inspection		Yes	n/a
Regulatory Compliance		Yes	n/a
Site Visit Documentation (Photos, Diagrams, etc.)		Yes	n/a
Report			
Required Parameters			
Introduction		Yes	n/a
Remedial Objectives		Yes	n/a
ARARs Review		Yes	n/a
Summary of Site Visit		Yes	n/a
Areas of Non Compliance		Yes	n/a
Technology Recommendations		Yes	n/a
Statement of Protectiveness		Yes	n/a
Next Review		Yes	n/a
Implementation Requirements		Yes	n/a
Travel			
Required Parameters			
Number of Travelers		2	EA
Number of Days		5	EA
Air Fare Ticket Price		0	$
Need a rental car?		Yes	n/a

Comments:

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM #3
Description: Administrative Land Use Controls, SEAD-23.

Start Date: October, 2009
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate
Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
ADMINISTRATIVE LAND USE CONTROLS	Yes	100	0

Total Marked-up Cost: $461,008

Technologies:

Estimate Documentation Report

Technology Name: **Administrative Land Use Controls (# 1)**
User Name: **ADMINISTRATIVE LAND USE CONTROLS**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Rename Model		ADMINISTRATIVE LAND USE CONTROLS	n/a
Planning Documents		No	n/a
Implementation		Yes	n/a
Implementation: Start Date		2009	n/a
Monitoring & Enforcement		Yes	n/a
Monitoring & Enforcement: Start Date		2009	n/a
Modification/Termination		Yes	n/a
Modification/Termination: Start Date		2035	n/a
Type of Site		Transferring Government Installation	n/a
Implementation			
Required Parameters			
Modify Installation (or City) Master Plan		No	n/a
Deed Notification		Yes	n/a
Deed Notification: Number		1	EA
Deed Notification: Task Complexity		Low	n/a
Negotiating Easements		No	n/a
Restrictive Covenants		Yes	n/a
Restrictive Covenants: Number		1	EA
Restrictive Covenants: Task Complexity		Low	n/a
Equitable Servitudes		No	n/a
Access Control Signs		No	n/a
Utility Notification Service		No	n/a
Geographic Information Systems (GIS)/Overlay Maps		No	n/a
Develop Finding of Suitability to Transfer (FOST)		No	n/a
Monitoring & Enforcement			
Required Parameters			
Duration of Monitoring/Enforcement		30	Years
Notice Letters		Yes	n/a
Notice Letters: Number		10	EA
Notice Letters: Frequency		Annually	n/a

Estimate Documentation Report

Technology Name: **Administrative Land Use Controls (# 1)**
User Name: **ADMINISTRATIVE LAND USE CONTROLS**

Description	*Default*	*Value*	*UOM*
Monitoring & Enforcement			
Required Parameters			
Guard Service/Security		No	n/a
Reports & Certifications		Yes	n/a
Reports & Certifications: Frequency		Annually	n/a
Site Visits/Inspections		No	n/a
Modify/Termination			
Required Parameters			
Document Evaluation		Yes	n/a
Document Evaluation: Number		1	EA
Document Evaluation: Plan Complexity		Low	n/a
Modify LUC Documents		Yes	n/a
Modify LUC Documents: Number		1	EA
Modify LUC Documents: Plan Complexity		Low	n/a
Amend Decision Documents		Yes	n/a
Amend Decision Documents: Number		1	EA
Amend Decision Documents: Plan Complexity		Low	n/a
Termination Letters		Yes	n/a
Termination Letters: Number		1	EA
Termination Letters: Plan Complexity		Low	n/a

Comments:

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM #2
Description: Site Closeout and Well Abandonment SEAD-06-R-01.

Start Date: December, 2012
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate

Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
Site Close-Out Documentation	Yes	100	0
Well Abandonment	Yes	100	0

Total Marked-up Cost: $60,453

Technologies:

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Meetings		Yes	n/a
Work Plans and Reports		Yes	n/a
Documents		Yes	n/a
Site Close-Out Complexity		Moderate	n/a
Meetings			
Required Parameters			
Kick Off/Scoping Meetings		Yes	n/a
Kick Off/Scoping Meetings: Number of Meetings	1	1	EA
Kick Off/Scoping Meetings: Travel		Yes	n/a
Kick Off/Scoping Meetings: Travelers		2	EA
Kick Off/Scoping Meetings: Days		5	Days
Kick Off/Scoping Meetings: Air Fare		0	$
Review Meetings		Yes	n/a
Review Meetings: Number of Meetings	1	1	EA
Review Meetings: Travel		No	n/a
Regulatory Review Meetings		Yes	n/a
Regulatory Review Meetings: Number of Meetings	1	1	EA
Regulatory Review Meetings: Travel		No	n/a
Work Plans & Reports			
Required Parameters			
Work Plans		Yes	n/a
Draft Work Plan		Yes	n/a
Final Work Plan		Yes	n/a
Reports		Yes	n/a
Draft Close-Out Report		Yes	n/a
Draft Final Close-Out Report		Yes	n/a
Final Close-Out Report		Yes	n/a
Progress Reports		Yes	n/a
Project Duration	10	10	months
Documents			
Required Parameters			

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
Documents			
Required Parameters			
Draft Decision Document		Yes	n/a
Draft Final Decision Document		Yes	n/a
Final Decision Document		Yes	n/a
Long Term Document Storage		Yes	n/a
Number of Boxes		4	EA
Duration of Storage		30	Yrs

Comments:

Technology Name: **Well Abandonment (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Safety Level		D	n/a
Abandon Wells			
Required Parameters			
Technology/Group Name		Well Group	n/a
Number of Wells		10	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a

Comments:

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM #4
Description: Site closeout and well abandonment, SEAD-23.

Start Date: September, 2037
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate

Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
Site Close-Out Documentation	Yes	100	0
Well Abandonment	Yes	100	0

Total Marked-up Cost: $71,158

Technologies:

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Meetings		Yes	n/a
Work Plans and Reports		Yes	n/a
Documents		Yes	n/a
Site Close-Out Complexity		Moderate	n/a
Meetings			
Required Parameters			
Kick Off/Scoping Meetings		Yes	n/a
Kick Off/Scoping Meetings: Number of Meetings	1	1	EA
Kick Off/Scoping Meetings: Travel		Yes	n/a
Kick Off/Scoping Meetings: Travelers		2	EA
Kick Off/Scoping Meetings: Days		5	Days
Kick Off/Scoping Meetings: Air Fare		0	$
Review Meetings		Yes	n/a
Review Meetings: Number of Meetings	1	1	EA
Review Meetings: Travel		No	n/a
Regulatory Review Meetings		Yes	n/a
Regulatory Review Meetings: Number of Meetings	1	1	EA
Regulatory Review Meetings: Travel		No	n/a
Work Plans & Reports			
Required Parameters			
Work Plans		Yes	n/a
Draft Work Plan		Yes	n/a
Final Work Plan		Yes	n/a
Reports		Yes	n/a
Draft Close-Out Report		Yes	n/a
Draft Final Close-Out Report		Yes	n/a
Final Close-Out Report		Yes	n/a
Progress Reports		Yes	n/a
Project Duration	10	10	months
Documents			
Required Parameters			

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
Documents			
Required Parameters			
Draft Decision Document		Yes	n/a
Draft Final Decision Document		Yes	n/a
Final Decision Document		Yes	n/a
Long Term Document Storage		Yes	n/a
Number of Boxes		5	EA
Duration of Storage		30	Yrs

Comments:

Technology Name: **Well Abandonment (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Safety Level		D	n/a
Abandon Wells			
Required Parameters			
Technology/Group Name		Well Group 1	n/a
Number of Wells		10	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a

Comments:

MEMORANDUM FOR RECORD

SUBJECT: Environmental Liabilities **Date:** 08 April 2009

This memorandum serves as formal documentation of the information used to develop the Cost-To-Complete (CTC) estimate for the 2009 data call. The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of site Close-Out Documentation. LTM cost for groundwater monitoring and LUC review & certification came from the AFCEE contract. The LTM for groundwater cost for 30 years is per the ROD. The AFCEE contract includes five years of GW monitoring. The 1st year occurred in FY 08. 5-year reviews are required by the ROD. The first 5-year review is included in the contract.

Site: SEAD-001-R-01 Deactivation Furnaces (alias SEAD-16/17)

Source:
1. AFCEE Contract FA 8903-04-D-8675 CLIN 0001 AC
2. Final ROD for SEAD-16 and SEAD-17 March 2006
3. Professional judgment based on site knowledge.
4. Corps of Engineers Memo, 13 March 2008, S&A Rate
5. Corps of Engineers Email, John Norhstedt, January 12, 2009, Contracting Cost

Corps of Engineers Support Assumptions:
Procurement support every year with new procurement actions every 5 years. Closeout occurs every five years. S&A needed for all onsite efforts. Procurement to be firm fixed price effort.

RACER Assumptions:

Site Closeout Documentation (LTM phase):
1. Site Closeout is moderate complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports-- all default values
4. Documents will be stored for 30 years

Well Abandonment (LTM phase):
1. Number of wells: 12
2. Depth: 15 feet
3. Diameter: 2"
4. Unconsolidated
5. Overdrill/removal

Cost Summary **SEAD-001-R-01**
(SEAD-16/17)

LTM

GW monitoring and LUC Review & Certification
Cost taken from Source 1 x FY06 escalation factor
$5,490 x 1.0674 = 5860/yr
5,860/yr x 25 years = 146,500 $146,500

5-year Reviews (Source 1 x FY06 escalation factor)
$6,588/yr x 1. 0674 = 7,032/yr
$7,032 per event x 5 events $35,160

Site Closeout & Well Abandonment (RACER) $77,927

Corps of Engineers Support (Source 6):
$160,056

Contract Procurement
5 Events $3,000/event = $15,000
Contract Monitoring
25 years $5,000/year = $125,000
Contract Closeout
5 events $1,000/event = $5,000

S&A 0.058 (146,500 + 35,160 + 77,927) = $15,056

Total Site Cost **$419,643**

Cost Difference > 10% from 2008 Report? Yes
Reason: RACER update and added Corps of Engineers Support

Prepared by: Randall Battaglia _____ 4/9/09
Signature Date

Reviewed by: Stephen M. Absolom _____ 4/9/09
Signature Date

Contract

Source 1

ORDER FOR SUPPLIES OR SERVICES

1. CONTRACT/~~PURCH ORDER~~/AGREEMENT NO.	2. DELIVERY ORDER/ CALL NO.	3. DATE OF ORDER/CALL (YYYYMMMDD)	4. REQUISITION/PURCH REQUEST NO.	5. PRIORITY
FA8903-04-D-8675	0031	20 JUN 2006	SEE SCHEDULE	DO-C9

6. ISSUED BY CODE FA8903
HSW/PKV-W
AIR FORCE MATERIEL COMMAND
311TH HUMAN SYSTEMS WING/PKV-W
3300 SIDNEY BROOKS
BROOKS CITY BASE TX 78235-5112
EDWIN CUSTODIO (210)536-4493
Edwin.Custodio@hqafcee.brooks.af.mil

7. ADMINISTERED BY *(If Other than 6)* CODE S0512A
DCMA LOS ANGELES
P.O. BOX 9608
MISSION HILLS CA 91346-9608
DCMALOSANGELES@DCMA.MIL

SCD: C PAS: (NONE)

8. DELIVERY FOB
X DESTINATION
OTHER *(See Schedule if other)*

9. CONTRACTOR CODE 1BVK6 FACILITY
NAME AND ADDRESS
PARSONS INFRASTRUCTURE & TECHNOLOGY GROUP INC
100 W WALNUT ST
PASADENA CA 91124-0001
(626) 440-2000

10. DELIVER TO FOB POINT BY *(Date)* (YYYYMMMDD) SEE SCHEDULE

11. X IF BUSINESS IS
SMALL
SMALL DISAD-VANTAGED
WOMEN-OWNED

12. DISCOUNT ITEMS
N

13. MAIL INVOICES TO ADDRESS IN BLOCK
SEE BLOCK 15 (PAYMENT OFFICE)

14. SHIP TO CODE
SEE SCHEDULE

15. PAYMENT WILL BE MADE BY CODE HQ0339
DFAS COLUMBUS CENTER
DFAS-CO/WEST ENTITLEMENT OPS
P.O. BOX 182381
COLUMBUS OH 43218-2381

EFT:T

MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.

16. TYPE OF ORDER
DELIVERY/CALL X — This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.
PURCHASE — Reference your ____ furnish the following on items specified herein.

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR | SIGNATURE | TYPED NAME AND TITLE | DATE SIGNED(YYYYMMMDD)

☐ If this box is marked, supplier must sign Acceptance and return the following number of copies:

17. ACCOUNTING AND APPROPRIATION DATA/LOCAL USE
SEE SCHEDULE

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/SERVICES	20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT

*If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.

24. UNITED STATES OF AMERICA
//signed//
BY: EDWIN CUSTODIO 20 JUN 2006
CONTRACTING/ORDERING OFFICER

25. TOTAL $10,820,000.00

29. DIFFERENCES

26. QUANTITY IN COLUMN 20 HAS BEEN
☐ INSPECTED ☐ RECEIVED ☐ ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

DATE SIGNATURE AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

27. SHIP NO. | **28. D.O. VOUCHER NO.** | **30. INITIALS**

☐ PARTIAL ☐ FINAL

32. PAID BY

33. AMOUNT VERIFIED CORRECT FOR

32. PAYMENT ☐ COMPLETE ☐ PARTIAL ☐ FINAL

34. CHECK NUMBER

35. BILL OF LADING

36. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT.

DATE SIGNATURE AND TITLE OF CERTIFYING OFFICER

37. RECEIVED AT	38. RECEIVED BY *(Print)*	39. DATE RECEIVED (YYYYMMMDD)	40. TOTAL CONTAINERS	41. S/R ACCOUNT NO.	42. S/R VOUCHER NO.

PARSONS

INVOICE

Parsons Infrastructure & Technology Group, Inc.
Remittance Address: PO Box 88954 • Chicago, IL 60695-1954 • www.parsons.com
Wire transfer: Account 323289711 • ABA 021000021

Billed to:
DFAS-Columbus Center
West Entitlement Operations
P.O. Box 182381
Columbus, OH 43218-2381

Invoice date: 2006/10/10
Shipment number: SER0004
Invoice number: 06100626
Client number: 72483
Job number: 745172

Project name: Seneca Army Depot Remedial Actions
Authorization: Contract FA8903-04-D-8675 order 0031

Invoice amount: $ 10,980

	ACRN	Contract amount	Previously billed	Current billing	Cumulative billed
CLIN 0001					
SUMMARY BY ACRN	AA	$ 39,614	$ 39,614	$ -	$ 39,614
	AB	$ 600,000	$ 160,320	$ 10,980	$ 171,300
LTM	AC	$ 548,386	$ -	$ -	$ -
	AD	$ 601,000	$ 107,304	$ -	$ 107,304
	AE	$ 4,870,000	$ 1,017,093	$ -	$ 1,017,093
	AF	$ 4,161,000	$ 397,813	$ -	$ 397,813
		$ 10,820,000	$ 1,722,144	$ 10,980	$ 1,733,124

SEE MILESTONE DETAIL BEGINNING ON NEXT PAGE.

Jesse Perez

Shipment number SER0004, invoice number 06100626, continued

Milestone	ACRN	Milestone payment	Previously billed	Current billing	Cumulative billed
SEAD 16/17 Mobilization (5%)	AA	$ 39,614	$ 39,614	$ -	$ 39,614
SEAD 16/17 Mobilization (5%)	AB	$ 19,786	$ 19,786	$ -	$ 19,786
SEAD 16/17 Insurance/Bonds	AB	$ 134,166	$ 134,166	$ -	$ 134,166
Schedule	AB	$ 6,368	$ 6,368	$ -	$ 6,368
SEAD 16/17 Approval of QPP/Work Plan	AB	$ 10,980	$ -	$ 10,980	$ 10,980
SEAD 16/17 WP Submittal	AB	$ 50,000	$ -	$ -	$ -
SEAD 16/17 RA WP Approval	AB	$ 50,000	$ -	$ -	$ -
SEAD 16/17 Excavation 50% Complete	AB	$ 328,700	$ -	$ -	$ -
SEAD 16/17 Excavation 50% Complete	AC	$ 168,858	$ -	$ -	$ -
SEAD 16/17 Excavation 100% Complete	AC	$ 300,000	$ -	$ -	$ -
SEAD 16/17 RA Report Approval	AC	$ 40,000	$ -	$ -	$ -
Submit SEAD 16/17 Year 1 LTM Report DONE/CS	AC	$ 5,490	$ -	$ -	$ -
Submit SEAD 16/17 Year 2 LTM Report	AC	$ 5,490	$ -	$ -	$ -
Submit SEAD 16/17 Year 3 LTM Report	AC	$ 5,490	$ -	$ -	$ -
Submit SEAD 16/17 Year 4 LTM Report	AC	$ 5,490	$ -	$ -	$ -
Submit SEAD 16/17 Year 5 LTM Report	AC	$ 5,490	$ -	$ -	$ -
Approval of SEAD 16/17 5-Year Report	AC	$ 6,588	$ -	$ -	$ -
Response Complete SEAD 16/17	AC	$ 5,490	$ -	$ -	$ -
SEAD 4/38 Mobilization (5%)	AF	$ 208,050	$ 208,050	$ -	$ 208,050
SEAD 4/38 Insurance/Bonds	AF	$ 129,001	$ 129,001	$ -	$ 129,001
SEAD 4/38 Submittal of WBS and Schedule	AF	$ 22,305	$ 22,305	$ -	$ 22,305
SEAD 4/38 Approval of QPP/Work Plan	AF	$ 38,457	$ 38,457	$ -	$ 38,457
SEAD 4/38 PRAP Submittal	AF	$ 75,000	$ -	$ -	$ -
SEAD 4/38 ROD Approval	AF	$ 75,000	$ -	$ -	$ -
SEAD 4/38 WP Submittal	AF	$ 75,000	$ -	$ -	$ -
SEAD 4/38 RA Work Plan Submittal	AF	$ 50,000	$ -	$ -	$ -
SEAD 4/38 Excavation 25% Complete	AF	$ 1,050,000	$ -	$ -	$ -
SEAD 4/38 Excavation 50% Complete	AF	$ 1,050,000	$ -	$ -	$ -
SEAD 4/38 Excavation 75% Complete	AF	$ 650,000	$ -	$ -	$ -
SEAD 4/38 Excavation 100% Complete	AF	$ 559,745	$ -	$ -	$ -
SEAD 4/38 RA Report Approval	AF	$ 40,000	$ -	$ -	$ -
Submit SEAD 4/38 Year 1 LTM Report	AF	$ 19,228	$ -	$ -	$ -
Submit SEAD 4/38 Year 2 LTM Report	AF	$ 19,228	$ -	$ -	$ -
Submit SEAD 4/38 Year 3 LTM Report	AF	$ 19,228	$ -	$ -	$ -
Submit SEAD 4/38 Year 4 LTM Report	AF	$ 19,228	$ -	$ -	$ -
Submit SEAD 4/38 Year 5 LTM Report	AF	$ 19,228	$ -	$ -	$ -
Approval of SEAD 4/38 5-Year Report	AF	$ 23,074	$ -	$ -	$ -
Response Complete SEAD 4/38	AF	$ 19,228	$ -	$ -	$ -

ANNUAL LTM

5YR REVIEW

5,490 FY 06 COST
1.0674 ESCALATION FACTOR
5,860 FY 09 COST

6588 FY 06 COST
1.0674 ESCALATION FACTOR
7032 FY 09 COST

Shipment number SER0004, invoice number 06100626, continued

Milestone	ACRN	Milestone payment	Previously billed	Current billing	Cumulative billed
SEAD 11 Mobilization (5%)	AE	$ 243,500	$ 243,500	$ -	$ 243,500
SEAD 11 Insurance/Bonds	AE	$ 542,479	$ 542,479	$ -	$ 542,479
SEAD 11 Submittal of WBS and Schedule	AE	$ 56,105	$ 56,105	$ -	$ 56,105
SEAD 11 Approval of QPP/Work Plan	AE	$ 75,009	$ 75,009	$ -	$ 75,009
SEAD 11 RA WP Submittal	AE	$ 100,000	$ 100,000	$ -	$ 100,000
SEAD 11 RA WP Approval	AE	$ 50,000	$ -	$ -	$ -
SEAD 11 Excavation 25% Complete	AE	$ 1,100,000	$ -	$ -	$ -
SEAD 11 Excavation 50% Complete	AE	$ 1,050,000	$ -	$ -	$ -
SEAD 11 Excavation 75% Complete	AE	$ 705,871	$ -	$ -	$ -
SEAD 11 Excavation 100% Complete	AE	$ 685,000	$ -	$ -	$ -
SEAD 11 RA Report Approval	AE	$ 40,000	$ -	$ -	$ -
SEAD 11 PRAP Approval	AE	$ 25,000	$ -	$ -	$ -
SEAD 11 ROD Approval	AE	$ 25,000	$ -	$ -	$ -
SEAD 11 LTM Plan Approval	AE	$ 10,000	$ -	$ -	$ -
Submit SEAD 11 Year 1 LTM Report	AE	$ 22,505	$ -	$ -	$ -
Submit SEAD 11 Year 2 LTM Report	AE	$ 22,505	$ -	$ -	$ -
Submit SEAD 11 Year 3 LTM Report	AE	$ 22,505	$ -	$ -	$ -
Submit SEAD 11 Year 4 LTM Report	AE	$ 22,505	$ -	$ -	$ -
Submit SEAD 11 Year 5 LTM Report	AE	$ 22,505	$ -	$ -	$ -
Approval of SEAD 11 5-Year Report	AE	$ 27,006	$ -	$ -	$ -
Response Complete SEAD 11	AE	$ 22,505	$ -	$ -	$ -
SEAD 121C Mobilization (5%)	AD	$ 30,050	$ 30,050	$ -	$ 30,050
SEAD 121C Insurance/Bonds	AD	$ 68,477	$ 68,477	$ -	$ 68,477
SEAD 121C Submittal of WBS and Schedule	AD	$ 3,222	$ 3,222	$ -	$ 3,222
SEAD 121C Approval of QPP/Work Plan	AD	$ 5,555	$ 5,555	$ -	$ 5,555
SEAD 121C RA WP Approval	AD	$ 30,000	$ -	$ -	$ -
SEAD 121C Excavation 50% Complete	AD	$ 174,100	$ -	$ -	$ -
SEAD 121C Excavation 100% Complete	AD	$ 139,601	$ -	$ -	$ -
SEAD 121C RA Report Approval	AD	$ 40,000	$ -	$ -	$ -
SEAD 121C PRAP Submittal	AD	$ 30,000	$ -	$ -	$ -
SEAD 121C ROD Approval	AD	$ 30,000	$ -	$ -	$ -
SEAD 121C LTM Plan Approval	AD	$ 30,000	$ -	$ -	$ -
Submit SEAD 121C Year 1 LTM Report	AD	$ 2,777	$ -	$ -	$ -
Submit SEAD 121C Year 2 LTM Report	AD	$ 2,777	$ -	$ -	$ -
Submit SEAD 121C Year 3 LTM Report	AD	$ 2,777	$ -	$ -	$ -
Submit SEAD 121C Year 4 LTM Report	AD	$ 2,777	$ -	$ -	$ -
Submit SEAD 121C Year 5 LTM Report	AD	$ 2,777	$ -	$ -	$ -
Approval of SEAD 121C 5-Year Report	AD	$ 3,333	$ -	$ -	$ -
Response Complete 121C	AD	$ 2,777	$ -	$ -	$ -
		$ 10,820,000	$ 1,722,144	$ 10,980	$ 1,733,124

Source 2

FINAL
RECORD OF DECISION

FOR

THE ABANDONED DEACTIVATION FURNACE (SEAD-16) AND
THE ACTIVE DEACTIVATION FURNACE (SEAD-17)

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

Prepared for:

SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK

and

UNITED STATES ARMY CORPS OF ENGINEERS
4820 UNIVERSITY SQUARE
HUNTSVILLE, ALABAMA

Prepared By:

PARSONS
150 Federal St.
4th Floor
Boston, Massachusetts

Contract Number: DACA87-95-D-0031
Delivery Order 003
USEPA Site ID: NY0213820830; NY Site ID: 8-50-006

March 2006

1.0 DECLARATION OF THE RECORD OF DECISION

Site Name and Location

The Abandoned Deactivation Furnace (SEAD-16) and the Active Deactivation Furnace (SEAD-17)
Seneca Army Depot Activity
CERCLIS ID# NY0213820830
Romulus, Seneca County, New York

Statement of Basis and Purpose

This decision document presents the U.S. Army's (Army's) and the U.S. Environmental Protection Agency's (USEPA's) selected remedy for SEAD-16 and SEAD-17, located at the Seneca Army Depot Activity (SEDA or the Depot) near Romulus, New York. The decision was developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended, 42 U.S.C. §9601 et seq., and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300. The Base Realignment and Closure (BRAC) Environmental Coordinator, the Director of the National Capital Region Field Office, and the USEPA Region II have been delegated the authority to approve this Record of Decision (ROD). The New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH) have concurred with the selected remedy.

This ROD is based on the Administrative Record that has been developed in accordance with Section 113(k) of CERCLA. The Administrative Record is available for public review at the Seneca Army Depot Activity, 5786 State Route 96, Building 123, Romulus, NY 14541. The Administrative Record Index identifies each of the items considered during the selection of the remedial action. This index is included in **Appendix A**.

The State of New York, through the NYSDEC and NYSDOH, has concurred with the selected remedy. The NYSDEC Declaration of Concurrence is provided in **Appendix B** of this ROD.

Site Assessment

The response action selected in this ROD is necessary to protect human health or the environment from actual or threatened releases of hazardous substances into the environment or from actual or threatened releases of pollutants or contaminants from SEAD-16 and SEAD-17, which may present an imminent and substantial endangerment to public health or welfare.

Description of the Selected Remedy

The selected remedy for SEAD-16 and SEAD-17 addresses contaminated soil, building debris, and groundwater. The selected remedy will result in the removal of soil and groundwater as a pathway

for potential receptors. Groundwater will be monitored to ensure that soil contamination left on-site does not further degrade groundwater quality.

The elements that compose this remedy include:

- Conduct additional sampling as part of the pre-design sampling program to further delineate the areas of excavation;
- Remove, test, and dispose of the SEAD-16 building debris off-site;
- Excavate approximately 275 cubic yards (cy) of ditch soil to a depth of 1 foot (ft.) with lead concentrations greater than 1250 mg/Kg until cleanup standards are achieved;
- Excavate approximately 1760 cy of surface soils to a depth of 1 ft. at SEAD-16 with lead concentrations greater than 1250 mg/Kg, and polycyclic aromatic hydrocarbon (PAH) and metal concentrations greater than risk-based derived cleanup standards listed below and in **Table 1-1**;
- Excavate approximately 67 cy of subsurface soils to a depth of 2 ft. to 3 ft. at SEAD-16 (areas around SB16-2, SB16-4, and SB16–5) with lead concentrations greater than 1250 mg/Kg, and PAH and metal concentrations greater than risk-based derived cleanup standards listed below and in **Table 1-1** (**Figure 1-1**);
- Excavate approximately 2590 cy of surface soils to a depth of 1 ft. at SEAD-17 with lead concentrations greater than 1250 mg/Kg and metal concentrations greater than risk-based derived cleanup standards listed below (**Table 1-1**) (**Figure 1-2**);
- Stabilize excavated soils from SEAD-16 and SEAD-17 and building debris from SEAD-16 exceeding the toxicity characteristic leaching procedure (TCLP) criteria in order to attain Land Disposal Restrictions (LDR);
- Dispose of the excavated material in an off-site landfill;
- Backfill the excavated areas with clean backfill;
- Conduct groundwater monitoring at SEAD-16 and SEAD-17 until concentrations are below the GA criteria;
- Remediate material potentially presenting an explosive hazard and munitions and explosives of concern to meet the Department of Defense Explosive Safety Board (DDESB) requirements for unrestricted use or to put into place land use restrictions as may be required by DDESB;
- Submit a Completion Report following the remedial action;
- Establish and maintain land use controls (LUCs) to prevent access to or use of the groundwater and to prevent residential use until cleanup standards are met; and
- Complete a review of the selected remedy every 5 years (at minimum), in accordance with Section 121(c) of the CERCLA.

GW monitoring

LUCs

5 year review

Cleanup Standards for Industrial Use at SEAD-16 and SEAD-17

COMPOUNDS	SOIL CLEANUP GOAL
Polycyclic Aromatic Hydrocarbons (PAHs)	
Benzo(a)anthracene (µg/Kg)	20,417
Benzo(a)pyrene (µg/Kg)	2,042
Benzo(b)fluoranthene (µg/Kg)	20,417
Benzo(k)fluoranthene (µg/Kg)	50,000
Chrysene (µg/Kg)	50,000
Dibenz(a,h)anthracene (µg/Kg)	2,042
Indeno(1,2,3-cd)pyrene (µg/Kg)	20,417
Metals	
Antimony (mg/Kg)	29
Arsenic (mg/Kg)	20
Cadmium (mg/Kg)	14
Copper (mg/Kg)	331
Lead (mg/Kg)	1250
Mercury (mg/Kg)	0.54
Thallium (mg/Kg)	2.6
Zinc (mg/kg)	773

To complete Resource Conservation and Recovery Act (RCRA) closure of the deactivation furnace at SEAD-17, the Army will either further decontaminate or demolish and dispose off-site the structures that failed to meet closure standards during the interim closure (i.e., concrete slabs and block walls).

SEAD-16 AND SEAD-17 Land Use Control (LUC) Performance Objectives

The LUC performance objectives for SEAD-16 and SEAD-17 are to:

- Prevent access to or use of the groundwater until cleanup levels are met; and
- Prevent residential housing, elementary and secondary schools, childcare facilities and playgrounds activities.

The LUCs would be implemented over the area bounded by the boundary at SEAD-16 (**Figure 1-1**) and SEAD-17 (**Figure 1-2**). The boundary of SEAD-16 is defined as the fence; SEAD-17 is bounded by the fence to the east and by natural boundaries, such as ditches. It should be noted that land within the Planned Industrial/Office Development (PID) area, which includes SEAD-16 and SEAD-17, is also subject to a separate Proposed Plan and ROD that include institutional controls (ICs) ["Final ROD for Sites Requiring Institutional Controls in the Planned Industrial/Office Development or Warehousing Areas" (Parsons, 2004)]. Groundwater use restrictions will continue until groundwater constituent concentrations have been reduced to levels that allow for unlimited exposure and unrestricted use. With USEPA approval, once groundwater cleanup standards are achieved, the groundwater use restrictions may be eliminated.

To implement the Army's remedy, which includes the imposition of LUCs, a LUC Remedial Design for SEAD-16 and SEAD-17 will be prepared which satisfies the applicable requirements of Paragraphs (a) and (c) of Environmental Conservation Law (ECL) Article 27, Section 1318: Institutional and Engineering Controls. In addition, the Army will prepare an environmental easement for SEAD-16 and SEAD-17, consistent with Section 27-1318(b) and Article 71, Title 36 of ECL, in favor of the State of New York and the Army, which will be recorded at the time of the property's transfer from federal ownership. A schedule for completion of the draft SEAD-16 and SEAD-17 LUC Remedial Design Plan (LUC RD) will be completed within 21 days of the ROD signature, consistent with Section 14.4 of the Federal Facilities Agreement (FFA).

The Army shall implement, inspect, report, and enforce the LUCs described in this ROD in accordance with the approved LUC RD. Although the Army may later transfer these responsibilities to another party by contract, property transfer agreement, or through other means, the Army shall retain ultimate responsibility for remedy integrity.

State Concurrence

NYSDOH forwarded a letter of concurrence regarding the selection of a remedial action to NYSDEC, and NYSDEC, in turn, forwarded to USEPA a letter of concurrence regarding the selection of a remedial action in the future. This letter of concurrence has been placed in **Appendix B**.

Declaration

CERCLA and the NCP require each selected remedy to be protective of human health, public welfare, and the environment; be cost effective, comply with other statutory laws; and use permanent solutions, alternative treatment technologies, and resource recovery options to the maximum extent possible. CERCLA and the NCP also state a preference for treatment as a principal element for the reduction of toxicity, mobility, or volume of the hazardous substances.

The selected remedy is consistent with CERCLA and the NCP and is protective of human health and the environment, complies with Federal and State requirements that are applicable or relevant and appropriate to the remedial action, is cost-effective, and utilizes permanent solutions. This remedy also reduces the toxicity, mobility, or volume of hazardous substances, pollutants, or contaminants.

Because this remedy may result in hazardous substances, pollutants, or contaminants remaining on-site above levels that allow for unlimited use and unrestricted exposure for an indeterminate period, a statutory review will be conducted every 5 years after initiation of the remedial action to ensure that the remedy is, or will be, protective of human health and the environment.

constituent concentrations have been reduced to levels that allow for unlimited exposure and unrestricted use. With USEPA approval, once groundwater cleanup standards are achieved, the groundwater use restrictions may be eliminated.

To implement the Army's remedy, which includes LUCs, a LUC RD for SEAD-16 and SEAD-17 will be prepared which satisfies the applicable requirements of Paragraphs (a) and (c) of ECL Article 27, Section 1318: Institutional and Engineering Controls. In addition, the Army will prepare an environmental easement for SEAD-16 and SEAD-17, consistent with Section 27-1318(b) and Article 71, Title 36 of ECL, in favor of the State of New York and the Army, which will be recorded at the time of SEAD-16's and SEAD-17's transfer from federal ownership. A schedule for completion of the draft SEAD-16 and SEAD-17 LUC RD will be completed within 21 days of the ROD signature, consistent with Section 14.4 of the FFA.

The present worth cost of this alternative is $3,109,400. The capital cost and the present worth O&M cost of Alternative 4 are $1,699,900 and $1,409,500, respectively.

In comparison to other remedies considered in the FS, Alternative 4 has the highest overall ranking. While it does not rank highest for any single evaluation criterion, as Alternatives 2 and 6 do, neither does it rank the lowest for any evaluation criteria considered, which each of the other intrusive alternatives did. Alternative 4 ranks second of all the alternatives for long-term effectiveness and permanence and reduction of mobility of contaminants. It also ranks highest of the three alternatives (2, 4, and 6) for technical feasibility and overall cost. The preferred alternative will eliminate source soils from further impacting SEAD-16 and SEAD-17 by preventing contact with receptors and migration of contaminants to surface water and groundwater. It is a cost-effective, readily available alternative that does not require long-term maintenance aside from groundwater monitoring and maintenance of LUCs, such as groundwater restrictions, and residential/daycare land use restrictions; and, the alternative can be implemented quickly to provide short-term effectiveness. Finally, it is a permanent solution that would significantly reduce the mobility of the contaminants and potential for exposure at SEAD-16 and SEAD-17.

Source 4

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

CERM-P (37)

13 MAR 2008

MEMORANDUM FOR MAJOR SUBORDINATE COMMANDS (MSC)

SUBJECT: Fiscal Year (FY) 2008 Supervision and Administration (S&A) Rate Changes

1. References:

a. CERM-P memorandum, 27 July 2005, Subject: S&A Accounting Procedures for Modularity Projects.

b. CERM-P memorandum, 20 September 2006, Subject: FY 2006 S&A Rate Changes.

2. Effective 1 April 2008 the Operation and Maintenance (O&M) and the Defense Environmental Restoration Program (DERP) S&A rate for the Continental United States (CONUS) is reduced for new Fiscal Year 2008 (FY08) contract awards from six and one-half percent to five and eight-tenths percent. The intent of this change is to adjust the S&A rate to match the current expense and income activity; the level of service or effort should remain unchanged. Any O&M losses to your S&A checkbook that result from the rate change will be reimbursed from the national S&A account. The Major Subordinate Command (MSC) maximum checkbook carryover will be increased to three months' expense and reflected in the next update to the consolidated command guidance.

S&A RATE

3. The one percent furniture rate in reference "a" was not intended to be restricted to modularity projects. It may be used for any MILCON or O&M project. This change in the O&M rate does not affect modularity/relocatable projects as they continue to be charged the MILCON rate per reference "a".

CERM-P (37)
SUBJECT: FY 2008 Supervision and Administration (S&A) Rate Changes

4. Since these changes significantly affect S&A schedules the FY08 S&A performance will be measured against your mid-year schedules due 25 April 2008. Special instructions are provided in the enclosed standing operating procedures to assist in implementation of these changes. These changes will be codified in the next update to the consolidated command guidance.

5. Point of contact for this action is Mr. Philip Blount, CERM-P, (202) 761-8908.

FOR THE COMMANDER:

Encl

Wesley C. Miller
Director of Resource Management

Absolom, Stephen M Mr CIV USA

Source 5

From: Nohrstedt, John HNC [John.Nohrstedt@usace.army.mil]
Sent: Monday, January 12, 2009 4:18 PM
To: Absolom, Stephen M Mr CIV USA
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Cost per year for contracting to monitor a contractor:
5 hrs/month X 12 months = 60 hrs
Approximately $5,000 to $7,000

Annual Monitoring

Cost for contracting Task Order Close out:
Firm Fixed Price - 5 to 10 hrs - Approx. $500 to $1000
Cost Plus - 10 to 25 hrs - Approx. $1000 to $2,500

multi year closeout

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA [mailto:stephen.m.absolom@us.army.mil]
Sent: Monday, January 12, 2009 8:07 AM
To: Nohrstedt, John HNC; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,
What will the cost per year be to monitor the TO if it is a multiple year task order.
Also need to a cost for TO Close out.
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362
-----Original Message-----
From: Nohrstedt, John HNC [mailto:John.Nohrstedt@usace.army.mil]
Sent: Friday, January 09, 2009 12:35 PM
To: Absolom, Stephen M Mr CIV USA; Battaglia, Randy W NAN02
Cc: Healy, Kevin W HNC
Subject: RE: Contracting Cost

Steve,

Below are the man-hours to prepare and issue a simple task order:

Prepare SOW and IGE	- 6 to 10 hrs
Review	- 0.5 to 2 hr
Issue RFP	- 2 to 3 hrs
Review Proposal	- 2 to 4 hrs
Tech Evaluation	- 4 to 8 hrs
Negotiation	- 2 to 4 hrs
Review Revised Proposal	- 2 to 3 hrs
Tech Eval. of revised	- 0.5 to 2 hrs
Issue Award	- 4 to 6 hrs

TOTAL - 23 to 42 hours

The cost would be approximately $3,000 to $5,000. Procurement cost

Thanks,
Steve Nohrstedt
256-895-1639

-----Original Message-----
From: Absolom, Stephen M Mr CIV USA
[mailto:stephen.m.absolom@us.army.mil]
Sent: Friday, January 09, 2009 9:14 AM
To: Battaglia, Randy W NAN02; Nohrstedt, John HNC
Subject: Contracting Cost

Steve,
I am starting to update my CTC for this year. One area not preivously included in the costing is the establishment of a new Task/Delivery order. Can you give me a Cost to be included in my CTC for the COE to prepare and issue a task order? Please note that your email will be included in the CTC file so it needs to be accurate as possible.

Thanks
Steve

SM Absolom
Installation Manager
Seneca Army Depot
Phone (607) 869-1309
Cell (315) 406-4737
Fax (607) 869-1362

Estimate Documentation Report

System:

RACER Version: 10.2.0
Database Location: C:\Documents and Settings\Andy W\Application Data\Earth Tech\RACER 10.2\Racer.mdb

Folder:

Folder Name: Seneca

Project:

Project ID: SEAD-001-R-01
Project Name: SEAD-001-R-01
Project Category: Planned Industrial Area

Location
State / Country: NEW YORK
City: SENECA ARMY DEPOT

Location Modifier	Default	User
	1.114	1.114

Options
Database: System Costs
Cost Database Date: 2009
Report Option: Fiscal

Description

SEAD-001-R-01 Deactivation Furnaces This MMR site was known as SEAD-16 & 17

Since this site is a Military Munitions Rule site, some costs reported have been captured in an OE EE/CA. The Remedial Action Cost Engineering and Requirements (RACER) system was used to estimate the cost of the Site Close-Out Documentation.

Changes from FY-08 Estimate:
- costs updated to FY09 database

Site: SEAD-001-R-01 Deactivation Furnaces (alias SEAD-16/17)

Source: 1.Final ROD for the Abandon Deactivation Furnace (SEAD-16) and the Active Deactivation Furnace (SEAD-17), March 2006

Estimate Documentation Report

2. Final Ordnance and Explosives Engineering Evaluation/Cost Analysis, January 2004.
3. Professional judgment based on site knowledge.

RACER Assumptions:

Site Closeout Documentation (LTM phase):
1. Site Closeout is moderate complexity
2. Kick-off, review and regulatory meetings
3. Work Plans and reports- all default values
4. Documents will be stored for 30 years
5. Well abandonment includes sub-contractor costs for fieldwork

Well Abandonment (LTM phase):
1. Number of wells: 12
2. Depth: 15 feet
3. Diameter: 2"
4. Unconsolidated
5. Overdrill/removal

Estimate Documentation Report

Site Documentation:

Site ID: SEAD-001-R-01
Site Name: Deactivation Furnaces
Site Type: None

Media/Waste Type
Primary: Groundwater
Secondary: N/A

Contaminant
Primary: Metals
Secondary: None

Phase Names
SI: ☐
RI/FS: ☐
RD: ☐
IRA: ☐
RA(C): ☐
RA(O): ☐
LTM: ☑
Site Closeout: ☐

Documentation
Description: SEAD-001-R-01 Deactivation Furnaces. MMR site (alias SEAD-16/17) will require Long Term Maintenance to include 5- Year Review and Site Closeout Documentation, and Land Use Controls. This estimate is for Site Closeout Documentation.

Support Team: Stephen M. Absolom - BEC for Seneca Army Depot
Randy Battaglia- US Army Corps of Engineers, Project Engineer

References: 1.Final ROD for the Abandon Deactivation Furnace (SEAD-16) and the Active Deactivation Furnace (SEAD-17), March 2006
2. AFCEE Contract FA 8903-04-D-8675 CLIN 0001 AC
3. Professional judgment based on site knowledge.

Estimator Information
Estimator Name: Andrew Weinberg
Estimator Title: Senior Geologist
Agency/Org./Office: Bechtel-S Corp.
Business Address: 203 E. Milton St.
Austin, TX 78704
Telephone Number: 512-344-9657
Email Address: aweinberg@bechtel-s.com
Estimate Prepared Date: 01/28/2009

Estimator Signature: _____ **Date:** _____

Estimate Documentation Report

Reviewer Information

Reviewer Name: Stephen Absolom
Reviewer Title: Installation Manager
Agency/Org./Office: Seneca Army Depot Activity
Business Address:
Telephone Number: (607) 869-1309
Email Address: stephen.m.absolom@us.army.mil
Date Reviewed: 02/09/2009

Reviewer Signature: _____ **Date:** _____

Estimated Costs:

Phase Names	Direct Cost	Marked-up Cost
LTM #1	$35,581	$77,927
Total Cost:	$35,581	$77,927

Estimate Documentation Report

Phase Documentation:

Phase Type: Long Term Monitoring
Phase Name: LTM #1
Description: Well abandonment assumed 12 wells, 2" diameter, 15 ft deep, unconsolidated, overdrill/removal.

Start Date: October, 2038
Labor Rate Group: System Labor Rate
Analysis Rate Group: System Analysis Rate
Phase Markups: System Defaults

Technology Markups	Markup	% Prime	% Sub.
Site Close-Out Documentation	Yes	100	0
Well Abandonment	Yes	100	0

Total Marked-up Cost: $77,927

Technologies:

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Meetings		Yes	n/a
Work Plans and Reports		Yes	n/a
Documents		Yes	n/a
Site Close-Out Complexity		Moderate	n/a
Meetings			
Required Parameters			
Kick Off/Scoping Meetings		Yes	n/a
Kick Off/Scoping Meetings: Number of Meetings	1	1	EA
Kick Off/Scoping Meetings: Travel		Yes	n/a
Kick Off/Scoping Meetings: Travelers		2	EA
Kick Off/Scoping Meetings: Days		5	Days
Kick Off/Scoping Meetings: Air Fare		0	$
Review Meetings		Yes	n/a
Review Meetings: Number of Meetings	1	1	EA
Review Meetings: Travel		No	n/a
Regulatory Review Meetings		Yes	n/a
Regulatory Review Meetings: Number of Meetings	1	1	EA
Regulatory Review Meetings: Travel		No	n/a
Work Plans & Reports			
Required Parameters			
Work Plans		Yes	n/a
Draft Work Plan		Yes	n/a
Final Work Plan		Yes	n/a
Reports		Yes	n/a
Draft Close-Out Report		Yes	n/a
Draft Final Close-Out Report		Yes	n/a
Final Close-Out Report		Yes	n/a
Progress Reports		Yes	n/a
Project Duration	10	10	months
Documents			
Required Parameters			

Estimate Documentation Report

Technology Name: **Site Close-Out Documentation (# 1)**

Description	*Default*	*Value*	*UOM*
Documents			
Required Parameters			
Draft Decision Document		Yes	n/a
Draft Final Decision Document		Yes	n/a
Final Decision Document		Yes	n/a
Long Term Document Storage		Yes	n/a
Number of Boxes		5	EA
Duration of Storage		30	Yrs

Comments:

Technology Name: **Well Abandonment (# 1)**

Description	*Default*	*Value*	*UOM*
System Definition			
Required Parameters			
Safety Level		D	n/a
Abandon Wells			
Required Parameters			
Technology/Group Name		Well Group	n/a
Number of Wells		12	EA
Well Depth		15	FT
Well Diameter		2	IN
Well Abandonment Method		Overdrill / Removal	n/a
Formation Type		Unconsolidated	n/a

Comments:

ORDER FOR SUPPLIES OR SERVICES

PAGE 1 OF 19

1. CONTRACT/PURCH. ORDER/ AGREEMENT NO.	2. DELIVERY ORDER/ CALL NO.	3. DATE OF ORDER/CALL (YYYYMMMDD)	4. REQ./ PURCH. REQUEST NO.	5. PRIORITY
W912DY-08-D-0003	0001	2008 May 22	W31RYO81401819	

6. ISSUED BY CODE W912DY
US ARMY ENGINEERING & SUPPORT CENTER
CEHNC-CT
4820 UNIVERSITY SQUARE
HUNTSVILLE AL 35816-1822

7. ADMINISTERED BY *(if other than 6)* CODE W912DY
DIRECTORATE OF CONTRACTING - HNC
ATTN: LAURA STIEGLER
256-895-1171
HUNTSVILLE AL 35807

8. DELIVERY FOB
[X] DESTINATION
[ ] OTHER
(See Schedule if other)

9. CONTRACTOR CODE 1BVK6 FACILITY
NAME AND ADDRESS
PARSONS INFRASTRUCTURE & TECHNOLOGY GROU
KEN STOCKWELL
100 W WALNUT STREET
PASADENA CA 91124

10. DELIVER TO FOB POINT BY (Date) *(YYYYMMMDD)*
SEE SCHEDULE

11. MARK IF BUSINESS IS
[ ] SMALL
[ ] SMALL DISADVANTAGED
[ ] WOMEN-OWNED

12. DISCOUNT TERMS
NET 30 DAYS

13. MAIL INVOICES TO THE ADDRESS IN BLOCK
See Item 15

14. SHIP TO CODE
SEE SCHEDULE

15. PAYMENT WILL BE MADE BY CODE 964145
US ARMY ENG & SUP CENTER - FINANCE OFFIC
US ARMY CORPS OF ENGRS FINANCE CTR
5722 INTEGRITY DRIVE
MILLINGTON TN 38054-5005

MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.

16. TYPE OF ORDER
DELIVERY/ CALL [X] This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.
PURCHASE [ ] Reference your quote dated
Furnish the following on terms specified herein. REF:

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR | SIGNATURE | TYPED NAME AND TITLE | DATE SIGNED (YYYYMMMDD)

[X] If this box is marked, supplier must sign Acceptance and return the following number of copies:

17. ACCOUNTING AND APPROPRIATION DATA/ LOCAL USE
See Schedule

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/ SERVICES	20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT
	SEE SCHEDULE				

* *If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.*

24. UNITED STATES OF AMERICA
TEL: 256-895-1440
EMAIL: Sharon.H.Butler@usace.army.mil
BY: SHARON H BUTLER
Sharon H Butler
CONTRACTING / ORDERING OFFICER

25. TOTAL $112,815.00
26. DIFFERENCES

27a. QUANTITY IN COLUMN 20 HAS BEEN
[ ] INSPECTED [ ] RECEIVED [ ] ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE | c. DATE (YYYYMMMDD) | d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE

f. TELEPHONE NUMBER | g. E-MAIL ADDRESS

28. SHIP NO. | 29. DO VOUCHER NO. | 30. INITIALS

[ ] PARTIAL [ ] FINAL

31. PAYMENT
[ ] COMPLETE [ ] PARTIAL [ ] FINAL

32. PAID BY

33. AMOUNT VERIFIED CORRECT FOR

34. CHECK NUMBER

35. BILL OF LADING NO.

36. I certify this account is correct and proper for payment.
a. DATE (YYYYMMMDD) | b. SIGNATURE AND TITLE OF CERTIFYING OFFICER

37. RECEIVED AT	38. RECEIVED BY	39. DATE RECEIVED (YYYYMMMDD)	40. TOTAL CONTAINERS	41. S/R ACCOUNT NO	42. S/R VOUCHER NO.

Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001		1	Lump Sum	$112,815.00	$112,815.00

Seneca Army Depot Long Term Monitoring
FFP
The contractor shall provide all the labor and material required to implement the approved plan for long-term monitoring at the Ash Landfill operable unit in accordance with the provided statement of work dated 31 March 2008. (Tasks 1 through 5)
FOB: Destination
MILSTRIP: W31RYO81401819
PURCHASE REQUEST NUMBER: W31RYO81401819

NET AMT		$112,815.00
ACRN AA		$112,815.00

CIN: W31RYO814018190001

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002		1	Lump Sum	$3,977.00	$3,977.00
OPTION					

Task 6 Annual Remedy Inspection
FFP
The contractor shall provide all the labor and material required to implement the approved plan for long-term monitoring at the Ash Landfill operable unit in accordance with the provided statement of work dated 31 March 2008. (Task 6)
FOB: Destination

NET AMT		$3,977.00

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003		1	Lump Sum	$32,027.00	$32,027.00
OPTION	Task 7 Initial Groundwater Monitoring FFP The contractor shall provide all the labor and material required to implement the approved plan for long-term monitoring at the Ash Landfill operable unit in accordance with the provided statement of work dated 31 March 2008. (Task 7) FOB: Destination				

NET AMT $32,027.00

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004		1	Lump Sum	$32,027.00	$32,027.00
OPTION	Task 8 Additional Groundwater Monitoring FFP The contractor shall provide all the labor and material required to implement the approved plan for long-term monitoring at the Ash Landfill operable unit in accordance with the provided statement of work dated 31 March 2008. (Task 8) FOB: Destination				

NET AMT $32,027.00

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005		1	Lump Sum	$15,627.00	$15,627.00
OPTION	Task 9 Preparation of Annual Report FFP The contractor shall provide all the labor and material required to implement the approved plan for long-term monitoring at the Ash Landfill operable unit in accordance with the provided statement of work dated 31 March 2008. (Task 9) FOB: Destination				
				NET AMT	$15,627.00

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0006		1	Lump Sum	$34,918.00	$34,918.00
OPTION	Task 10 Project Management FFP The contractor shall provide all the labor and material required to implement the approved plan for long-term monitoring at the Ash Landfill operable unit in accordance with the provided statement of work dated 31 March 2008. (Task 10) FOB: Destination				
				NET AMT	$34,918.00

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0007		1	Lump Sum	$4,554.00	$4,554.00
OPTION	Task 11 Annual Remedy Inspection FFP The contractor shall provide all the labor and material required to implement the approved plan for long-term monitoring at the Ash Landfill operable unit in accordance with the provided statement of work dated 31 March 2008. (Task 11) FOB: Destination				

NET AMT $4,554.00

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0008		1	Lump Sum	$32,753.00	$32,753.00
OPTION	Task 12 Initial Groundwater Monitoring FFP The contractor shall provide all the labor and material required to implement the approved plan for long-term monitoring at the Ash Landfill operable unit in accordance with the provided statement of work dated 31 March 2008. (Task 12) FOB: Destination				

NET AMT $32,753.00

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0009		1	Lump Sum	$32,753.00	$32,753.00
OPTION	Task 13 Additional Groundwater FFP The contractor shall provide all the labor and material required to implement the approved plan for long-term monitoring at the Ash Landfill operable unit in accordance with the provided statement of work dated 31 March 2008. (Task 13) FOB: Destination				

NET AMT $32,753.00

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0010		1	Lump Sum	$32,753.00	$32,753.00
OPTION	Task 14 Preparation of the Annual Report FFP The contractor shall provide all the labor and material required to implement the approved plan for long-term monitoring at the Ash Landfill operable unit in accordance with the provided statement of work dated 31 March 2008. (Task 14) FOB: Destination				

NET AMT $32,753.00

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0011		1	Lump Sum	$35,567.00	$35,567.00
OPTION	Task 15 Project Management FFP The contractor shall provide all the labor and material required to implement the approved plan for long-term monitoring at the Ash Landfill operable unit in accordance with the provided statement of work dated 31 March 2008. (Task 15) FOB: Destination				
				NET AMT	$35,567.00

Section C - Descriptions and Specifications

STATEMENT OF WORK

PERFORMANCE WORK STATEMENTIMPLEMENTATION OF THE POST CLOSURE MONITORING AND MAINTENANCE PLANFOR THE ASH LANDFILL OPERABLE UNITSENECA ARMY DEPOT ACTIVITY ROMULUS, NEW YORK
31 March 2008

1.0 BACKGROUND AND GENERAL STATEMENT OF SERVICES: Following remediation of the Ash Landfill operable unit, long-term monitoring is required to verify the success of the remedial efforts. **1.1 GENERAL DESCRIPTION.** SEDA is a US Army facility located in Seneca County, New York. SEDA occupies approximately 10,600 acres. It is bounded on the west by State Route 96A and on the east by State Route 96. The cities of Geneva and Rochester are located to the northwest (14 and 50 miles, respectively); Syracuse is 53 miles to the northeast and Ithaca is 31 miles to the south. The surrounding area is generally used for farming.

1.2 REGULATORY STATUS. The Installation was included on the Federal Facilities National Priorities List on 13 July 1989. Consequently, all work to be performed under this contract shall be performed according to Comprehensive Environmental Response Compensation and Liability Act (CERCLA) guidance as put forth in the EPA Interim Final "Guidance for Conducting Remedial Investigations/ Feasibility Studies under CERCLA" and the "Federal Facility Agreement under CERCLA Section 120 in the matter of Seneca Army Depot, Romulus, New York".
1.3 SECURITY REQUIREMENTS. Compliance with SEDA security requirements is mandated. **2.0 OBJECTIVES:**
The Contractor shall implement the approved plan for long-term monitoring at the Ash Landfill operable unit. Following that year of performance, the Contractor shall report annual results and provide recommendations for future Long Term Management needs. All work shall be completed in accordance with (IAW) the approved **Post Closure Monitoring and Maintenance Plan**. All field activities shall be performed IAW the approved **Accident Prevention Plan for the Seneca program**.

3.0 DESCRIPTION OF SERVICES:
3.1 Post Closure Monitoring and Maintenance YR2.

3.1.1 (Task 1) Annual Remedy Inspections

3.1.1.1 Vegetative Cap and Drainage Swale Inspections. The Contractor shall inspect the vegetative soil cover and drainage swales on the site. Inspection shall include observations pertinent to the integrity of the soil and vegetative covering and the condition of run-off channels, infiltration galleries and swales.

3.1.1.2 Biowall Trench Condition. The Contractor shall inspect the condition of the Biowall trenches.

3.1.1.3 Groundwater Monitoring Well Inspections. The Contractor shall inspect the condition of the groundwater monitoring wells.

3.1.2 (Task 2) Initial Groundwater Monitoring Event. The Contractor shall perform an initial groundwater monitoring event.

3.1.2.1 Plume Performance Monitoring. The Contractor shall sample and analyze monitoring wells PT-18A, MWT-22, PT-22, PT-17, MWT-7, PT-24, MWT-24, MWT-25 and MW-56 as per the protocols and monitoring wells in the approved plan.

3.1.2.2 Biowall Process Monitoring. The Contractor shall sample and analyze monitoring wells MWT-26, MWT-27, MWT-28, MWT-29 and MWT-23 as per the protocols and monitoring wells in the approved plan.

3.1.2.3 Preparation of Groundwater Monitoring Reports. Following completion of each Groundwater Monitoring Event, the Contractor shall prepare and submit a report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend analysis for contaminant of concern concentration data developed for key monitoring wells.
- Trend analysis of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.1.3 (Task 3) Second Groundwater Monitoring Event. The Contractor shall perform an initial groundwater monitoring event.

3.1.3.1 Plume Performance Monitoring. The Contractor shall sample and analyze monitoring wells PT-18A, MWT-22, PT-22, PT-17, MWT-7, PT-24, MWT-24, MWT-25 and MW-56 as per the protocols and monitoring wells in the approved plan.

3.1.3.2 Biowall Process Monitoring. The Contractor shall sample and analyze monitoring wells MWT-26, MWT-27, MWT-28, MWT-29 and MWT-23 as per the protocols and monitoring wells in the approved plan.

3.1.3.3 Preparation of Groundwater Monitoring Reports. Following completion of each Groundwater Monitoring Event, the Contractor shall prepare and submit a report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend plots for all chemical concentration data developed for each of the monitoring wells.
- Trend plots of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.1.4 (Task 4) Preparation of the Annual Report. Following completion of a year of groundwater monitoring events, the Contractor shall prepare and submit an annual report which summarizes and analyzes the data collected and observations made over the year's effort. Presentation shall include:

- Complete tabulations, including maximum and minimum levels, of all groundwater elevation data developed.
- Trend plots of groundwater elevation data for each of the monitoring wells.
- A potentiometric map of site groundwater.
- Complete tabulations of all chemical concentration data developed to date.
- Complete tabulations of all indicator parameter data developed to date.
- Summary presentations (e.g. Sample population, maximums, minimums, median, mean, standard deviation, coefficient of variation, etc) of all chemical concentration data developed to date for downgradient and background wells versus the regulatory criteria values.
- Trend analysis for contaminant of concern concentration data developed for key monitoring wells.
- Trend analysis for key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.
- A recommendation of any changes (e.g. changing frequency of data collection to semi annual or annual, development of a sediment monitoring program, etc.) that are proposed for implementation for the OB Grounds LTM Plan.

3.1.5 (Task 5) Project Management. The Contractor shall manage the delivery order in accordance with the basic contract statement of work. All project management associated with the delivery order, with the exception of the direct technical oversight of the work described in the preceding tasks, shall be accounted for in this task.

3.2 Post Closure Monitoring and Maintenance Event YR3:

3.2.1 (Optional Task 6) Annual Remedy Inspection.

3.2.1.1 Vegetative Cap and Drainage Swale Inspections. The Contractor shall inspect the vegetative soil cover and drainage swales on the site. Inspection shall include observations pertinent to the integrity of the soil and vegetative covering and the condition of run-off channels, infiltration galleries and swales.

3.2.1.2 Biowall Trench Condition. The Contractor shall inspect the condition of the Biowall trenches.

3.2.1.3 Groundwater Monitoring Well Inspections. The Contractor shall inspect the condition of the groundwater monitoring wells.

3.2.2 (Optional Task 7) Initial Groundwater Monitoring Event. The Contractor shall perform an initial groundwater monitoring event.

3.2.2.1 Plume Performance Monitoring. The Contractor shall sample and analyze monitoring wells PT-18A, MWT-22, PT-22, PT-17, MWT-7, PT-24, MWT-24, MWT-25 and MW-56 as per the protocols and monitoring wells in the approved plan.

3.2.2.2 Biowall Process Monitoring. The Contractor shall sample and analyze monitoring wells MWT-26, MWT-27, MWT-28, MWT-29 and MWT-23 as per the protocols and monitoring wells in the approved plan.

3.2.2.3 Preparation of Groundwater Monitoring Reports. Following completion of each Groundwater Monitoring Event, the Contractor shall prepare and submit a report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend analysis for contaminant of concern concentration data developed for key monitoring wells.
- Trend analysis of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.2.3 (Optional Task 8) Additional Groundwater Monitoring Event. The Contractor shall perform an additional groundwater monitoring event.

3.2.3.1 Plume Performance Monitoring. The Contractor shall sample and analyze monitoring wells PT-18A, MWT-22, PT-22, PT-17, MWT-7, PT-24, MWT-24, MWT-25 and MW-56 as per the protocols and monitoring wells in the approved plan.

3.2.3.2 Biowall Process Monitoring. The Contractor shall sample and analyze monitoring wells MWT-26, MWT-27, MWT-28, MWT-29 and MWT-23 as per the protocols and monitoring wells in the approved plan.

3.2.3.3 Preparation of Groundwater Monitoring Reports. Following completion of the additional Groundwater Monitoring Event, the Contractor shall prepare and submit a report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend analysis for contaminant of concern concentration data developed for key monitoring wells.

- Trend analysis of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.2.4 (Optional Task 9) Preparation of the Annual Report. Following completion of a year of groundwater monitoring events, the Contractor shall prepare and submit an annual report which summarizes and analyzes the data collected and observations made over the year's effort. Presentation shall include:

- Complete tabulations, including maximum and minimum levels, of all groundwater elevation data developed.
- Trend plots of groundwater elevation data for each of the monitoring wells.
- A potentiometric map of site groundwater.
- Complete tabulations of all chemical concentration data developed to date.
- Complete tabulations of all indicator parameter data developed to date.
- Summary presentations (e.g. Sample population, maximums, minimums, median, mean, standard deviation, coefficient of variation, etc) of all chemical concentration data developed to date for downgradient and background wells versus the regulatory criteria values.
- Trend analysis for contaminant of concern concentration data developed for key monitoring wells.
- Trend analysis for key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.
- A recommendation of any changes (e.g. changing frequency of data collection to semi annual or annual, development of a sediment monitoring program, etc.) that are proposed for implementation for the OB Grounds LTM Plan.

3.2.5 (Optional Task 10) Project Management. The Contractor shall manage the delivery order in accordance with the basic contract statement of work. All project management associated with the delivery order, with the exception of the direct technical oversight of the work described in the preceding tasks, shall be accounted for in this task.

3.3 Post Closure Monitoring and Maintenance Event YR4:

3.3.1 (Optional Task 11) Annual Remedy Inspection.

3.3.1.1 Vegetative Cap and Drainage Swale Inspections. The Contractor shall inspect the vegetative soil cover and drainage swales on the site. Inspection shall include observations pertinent to the integrity of the soil and vegetative covering and the condition of run-off channels, infiltration galleries and swales.

3.3.1.2 Biowall Trench Condition. The Contractor shall inspect the condition of the Biowall trenches.

3.3.1.3 Groundwater Monitoring Well Inspections. The Contractor shall inspect the condition of the groundwater monitoring wells.

3.3.2 (Optional Task 12) Initial Groundwater Monitoring Event. The Contractor shall perform an initial groundwater monitoring event.

3.3.2.1 Plume Performance Monitoring. The Contractor shall sample and analyze monitoring wells PT-18A, MWT-22, PT-22, PT-17, MWT-7, PT-24, MWT-24, MWT-25 and MW-56 as per the protocols and monitoring wells in the approved plan.

3.3.2.2 Biowall Process Monitoring. The Contractor shall sample and analyze monitoring wells MWT-26, MWT-27, MWT-28, MWT-29 and MWT-23 as per the protocols and monitoring wells in the approved plan.

3.3.2.3 Preparation of Groundwater Monitoring Reports. Following completion of each Groundwater Monitoring Event, the Contractor shall prepare and submit a report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend analysis for contaminant of concern concentration data developed for key monitoring wells.
- Trend analysis of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.3.3 (Optional Task 13) Additional Groundwater Monitoring Event. The Contractor shall perform an additional groundwater monitoring event.

3.3.3.1 Plume Performance Monitoring. The Contractor shall sample and analyze monitoring wells PT-18A, MWT-22, PT-22, PT-17, MWT-7, PT-24, MWT-24, MWT-25 and MW-56 as per the protocols and monitoring wells in the approved plan.

3.3.3.2 Biowall Process Monitoring. The Contractor shall sample and analyze monitoring wells MWT-26, MWT-27, MWT-28, MWT-29 and MWT-23 as per the protocols and monitoring wells in the approved plan.

3.3.3.3 Preparation of Groundwater Monitoring Reports. Following completion of the additional Groundwater Monitoring Event, the Contractor shall prepare and submit a report which summarizes and analyzes the data collected and observations made. Presentation shall include:

- Trend plots of groundwater elevation data for each of the monitoring wells.
- Trend analysis for contaminant of concern concentration data developed for key monitoring wells.
- Trend analysis of key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.

3.3.4 (Optional Task 14) Preparation of the Annual Report. Following completion of a year of groundwater monitoring events, the Contractor shall prepare and submit an annual report which summarizes and analyzes the data collected and observations made over the year's effort. Presentation shall include:

- Complete tabulations, including maximum and minimum levels, of all groundwater elevation data developed.
- Trend plots of groundwater elevation data for each of the monitoring wells.
- A potentiometric map of site groundwater.
- Complete tabulations of all chemical concentration data developed to date.
- Complete tabulations of all indicator parameter data developed to date.
- Summary presentations (e.g. Sample population, maximums, minimums, median, mean, standard deviation, coefficient of variation, etc) of all chemical concentration data developed to date for downgradient and background wells versus the regulatory criteria values.
- Trend analysis for contaminant of concern concentration data developed for key monitoring wells.
- Trend analysis for key indicator parameter data developed for each of the monitoring wells.
- A chronological listing of any noted breach or erosion of the vegetative cap and an indication of the corrective action recommended or taken to alleviate the identified condition.
- A recommendation of any changes (e.g. changing frequency of data collection to semi annual or annual, development of a sediment monitoring program, etc.) that are proposed for implementation for the OB Grounds LTM Plan.

3.3.5 (Optional Task 15) Project Management. The Contractor shall manage the delivery order in accordance with the basic contract statement of work. All project management associated with the delivery order, with the exception of the direct technical oversight of the work described in the preceding tasks, shall be accounted for in this task.

4.0 SUBMITTALS: The contractor shall furnish copies of all documents to the addressees listed below. The documents will require an electronic pre-draft, a draft and a final. The number of copies per organization are listed in 4.1.1. One copy of the final documents shall be sent to the CEHNC Project Manager on 3.5-inch computer disk or CD ROM in an acceptable format in addition to the number of hard copies identified below. The contractor shall use express mail services for delivering these documents. Following each submission, comments generated as a result of their review shall be incorporated.

4.1 ADDRESSEES

a) Contracting Officer (KO)
US Army Engineering and Support Center, Huntsville
ATTN: CEHNC-CT-S (MS. Sharon Butler)4820 University Square,
Huntsville, Alabama, 35816

b) Huntsville Center Project Manager (PM)
US Army Engineering and Support Center, Huntsville
ATTN: CEHNC-ED-CS-P (Mr. Steve Nohrstedt)4820 University Square,
Huntsville, Alabama, 35816

c) Seneca ADA Installation Manager
Commander's Representative
Seneca ADA
ATTN: SMASE-CO (Bld.123, Mr. Absolom)
5786 State Route 96, P.O. Box 9,
Romulus, New York 14541-5001

d) Environmental Health Risk Assessor
Commander
USACHPPM (PROV)
ATTN: MCHB-ME-R (Mr. Hoddinott)
Building E1677
Aberdeen Proving Ground, MD, 21010-5422

e) New York District (CENAN) Project Manager
Commander
US Army Engineer District, New York
Seneca Office for Project Management
ATTN: Mr. R. Battaglia, Bld.125
P.O. Box 9
5786 State Route 96
Romulus, New York, 14541-5001

f) USAEC Representative to Seneca
Commander
U.S. Army Environmental Center,
ATTN: Mr. Roger Walton
Aberdeen Proving Ground, MD, 21010-5422

4.1.1 DOCUMENT AND SUBMITTAL LIST

Organization	Copies		
	Pre-draft*	Draft	Final
CEHNC-ED-CS-P	1	2	2
SMASE-CO	1	2	2
USACHPPM	1	2	2
CENAN	1	2	2
USAEC	1	2	2

* **Electronic Copy**

4.2 SUBMITTALS AND DUE DATES: The proposed schedule for the Implementation of the Long-Term Management Plan is given below. All work under this delivery order shall be completed by **31 March 2009.**

Submittal	**Due Date**
NTP	0
Annual Remedy Inspection	NTP +45 days
Initial Groundwater Monitoring Event	NTP + 50 daysDraft Initial Groundwater Monitoring Report
NTP + 90 daysComments Due to Contractor	NTP + 105 days
Final Initial Groundwater Monitoring Report	NTP + 120 days

5.0 QUALITY ASSURANCE (QA): The Government will perform QA of the Contractor's performance under this contract using the method of surveillance specified in the Quality Assurance Surveillance Plan (QASP), Attachment 1. The Government will conduct QA inspections on all phases and types of work performed. The Government reserves the right to perform QA inspections at any time.

6.0 PUBLIC AFFAIRS: The Contractor shall not conduct Public Affairs activities at the installation. All agencies and/or individuals requesting information concerning the conduct of the project shall be referred to the Seneca Army Depot Activity, Public Affairs Office (PAO) or the U.S. Army Engineering and Support Center, Huntsville, PAO.

7.0 REFERENCES: 7.1 Interim Final, "Guidance for or Conducting Remedial Investigations/Feasibility studies Under CERCLA", U.S. EPA, Office of Solid Waste and Emergency Response, October 1988.

7.2 "Federal Facility Agreement under CERCLA Section 120 in the matter of Seneca Army Depot, Romulus, New York", Docket No. II-CERCLA-FFA-00202, USEPA, U.S. Department of the Army, and the New York State Department of Environmental Conservation, November 1990.

7.3 Final, "Generic Site-Wide Sampling and Analysis Plan, Seneca Army Depot Activity, Romulus, New York", Parsons, December 2005.

7.4 Final, "Generic Site-Wide Sampling and Analysis Plan, Seneca ADA", Parsons, December 2005.

7.5 All applicable local, state, and federal regulations

Attachment 1

Quality Assurance Surveillance Plan IMPLEMENTATION OF THE POST CLOSURE MONITORING AND MAINTENANCE PLAN FOR THE ASH LANDFILL OPERABLE UNIT SENECA ARMY DEPOT ACTIVITY ROMULUS, NEW YORK				
TASK	**METHOD OF SURVEILLANCE**	**PERFORMANCE OBJECTIVES**	**MAXIMUM ALLOWABLE DEGREE OF DEVIATION FROM RQMT (AQL)**	**FREQUENCY INSPECTED**
1, 6, and 11 - Annual Remedy Inspection	Periodic Inspection	Perform inspections in accordance with the approved Post Closure Monitoring and Maintenance Plan and the approved Accident Prevention Plan for the Seneca Program.	Zero Defects	One time, or as needed
2, 7, and 12 - Initial Groundwater Monitoring Event	Periodic Inspection	Perform groundwater monitoring in accordance with the approved Post Closure Monitoring and Maintenance Plan and the approved Accident Prevention Plan for the Seneca Program.	Zero Defects	One time, or as needed
2, 7, and 12 - Initial Groundwater Monitoring Report	100% Inspection	Prepare groundwater monitoring report in accordance with the approved Post Closure Monitoring and Maintenance Plan	Zero Defects	One time, or as needed
3, 8, and 13 - Second Groundwater Monitoring Event	Periodic Inspection	Perform groundwater monitoring in accordance with the approved Post Closure Monitoring and Maintenance Plan and the approved Accident Prevention Plan for the Seneca Program.	Zero Defects	One time, or as needed

Quality Assurance Surveillance Plan IMPLEMENTATION OF THE POST CLOSURE MONITORING AND MAINTENANCE PLAN FOR THE ASH LANDFILL OPERABLE UNIT SENECA ARMY DEPOT ACTIVITY ROMULUS, NEW YORK				
TASK	**METHOD OF SURVEILLANCE**	**PERFORMANCE OBJECTIVES**	**MAXIMUM ALLOWABLE DEGREE OF DEVIATION FROM RQMT (AQL)**	**FREQUENCY INSPECTED**
3, 8, and 13 - Second Groundwater Monitoring Report	100% Inspection	Prepare groundwater monitoring report in accordance with the approved Post Closure Monitoring and Maintenance Plan	Zero Defects	One time, or as needed
4, 9, and 14 - Preparation of the Annual Report	100% Inspection	Prepare annual groundwater monitoring report in accordance with the approved Post Closure Monitoring and Maintenance Plan	Zero Defects	One time, or as needed
5, 10, and 15 - Project Management	100% Inspection	The contractor shall meet the project management requirements as specified in the contract.	Zero Defects	One time, or as needed

Section E - Inspection and Acceptance

INSPECTION & ACCEPTANCE
Indspection and acceptance shall be in accordance with the statement of work dated 31 March 2008.

Section F - Deliveries or Performance

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
0001	POP 22-MAY-2008 TO 31-MAR-2009	N/A	N/A FOB: Destination	
0002	N/A	N/A	N/A	N/A
0003	N/A	N/A	N/A	N/A
0004	N/A	N/A	N/A	N/A
0005	N/A	N/A	N/A	N/A
0006	N/A	N/A	N/A	N/A
0007	N/A	N/A	N/A	N/A
0008	N/A	N/A	N/A	N/A
0009	N/A	N/A	N/A	N/A
0010	N/A	N/A	N/A	N/A
0011	N/A	N/A	N/A	N/A

CLAUSES INCORPORATED BY REFERENCE

52.242-15	Stop-Work Order	AUG 1989
52.242-17	Government Delay Of Work	APR 1984

Section G - Contract Administration Data

INVOICING INSTRUCTIONS
Invoicing Instructions:

The invoice should be sent electronically to:

US Army Engineering and Support Center, Huntsville
ATTN: CEHNC-ED-CS-P (Mr. Steve Nohrstedt)
4820 University Square,
Huntsville, Alabama, 35816

John.Nohrstedt@usace.army.mil

ACCOUNTING AND APPROPRIATION DATA

AA: 21820200000 088130 32308J4FJ249300824000 ENVR 01110
AMOUNT: $112,815.00
CIN W31RYO814018190001: $112,815.00

Data Submission Readiness Checklist

This checklist helps you assess the readiness of a data submission. By default, the checklist only shows proposed and approved sites with errors, but you may click on the *Show Sites without Errors* option if you want to view all of the proposed and approved sites in the data submission.

Advisory errors (errors that will not prevent you from approving this data submission) are listed as warnings.

Checklist options:
[Show Sites without Errors]

Part I. Readiness Summary

SENECA ARMY DEPOT ACTIVITY Data Submission Readiness Summary

A. 0 critical errors detected
B. 0 advisory errors (warnings) detected
C. no installation-level critical errors and/or advisory errors (warnings) detected
D. 0 sites with critical errors and/or advisory errors (warnings)
E. this data submission is ready to submit

Part II. Installation-level Readiness Checks

Installation SENECA ARMY DEPOT ACTIVITY

A.1. Are ROD/DD signature dates and statuses consistent with the reporting period end date?

OK [ROD] Ash Landfill ROD signatures are consistent
OK [DD] Boiler Blowdown Pit signatures are consistent
OK [DD] DECISION DOC FOR ASH LANDFILL REM ACTION signatures are consistent
OK [ROD] Deactivation Furnaces signatures are consistent
OK [ROD] EBS Industrial Area signatures are consistent
OK [ROD] Fire Training Areas DD signatures are consistent
OK [ROD] Multiple Sites Rod With Risk Assessment signatures are consistent
OK [ROD] Munition Destruction Areas signatures are consistent
OK [ROD] Munitions Washout Facility ROD signatures are consistent
OK [ROD] NFA/IC sites II signatures are consistent
OK [ROD] PID IC ROD signatures are consistent
OK [DD] Paint Disposal Areas signatures are consistent
OK [ROD] Paint Disposal Areas ROD signatures are consistent
OK [DD] RAD disposal site signatures are consistent
OK [DD] RCRA Closure Plan signatures are consistent
OK [ROD] Rad site, SEAD-48 signatures are consistent
OK [ROD] SEAD 11 Old Construction Debris LF signatures are consistent
OK [ROD] SEAD 12 RAD site ROD signatures are consistent
OK [ROD] SEAD-002-R-01 and SEAD-007-R-01 signatures are consistent
OK [DD] Sludge piles removal signatures are consistent
OK [ROD] Tank Farm signatures are consistent

A.2. Are all mandatory ROD/DD signatures entered?

OK [ROD] Ash Landfill ROD mandatory signature was entered
OK [DD] Boiler Blowdown Pit mandatory signature was entered
OK [DD] DECISION DOC FOR ASH LANDFILL REM ACTION mandatory signature was entered
OK [ROD] Deactivation Furnaces mandatory signature was entered
OK [ROD] EBS Industrial Area mandatory signature was entered
OK [ROD] Fire Training Areas DD mandatory signature was entered
OK [ROD] Multiple Sites Rod With Risk Assessment mandatory signature was entered
OK [ROD] Munition Destruction Areas mandatory signature was entered
OK [ROD] Munitions Washout Facility ROD mandatory signature was entered
OK [ROD] NFA/IC sites II mandatory signature was entered
OK [ROD] PID IC ROD mandatory signature was entered
OK [DD] Paint Disposal Areas mandatory signature was entered
OK [ROD] Paint Disposal Areas ROD mandatory signature was entered
OK [DD] RAD disposal site mandatory signature was entered
OK [DD] RCRA Closure Plan mandatory signature was entered
OK [ROD] Rad site, SEAD-48 mandatory signature was entered
OK [ROD] SEAD 11 Old Construction Debris LF mandatory signature was entered
OK [ROD] SEAD 12 RAD site ROD mandatory signature was entered
OK [ROD] SEAD-002-R-01 and SEAD-007-R-01 mandatory signature was entered
OK [DD] Sludge piles removal mandatory signature was entered
OK [ROD] Tank Farm mandatory signature was entered

B. Are LUC CTC costs less than total Action Item Phase costs?

OK no LUC CTC cost issues exist

C. Are five year review dates and statuses consistent with the reporting period end date? Has Responsible Party information been entered?

OK review starting 20100430 and ending 20101030 has status Planned

D. If the RAB adjournment date occurs before the reporting period end date, is the adjournment reason specified?

OK RAB is not adjourned

E. Is installation progress entry required for FY 2009 and, if so, is it present?

not required for Spring data calls

F. Are FOST, FOSET, and FOSL dates and statuses consistent with the reporting period end date?

OK BRAC IV FOST *Airfield* date and status are consistent
OK BRAC IV FOST *CONSERVATION* date and status are consistent
OK BRAC IV FOST *FAMILY HOUSING* date and status are consistent
OK BRAC IV FOST *FOST Amendment 2* date and status are consistent
OK BRAC IV FOST *FOST Amendment 3* date and status are consistent
OK BRAC IV FOST *FOST Amendment LRA 3B* date and status are consistent
OK BRAC IV FOST *FOST Amendment for LRA1B* date and status are consistent
OK BRAC IV FOST *FOST amendment 2A* date and status are consistent
OK BRAC IV FOST *FOST amendment 2B* date and status are consistent
OK BRAC IV FOST *FOST amendment 4* date and status are consistent
OK BRAC IV FOST *FOST amendment 5* date and status are consistent
OK BRAC IV FOST *FOST amendmment 1A* date and status are consistent
OK BRAC IV FOST *Jail Parcel* date and status are consistent
OK BRAC IV FOST *LRA 4A* date and status are consistent
OK BRAC IV FOST *NORTH DEPOT* date and status are consistent

OK BRAC IV FOST *PID/WAREHOUSE* date and status are consistent
OK BRAC IV FOST *PRISON* date and status are consistent
OK BRAC IV FOST *U.S. COAST GUARD* date and status are consistent
OK BRAC IV FOST *UTILITIES* date and status are consistent
OK BRAC IV Transfer *CONSERVATION/Conservation* date and status are consistent
OK BRAC IV Transfer *FAMILY HOUSING/FAMILY HOUSING* date and status are consistent
OK BRAC IV Transfer *Jail Parcel/County Jail Parcel* date and status are consistent
OK BRAC IV Transfer *NORTH DEPOT/NORTH DEPOT* date and status are consistent
OK BRAC IV Transfer *PID/WAREHOUSE/EDC* date and status are consistent
OK BRAC IV Transfer *PRISON/PRISON PARCEL* date and status are consistent
OK BRAC IV Transfer *U.S. COAST GUARD/Coast Guard Parcel* date and status are consistent
OK BRAC IV Transfer *UTILITIES/Water and Sewer System* date and status are consistent
OK BRAC IV FOSL *AIRFIELD* date and status are consistent
OK BRAC IV FOSL *PID PHASE II* date and status are consistent
OK BRAC IV Lease *AIRFIELD/Master Lease SEDA* date and status are consistent
OK BRAC IV Lease *PID PHASE II/Master Lease SEDA* date and status are consistent

G. Are the FOST and FOSET required acreage amounts within available acreage amounts?

OK BRAC IV FOST *Airfield* is not subject to this validation because its status is Complete No Transfer
OK BRAC IV FOST *CONSERVATION* requires 6,981.00 acres and 7,844.60 are available
OK BRAC IV FOST *FAMILY HOUSING* requires 193.00 acres and 1,574.00 are available
OK BRAC IV FOST *FOST Amendment 2* is not subject to this validation because its status is Complete No Transfer
OK BRAC IV FOST *FOST Amendment 3* is not subject to this validation because its status is Future
OK BRAC IV FOST *FOST Amendment LRA 3B* is not subject to this validation because its status is Future
OK BRAC IV FOST *FOST Amendment for LRA1B* is not subject to this validation because its status is Future
OK BRAC IV FOST *FOST amendment 2A* is not subject to this validation because its status is Future
OK BRAC IV FOST *FOST amendment 2B* is not subject to this validation because its status is Future
OK BRAC IV FOST *FOST amendment 4* is not subject to this validation because its status is Future
OK BRAC IV FOST *FOST amendment 5* is not subject to this validation because its status is Future
OK BRAC IV FOST *FOST amendmment 1A* is not subject to this validation because its status is Future
OK BRAC IV FOST *Jail Parcel* requires 25.00 acres and 888.60 are available
OK BRAC IV FOST *LRA 4A* is not subject to this validation because its status is Future
OK BRAC IV FOST *NORTH DEPOT* requires 173.00 acres and 1,554.00 are available
OK BRAC IV FOST *PID/WAREHOUSE* requires 967.00 acres and 1,830.60 are available
OK BRAC IV FOST *PRISON* requires 689.00 acres and 2,070.00 are available
OK BRAC IV FOST *U.S. COAST GUARD* requires 271.00 acres and 1,134.60 are available
OK BRAC IV FOST *UTILITIES* requires 7.00 acres and 1,388.00 are available

H. If a BCP Abstract is required, are one (1) to four (4) Compliance narratives identified for elevation to DoD?

OK BCP Abstract is required and 2 narratives are identified for elevation to DoD

OK BCP Abstract is required and both mandatory narratives (Execution/Conservation & Execution/Fast Track) are present

I. If a BCT is required, is one established?

OK BCT is required and is present

J. If BRAC sites exist, are BRAC Rounds established?

OK sites exist, and BRAC IV - Base Realignment And Closure 1995 is established

Part III. Site-level Readiness Checks

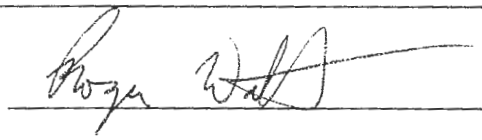
no Sites with errors

Supervisory Review Check List

Installation Name: Seneca Army Depot Review Date: Mar 17, 2009

Estimator Name: Randall Battaglia Date Estimate Prepared: Jan - Mar 2009

	YES	NO
1. Are sound estimating methodology and reasonable assumptions used?	X	
2. Did the estimator compare prior year estimates to the current year estimate?	X	
3. Does the estimate include all relevant phases and costs to complete the cleanup?	X	
4. Is the estimate consistent with the operational plans of the installation?	X	
5. Does the estimator have proper qualifications and required training to develop the estimate?	X	
6. Is there an adequate audit trail to support the estimate?	X	
7. Is there adequate documentation to support the underlying assumptions used to develop the estimate?	X	
8. Does the supervisor agree with the underlying assumptions used to develop the estimate?	X	
9. Is the estimate maintained in the current cost basis?	X	

Supervisor's Signature:  Date :Mar 17, 2009

Note: The above checklist is being used to assess the reasonableness of the installation's estimates and to document supervisory review. The signed checklist reflecting final approval will be maintained with the estimates as part of the audit trail and attached electronically to the data reporting system.

Supervisory Review Checklist (cont'd)			
	Approved		
SITE ID	Yes	No	Comments
SEAD-001-R-01	☒	☐	
SEAD-002-R-01	☒	☐	
SEAD-003-R-01	☒	☐	
SEAD-006-R-01	☒	☐	
SEAD-007-R-01	☒	☐	
SEAD-004	☒	☐	
SEAD-005	☒	☐	
SEAD-006	☒	☐	
SEAD-009	☒	☐	
SEAD-012	☒	☐	
SEAD-024	☒	☐	
SEAD-025	☒	☐	
SEAD-059	☒	☐	
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	
SEAD 13	☐	☐	
48	☐	☐	
121	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	

Certificate of Training

This certifies that

Andrew Weinberg

has successfully completed

Environmental Liabilities

Guidelines for Developing Auditable Cost-to-Complete Estimates

January 21, 2009

Date of Training

Hopeton D. Brown, CTC Program Manager

Certificate of Training

This certifies that

Andy Weinberg

has successfully completed

RACER™ 2007 Training

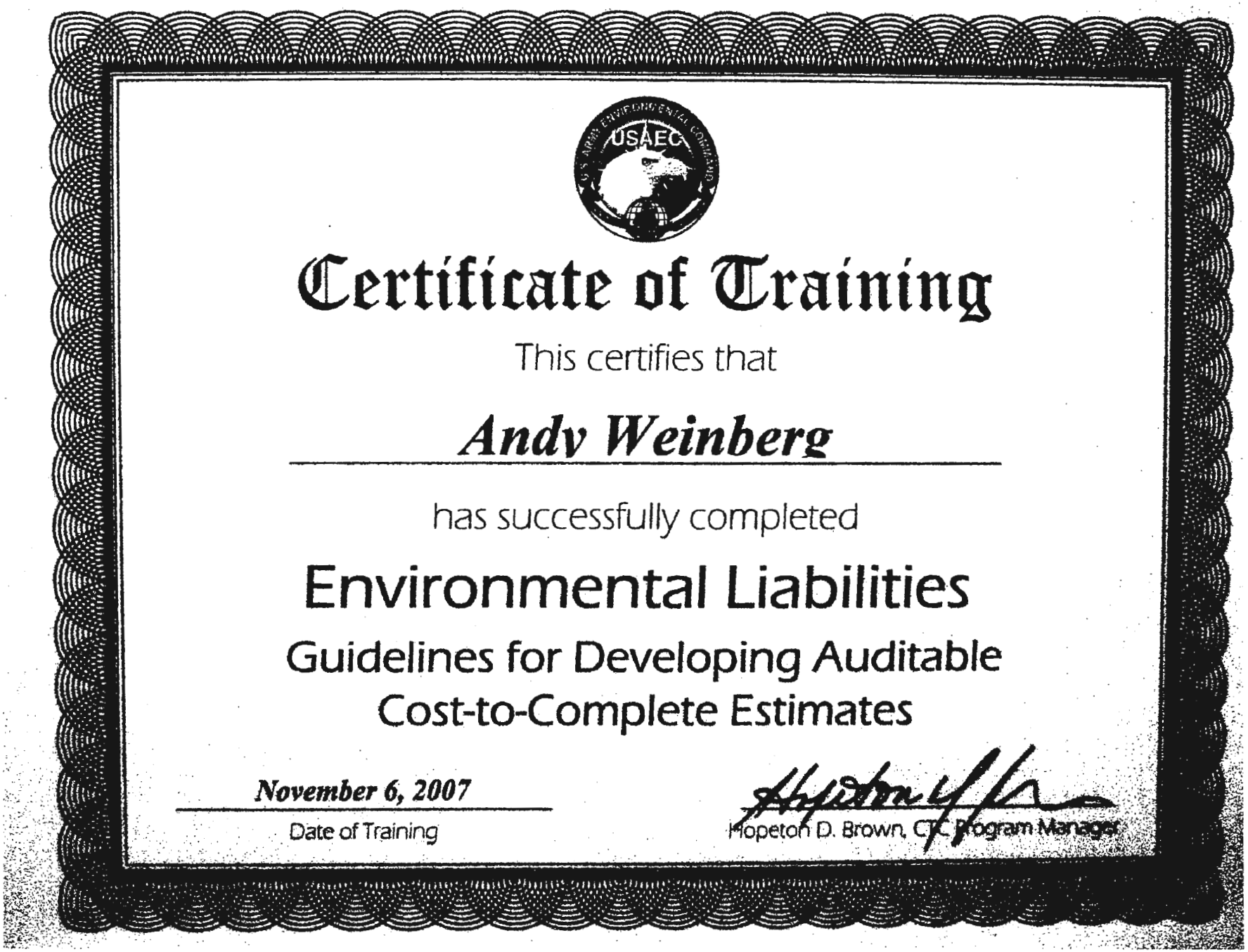
REMEDIAL ACTION COST ENGINEERING AND REQUIREMENTS

November 6-7, 2007

Date of Training

John F. Hansen, Instructor

Hopeton D. Brown, Army RACER™ Point of Contact



Certificate of Training

This certifies that

Andy Weinberg

has successfully completed

Environmental Liabilities

Guidelines for Developing Auditable Cost-to-Complete Estimates

November 6, 2007

Date of Training

Hopeton D. Brown, CTC Program Manager

BECHTEL

MALCOLM PIRNIE TEAM

FY09 SITE VISIT TRIP REPORT: Seneca Army Depot, BRAC IR/MR *Mar 6, 2009*

Seneca Transition Coordinator:	*Stephen Absolom 607-869-1309*
Cost Estimator	Randy Battaglia
IST:	*Team C, Andrew Weinberg*

OTHER ATTENDEES:

Background:

A data gathering site visit for Seneca Army Depot Activity was conducted by teleconference on26 March 2009 to provide input to the IAP development and update information on all active IRP, and MMRP sites in AEDB-R and the IAP tool. The MMRP program is transitioning off central managed by AEC. The group discussed status, schedule and budget issues for all active sites, edited database narratives, identified new documentation required, and other data needs for IAP revision.

Actions Completed During Conference Call:

- Reviewed and updated AEDB-R and IAP tool narratives, phase schedules, and cost data.
- Discussed the new Five-Year Review and LUC questionnaires. The utility of the LUC questionnaire was questioned, given the significant workload anticipated to fill in site-by site data as requested.
- Discussed CTC approach and the remaining information and signatures required to complete loading the CTC estimates.
- Agreed on estimator, reviewer and supervisory review roles for CTC estimates.
- Discussed remaining steps to get data checked and validated.

Outstanding Tasks:

IST: *Andrew Weinberg, Installation Support Team C*

- *Provide installation with EL Training and RACER Training certificates for CTC project files by 9 March 2009.*
- *Check on when sites are supposed to be released(before/after data validation)?*
- *Issue draft IAP to installation by 10 March 2009.*

RPM: *Stephen Absolom*

- *Complete edits to database and IAP tool narratives by 9 March 2009.*
- *Sign and load MFRs by 9 March 2009*

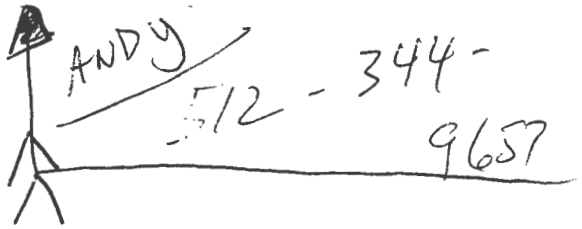
ERM: Roger Walton

- *Review MFRs and sign SRCs*

Additional Items:

- Data Gathering End Date: March 9, 2009
- Data Validation Date: March 31, 2009

RAO →



CTC/IAP Updates

INSTALLATION: Name

Program:

Done?	Data Gathering Phase	Notes
	Objective of data gathering is to address Validation Objectives Non-Cost data in AEDB-R is complete CTC is complete All IAP updates are complete Stakeholderparticipation 5-yr review worksheet is complete LUC Questionnaire is complete Signature blocks are accurate	The objectives listed are generic- CC does not require 5-year (RAO) worksheets.
	Work with IST on conference calls or Site Visit to complete cost and non-cost information	Cost information is the CTC- MFR updates, estimate updates, Database updates, non cost information is the site narratives, IAP sections, the 5-yr review (RAO/LTM) worksheet, etc.
	Stakeholder Participation	Involve your stakeholders (regulators, public participation, RAB members, local tribes, etc) in the IAP development during data gathering. The IST will ask who your regulators are and how they participate.
	Complete edits in the proposed timeframe	The schedule is posted on AERO weekly- filter to your installation for all of the intended submittal times.
	Resolve any QC deficiencies identified in FY08's QC or QA review.	The IST will work with you to resolve any outstanding deficiencies from FY08.
	RACER	The most current version of RACER is to be used. A new release occurred in Oct 2008-RACER 10.2. If you need additional information on it ask your IST or ERM/CC PM.
	EL Training	Estimators, Reviewers, and Supervisory Review checklist signers must have EL training every year. Provide a copy of the certificates to the IST as documentation. If not provided, and you are not listed on any training rosters you will not be marked as having completed the training.

Project file

	MFR updates		The IST will provide a review of the MFRs and supporting documentation for you prior to upload into the database. If you are implementing USACE support on estimate generation- it is suggested you ask your IST to review the FY08 estimates before requesting updates from USACE on the 09 estimates so recommendations can be made in advance of Corps participation.
	RAO/LTM Worksheet (Five-year review worksheet) (no CC)		It is requested you populate the five-year review worksheet and provide to the IST no later than your validation call. The five-year review worksheet replaces the RAO/LTM worksheet completed in previous years.
	LUC Questionnaire (No CC)		AEC has developed a questionnaire on Land Use Controls. Please complete the questionnaire and provide no later than the validation call. AEC has provided a spreadsheet of all the Land Use Controls at your installation, confirm with the IST that the LUCs listed are implemented and are accurately depicted in the database.

Done?	Site Visit		Notes
	Work with the IST to establish the logistics for your site visit		Logistics for site visit may include: Time/date of arrival, Space availability, Location of installation data (CTC Project file), Is a projector necessary/available, and Installation Access. Recommended attendees include the installation POC, the estimator and MFR generator, and anyone else involved in updating the AEDB databases and IAP tool.
	Identify the areas to be addressed at the site visit in advance.		Each installation is different- discuss with the IST your needs. The IST can assist with MFR updates, cost estimate revisions, IAP and Database updates.

	CTC Project file		The IST will ask to review your CTC Project file. A Cost To Complete Project File is required to be maintained at the installation. In the event of an audit, the auditor would request to view this file. If conducting site visit, review the CTC Project File for: A hard copy of the current MFR (matches one in database) Hard copy of the supporting documentation Hard copy of supervisory review checklist Estimators training records Document retention time is 6 years and 3 months
	Site Visit Trip Report		A trip report will be submitted to you. It will outline the activities completed at the site visit and document the remaining after action items for participants.

Done?	Validation Phase		Notes
	Validation IAP submitted to call participants 15 days prior to call		15 days prior to your validation call- the IST will send a Public Draft IAP for your review and for you to submit to any additional call participants (stakeholder community). Please pass along with the conference call in information.
	Date and call in information confirmed with participants		The IST will work with you and your ERM/CC PM to establish a call time that works with all participants.
	Take Stakeholder comment		The first portion of the call will be open to comment from call participants. All information will be documented in the After Action Report
	Discuss any remaining IAP/CTC updates that are required.		To include status of database and IAP tool updates, 5-yr Review worksheet status, RAB information & any installation specific details
	Review timeline of events for Data Acquisition submittal		Data Acquisition Submittal signifies the completion of all IAP and CTC updates as identified by the IST. This date falls approximately 10 business days after the Validation call is held.
	Validation After Action Report		You will receive a Validation After Action Report (AAR). This is a draft, it will discuss validation call topics and identify any after action items. It will be submitted to all call participants and AEC. You may provide comment to the IST to incorporate into the final.

Done?	Data Acquisition Submittal		Notes
	All After Actions from Validation are complete		The installation and IST have 10 business days after the validation call to ensure all outstanding elements are complete.
	Release the estimates		Once all outstanding items are completed- the installation is to release the estimates if haven't already been released.
	No errors in installation or site level readiness checklists		Once all sites are released the installation readiness checklist can be run. The only error should be "programmed funds do not match requirements".
	Final Validation AAR		Once the above items are complete, the IST will submit a revised, Final AAR to you, ERM/CC PM, and AEC.
	Programming Spread		Roxann Diehl will populate the programmed funding once Data Acquisition Submittal is complete, the installation will be advised to spread the programmed funds to the requirements and submit the installation to oversight.

Data Gathering- CC

INSTALLATION: Name
Program:

Done?	Initial Cold Call	Completed	Notes
	Cold Call Completed	(DATE?)	(contact name here)
	Confirm site visit, data gathering end date and validation date		
	Confirm POC's contact information		(email address, mailing address, and phone number here email any changes to S Herbert)
	Follow-up email		(Send to: Installation POC, CCPM, S Abston, A Behl, S Herbert, C Bentley, K Harris Stokes)

Done?	Data Gathering Preparation	Completed	Notes
	Address Validation Objectives Non-Cost data in AEDB-CC is complete Ensure CTC is complete All IAP updates are complete Stakeholder involvement occurs Signature blocks are accurate		
	Identify areas of assistance for FY09		(note specific areas installation may need assistance with)
	Identify IAP/CTC deficiencies that were not addressed in FY08		(Review FY07 MFRs and discuss edits that will be required for FY08. Note any outstanding results from QA review or IQC results or comments in validation AAR from FY08)
	Identify EL training requirements for those involved in estimation process		
	Document the intended Stakeholder Participation for development of the IAP		(List Stakeholders which can include state and federal agencies, tribes, local community participants, RAB etc. Identify if there will be a meeting or how the installation will involve participation in the IAP.)
	Gain CC PM approval of cleanup remedies and objectives		

	updated/completed by the next DG call/site visit		
	Set date and time of next DG call and/or logistics for site visit.		(logistics for site visit may include: Time/date of arrival, Space availability, Location of installation data (CTC Project file), Is a projector necessary/available, Installation Access)
	Identify what elements will be reviewed/worked on during site visit		
	Submit Site Visit Trip Report		(email to Installation POC, ERM S. Abston, A. Behl, C. Bentley, S. Herbert, K Harris-Stokes)

Done?	Database Updates	Completed	Notes
	Upload NFA documentation		
	Ensure all phases have costs to support the phase objectives		

Done?	IAP Tool Updates	Completed	Notes
	Update Signature Blocks		
	Installation information		
	Widespread contaminants and media of concern		
	Cleanup Program Summary- Historic Activity		
	CC Contamination Assessment		
	CC Cleanup Exit Strategy		
	Previous Study tables		
	Installation or site photos or maps		
	Cost-to-complete actions		
	NFA Tables		

Done?	Other updates	Completed	Notes
	CTC Project File		
	Verify Installation Name		
	IST Editorial Review		

	No errors in installation or site readiness checklists		

Done?	Validation	Completed	Notes
	Validation IAP submitted to call participants		(email to Installation POC, CC PM, S. Abston, A. Behl, C. Bentley, K. Harris-Stokes, S. Herbert)
	Date and call in information confirmed with participants		
	Address Validation Objectives Non-Cost data in AEDB-CC is complete Ensure CTC is complete All IAP updates are complete Stakeholder involvement occurs Signature blocks are accurate		
	Take Stakeholder comment		(document in the AAR)
	Discuss other AAR elements		(to include status of database and IAP tool updates, any remaining CTC edits and any installation specific details)
	Review timeline of events for DA submittal		
	Participants and date added to IAP		
	AAR submitted		(title of Validation AAR: InstallationName_Program_AAR Send to: Installation POC, ERM, S. Abston, A. Behl, C. Bentley, S. Herbert, K Harris-Stokes)

Done?	Data Acquisition Submittal	Completed	Notes
	All After Actions from Validation complete?		
	Final AAR submitted		(Title of revised validation AAR: InstallationName_Program_AAR_V0.1 Email Subject: InstallationName_CC_DataAcquisitionSubmittal Send to: Installation POC, ERM, S. Abston, A. Behl, C. Bentley, S. Herbert, K. Harris-Stokes)
	No errors in installation or site level readiness checklists		
	Upload pertinent documents to FTP		(Documents to include Final AAR, JEP, RAO/LTM worksheet, Data Gathering Workbook, Final IQC Spreadsheet)

CTC/IAP Updates

INSTALLATION: Name
Program:

Done?	Data Gathering Phase		Notes
	Objective of data gathering is to address Validation Objectives Non-Cost data in AEDB-R is complete CTC is complete All IAP updates are complete Stakeholderparticipation 5-yr review worksheet is complete LUC Questionnaire is complete Signature blocks are accurate		The objectives listed are generic- CC does not require 5-year (RAO) worksheets.
	Work with IST on conference calls or Site Visit to complete cost and non-cost information		Cost information is the CTC- MFR updates, estimate updates, Database updates, non cost information is the site narratives, IAP sections, the 5-yr review (RAO/LTM) worksheet, etc.
	Stakeholder Participation		Involve your stakeholders (regulators, public participation, RAB members, local tribes, etc) in the IAP development during data gathering. The IST will ask who your regulators are and how they participate.
	Complete edits in the proposed timeframe		The schedule is posted on AERO weekly- filter to your installation for all of the intended submittal times.
	Resolve any QC deficiencies identified in FY08's QC or QA review.		The IST will work with you to resolve any outstanding deficiencies from FY08.
	RACER		The most current version of RACER is to be used. A new release occurred in Oct 2008-RACER 10.2. If you need additional information on it ask your IST or ERM/CC PM.
	EL Training		Estimators, Reviewers, and Supervisory Review checklist signers must have EL training every year. Provide a copy of the certificates to the IST as documentation. If not provided, and you are not listed on any training rosters you will not be marked as having completed the training.

	MFR updates		The IST will provide a review of the MFRs and supporting documentation for you prior to upload into the database. If you are implementing USACE support on estimate generation- it is suggested you ask your IST to review the FY08 estimates before requesting updates from USACE on the 09 estimates so recommendations can be made in advance of Corps participation.
	RAO/LTM Worksheet (Five-year review worksheet) (no CC)		It is requested you populate the five-year review worksheet and provide to the IST no later than your validation call. The five-year review worksheet replaces the RAO/LTM worksheet completed in previous years.
	LUC Questionnaire (No CC)		AEC has developed a questionnaire on Land Use Controls. Please complete the questionnaire and provide no later than the validation call. AEC has provided a spreadsheet of all the Land Use Controls at your installation, confirm with the IST that the LUCs listed are implemented and are accurately depicted in the database.

Done?	Site Visit		Notes
	Work with the IST to establish the logistics for your site visit		Logistics for site visit may include: Time/date of arrival, Space availability, Location of installation data (CTC Project file), Is a projector necessary/available, and Installation Access. Recommended attendees include the installation POC, the estimator and MFR generator, and anyone else involved in updating the AEDB databases and IAP tool.
	Identify the areas to be addressed at the site visit in advance.		Each installation is different- discuss with the IST your needs. The IST can assist with MFR updates, cost estimate revisions, IAP and Database updates.

	CTC Project file		The IST will ask to review your CTC Project file. A Cost To Complete Project File is required to be maintained at the installation. In the event of an audit, the auditor would request to view this file. If conducting site visit, review the CTC Project File for: A hard copy of the current MFR (matches one in database) Hard copy of the supporting documentation Hard copy of supervisory review checklist Estimators training records Document retention time is 6 years and 3 months
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	No errors in installation or site level readiness checklists		Once all sites are released the installation readiness checklist can be run. The only error should be "programmed funds do not match requirements".
	Final Validation AAR		Once the above items are complete, the IST will submit a revised, Final AAR to you, ERM/CC PM, and AEC.
	Programming Spread		Roxann Diehl will populate the programmed funding once Data Acquisition Submittal is complete, the installation will be advised to spread the programmed funds to the requirements and submit the installation to oversight.

Certificate of Training

This certifies that

Stephen Absolom

has successfully completed

Environmental Liabilities

Guidelines for Developing Auditable Cost-to-Complete Estimates

February 25, 2009

Date of Training

Hopeton D. Brown, CTC Program Manager

LOCATIONS & DATES

All workshops will be conducted at the USAEC Training Facility, Building E4410, at the Edgewood Area of Aberdeen Proving Ground (APG), MD. The APG location accommodates approximately 12 trainees per session.

Ten (10) training sessions are planned, as indicated in the Schedule below. Class time is scheduled for 0830 to 1700. Environmental Cleanup Liabilities training will be provided Tuesday morning. The RACER™ training will be provided Tuesday afternoon and all day Wednesday. The AEDB-CC and AEDB-R training will be provided all day Thursday and Friday morning. Training will end no later than 1200 on Friday. Monday and Friday afternoons are considered travel days.

FY09 Environmental Cleanup Reporting Workshops Schedule

Session	Tuesday	Wednesday	Thursday	Friday
18-21 Nov 08	EL/RACER	RACER	AEDB-CC	AEDB-CC
9-12 Dec 08	EL/RACER	RACER	AEDB-R	AEDB-R
13-16 Jan 09	EL/RACER	RACER	AEDB-CC	AEDB-CC
10-13 Feb 09	EL/RACER	RACER	AEDB-R	AEDB-R
17-20 Mar 09	EL/RACER	RACER	AEDB-CC	AEDB-CC
21-24 Apr 09	EL/RACER	RACER	AEDB-R	AEDB-R
12-15 May 09	EL/RACER	RACER	AEDB-CC	AEDB-CC
16-19 Jun 09	EL/RACER	RACER	AEDB-R	AEDB-R
18-21 Aug 09	EL/RACER	RACER	AEDB-CC	AEDB-CC
15-18 Sep 09	EL/RACER	RACER	AEDB-R	AEDB-R

REGISTRATION

To register, contact the IMCOM IT Help Desk at 410-436-1244 or e-mail: APGR-IMCOM-ITHelpDesk@conus.army.mil. Please include the training session for which you would like to register. Registered participants will receive a confirmation e-mail to include the Environmental Liability, RACER™ and/or AEDB-R/AEDB-CC training session in which they have been placed.

CANCELLATION POLICY

All individuals participating in the course are expected to attend. If the need to withdraw should arise, the Help Desk must be notified, at a minimum, 5 working days prior to the start of the workshop. The USAEC will make arrangements for the individuals to come to a future class if so desired.

LODGING INFORMATION

Below is a listing of area hotels in close proximity to training sites in the Aberdeen Proving Ground (APG)-Edgewood Area (EA), MD.

BEST WESTERN INVITATION INN
1709 Edgewood Road
Edgewood, MD 21040
Phone: 410-679-9700
Toll Free: 1-800-528-1234

RAMADA EDGEWOOD
1700 Van Bibber Road
Edgewood, MD 21040
Phone: 410-679-0770
Toll Free: 1-800-272-6232

HAMPTON INN
2112 Emmorton Park Road
Edgewood, MD 21040
Phone: 410-670-6000
Toll Free: 1-800-426-7866

HOLIDAY INN EXPRESS
2118 Emmorton Park Road
Edgewood, MD 21040
Phone: 410-612-1200
Toll Free: 1-877-863-4780

WINGATE INN-ABERDEEN
1326 Policy Drive
I-95 & Route 543
Belcamp, MD 21017
Phone: 410-272-2929
Toll Free: 1-800-228-1000

COUNTRY INN AND SUITES BEL AIR EAST
1435 Handlir Road
Bel Air, MD 21015
Phone: 410-297-9444
Toll-Free: 1-888-201-1746

SLEEP INN & SUITES
1807 Edgewood Road
Edgewood, Maryland 21040
Phone: 410-679-4700
Toll-Free: 1-877-424-6423

LA QUNITA INN & SUITES
2112-B Emmorton Park Road
Edgewood, MD 21040
Phone: 410-676-6969
Toll-Free: 1-800-642-4271

DRIVING DIRECTIONS

Building E-4410 USAEC Training Facility, APG-EA, MD.

Directions from the Baltimore Washington International Airport (BWI):

1. Exit BWI Airport to I-295 North (right exit).

2. Take I-295 North to I-95 North.

3. Follow I-95 North for approx. 20 miles to Exit 74 (Mountain Road) – Rt. 152 South.

4. Follow Rt. 152 South (approx. 3 miles, crossing MD Rt. 7 and U.S. 40) to the Magnolia gate of the Edgewood Area of APG. Bring your Department of Army Civilian Identification to enter post. Otherwise, you will have to sign in at the visitor's booth.

5. Proceed through the gate to the first traffic light; continue straight through the first light to the next traffic light and bear right at the yield sign onto Wise Road. Continue on Wise Road until the 4-way stop. Proceed straight through the stop sign and make your 2nd right into the parking lot, Building E4410 will be on your right.

MMRP Installations on and off Central Program Management

Off Central Program Development	Still On Central Program Development
Aberdeen PG	Anniston AD
Biak Training Center	Blue Grass AD
Blossom Point	Camp Edwards
Camp Bowie	Camp Roberts
Camp Bullis	Devens Reserve TF
Camp Clark	Dugway
Camp Grayling Army Airfield	Fort Allen
Camp McCain	Fort AP Hill
Camp Murray	Fort Benning
Charles Melvin Pr.	Fort Buchanan
Cornhusker AAP	Fort Campbell
Fort Belvoir	Fort Dix
Fort Bliss	Fort Greely
Fort Eustis	Fort Hunter Liggett
Fort Hamilton	Fort Indiantown Gap
Fort Huachuca	Fort Irwin
Fort Jackson	Fort Lee
Fort Leavenworth	Fort Leonard Wood
Fort Lewis	Fort McClellan
Fort Meade	Fort Polk
Fort Missoula	Fort Richardson
Fort Riley	Fort Shafter
Fort Rucker	Fort Story
Fort Sam Houston	Fort Wainright
Fort Sill	Hawthorne AD
Fort Snelling USARC AMSA	Los Alamitos
Fort Stewart	McAlester AAP
Fort William Henry Harrison	Milan AAP
Iowa AAP	NG Akiachak
Joliet AAP	NG Alakanuk
Kilauea Military Reservation	NG Atmautluak
Kimama TS Rupert	NG Barrow
Longhorn AAP	NG Brevig Mission
Louisiana AAP	NG Chefornak
Makua Military Reservation	NG Chevak
MTA-L Camp Williams East St.	NG Eek Federal
NG New Castle	NG Elim
Orchard Range TS Boise	NG Emmonak
Picatinny Arsenal	NG Fort Yukon
Pohakuloa Training Area	NG Gambell
Ravenna AAP	NG Goodnews Bay
Red River AD	NG Hoonah
Rock Island Arsenal	NG Hooper Bay

Off Central Program Development	Still On Central Program Development
Schofield Barracks	NG Kasighuk
Tobyhanna AD	NG Kiana
USARC Fort Sheridan	NG Kipnuk
Waikakulua Ammo Storage	NG Kongiganak
West Point	NG Kotlik
Yakima	NG Kwethluk
Yuma PG	NG Mekoryuk
	NG Mountain Village
	NG Napakiak
	NG Napaskiak
	NG Nightmute
	NG Noatak
	NG Noorvik
	NG Nulato
	NG Nunapitchuk
	NG Point Hope
	NG Savoonga
	NG Scammon Bay
	NG Shaktoolik
	NG Shishmaref
	NG Shungnak
	NG St. Mary's
	NG St. Michael
	NG Stebbins
	NG Teller
	NG Togiak
	NG Toksook Bay
	NG Tuntutuliak
	NG Tununak
	NG Unalakleet
	NG Wainwright
	NG Wales
	NG Wrangell
	Papago Park
	Parks Reserve FTA
	Pine Bluff Arsenal
	Radford AAP
	Redstone Arsenal
	Sierra
	Tooele AD
	Wheeler AAF
	White Sands MR

AEDB-R SPECIFIC CONTACTS FOR TECHNICAL, REPORTING, AND PROGRAM MANAGEMENT ASSISTANCE

PROGRAM POLICY & GUIDANCE:

OACSIM Installation Services Directorate, Environmental Division:

Mr. Charles George
E-mail: charles.george@us.army.mil
Commercial: 703-601-1597

Mr. Samuel Pierre
E-mail: samuel.pierre@us.army.mil
Commercial: 703-601-1550

OACSIM Operation Directorate, BRAC Division:

Ms. Karen Wilson
E-mail: karen.wilson@us.army.mil
Commercial: 703-602-2861

Dr. David Goldblum
E-mail: david.goldblum@us.army.mil
Commercial: 703-602-6619

PROGRAM EXECUTION & TECHNICAL SUPPORT:

ER, A Installations Team Lead: Ms. Roxann Diehl, IMAE-CDP
E-mail: roxann.diehl@us.army.mil
Commercial: (410) 436-1544 (DSN 584)

IAP Team Lead: Ms. Susan Abston, IMAE-CDP
E-mail: susan.abston@us.army.mil
Commercial: (410) 436-1528 (DSN 584)

Environmental Restoration Liabilities (Cost-to-Complete):

Mr. Hopeton Brown, IMAE-CDP
E-mail: hopeton.brown@us.army.mil
Commercial: 410-436-1619 (DSN 584)

BRAC Installation Support, including non-BRAC Excess Installations:

Ms, Stephanie Sigler, IMAE-CDP
E-mail: stephanie.j.sigler@us.army.mil
Commercial: 410-436-0446 (DSN 584)

AEDB-R SPECIFIC CONTACTS FOR TECHNICAL, REPORTING, AND PROGRAM MANAGEMENT ASSISTANCE (CONT)

Military Munitions Response Program (Active & Excess Installations):
Ms. Mary Ellen Maly, IMAE-CDP
E-mail: maryellen.h.maly@us.army.mil
Commercial: 410-436-7083 (DSN 584)

SOFTWARE:

IMCOM IT Help Desk Service Center:
E-mail: APGR-IMCOM-ITHelpDesk@conus.army.mil
Commercial: (410) 436-1244 (DSN 584)

REPORTING:

Restoration Team Lead:
Mr. Matt Andrews, IMAE-ER
E-mail: matt.andrews@us.army.mil
Commercial: (410) 436-7087 (DSN 584)

AEDB-R Project Officer:
Mr. Mark T. Caro, IMAE-ER
E-mail: mark.caro@us.army.mil
Commercial: (410) 436-1509 (DSN 584)

DEVELOPING AND UPDATING COST-TO-COMPLETE (CTC) ESTIMATES

Department of Defense guidance requires the Army to use CTC estimates as the basis for the environmental liability portion of the Army's annual financial statement. The CTC estimates when used to report environmental liabilities become accounting estimates and therefore must meet Financial Management Regulation (FMR) requirements. This requires CTC estimates to be complete, up-to-date, and fully and formally documented. Although AEDB-R enhancements ensured supporting documentation was attached to all sites, the quality control reviews identified discrepancies with the quality of the documentation and audit trails. Please consider the following procedures when preparing CTC estimates. Information that is more detailed is included in the CTC Guidance document found here (AERO account required): https://aero.apgea.army.mil/portal/page/portal/aero2_pages/aero_main/aero_army_systems/sy_aedb_r/sy_aedb_r_documents/FINAL%20SIGNED%2017%20JAN%2007%20CTC%20GUIDANCE%203%20OCT%2006.pdf.

Documentation and Audit Trails

A Memorandum for Record(MFR)/Summary Document must be provided for all CTC estimates. The MFR must identify the supporting documentation used and provide a good audit trail to show how that information is used to populate AEDB-R. The MFR should cover a single site. The MFR must be signed and dated by the estimator and the reviewer who ensures the estimate is supported by documentation. The MFR must be uploaded to the database of record and also placed in the installation's project files. Examples of an MFR and types of supporting documentation are included in the CTC Guidance document.

Current Year Dollars

The CTC estimates shall be reported on a current cost basis (unadjusted for inflation). The following factors should be used to bring previous year costs to the current year.

Base Fiscal Year	Escalation Rate
2004	1.1314
2005	1.1006
2006	1.0674
2007	1.0394
2008	1.0200

Remedial Cost Engineering and Requirements (RACER™) Software

Cost estimators must prepare their RACER™ estimates in accordance with Army-specific requirements to ensure successful import to AEDB-R. All assumptions used to develop RACER™ estimates must be entered into the comment fields in the RACER™ software. Information that is more detailed is included in the CTC Guidance document. A summary of the Army guidelines for developing RACER™ estimates is listed below.

DEVELOPING AND UPDATING COST-TO-COMPLETE (CTC) ESTIMATES (CONT)

- **Site ID** and **Site Name** should be the same as what is in AEDB-R.
- Do **NOT** use the Site Close-out phase.
- Do **NOT** use User-Defined Technologies.
- Do **NOT** use User-Defined Assemblies.
- Do **NOT** use Army analytical templates. They are no longer updated. Use System Analytical Templates only.
- Use the **Template** method for setting up Sites and Phases.
- Do **NOT** escalate values across fiscal years.
- Phases in RACER™ estimates should be consistent with AEDB-R phases.
- Active, BRAC and Excess installations should **NOT** use a RACER™ generated MFR. Estimator must develop a standard MFR for upload to CTC site.

ENVIRONMENTAL CLEANUP REPORTING WORKSHOP TRAINING PLAN

INTENTION

This Training Plan provides an overview of the FY09 Environmental Cleanup Reporting Workshops provided by the US Army Environmental Command (USAEC) Environmental Reporting Office.

PURPOSE

The USAEC is offering training for Environmental Cleanup Financial Liabilities (ECFL), Remedial Action Cost Engineering and Requirements (RACER™) software, Army Environmental Database-Restoration (AEDB-R), and Army Environmental Database-Compliance-Related Cleanup (AEDB-CC). Also included during the workshop is an overview of the Installation Action Plan (IAP) Tool as well as the Repository of Environmental Army Documents (READ).

OBJECTIVES

The training objectives are to educate personnel involved in the data collection, review, and submittal of Defense Environmental Restoration Program (DERP) and Non-DERP cost and non-cost data with the functionality of the AEDB-R and AEDB-CC applications.

COURSE DESCRIPTIONS

ENVIRONMENTAL CLEANUP LIABILTIES

This 4-hour training is designed to enhance remedial project manager's capabilities, when managing projects, through improved procedures of cost estimating. Provided is an overview of the Financial Reporting requirements and its relationship to Cost-to-Complete (CTC). The training includes discussions on the 1990 Chief Financial Officers (CFO) Act, Government Performance and Results Act (GPRA), Government Management Reform Act (GMRA), Federal Financial Management Improvement Act (FFMIA), and the guidelines to develop auditable CTC estimates that are used as the basis for the environmental liabilities in the annual financial statements. Key concepts, practical examples, and lessons learned will be discussed.

Intended Audience:
This is a MANDATORY course for all staff engaged in the development of CTC estimates or preparation of the environmental restoration liability reports. The intended audience includes Headquarters/Command, program managers, remedial project managers (RPM), BRAC Environmental Coordinators (BEC), and engineers.

Training Objectives:
Provide Headquarters/Command, program managers, RPM, BEC, and engineers an improved understanding of financial reporting requirements. Define environmental liability and identify the key historical events impacting the Army's CTC process. Identify key points of the guidance relating to the CTC Program and its effect on the Army's responsibility to report environmental cleanup liabilities. Recall answers to frequently asked questions relating to the cleanup process and the reporting system.

Identify facts and implications of CTC estimates on how the Army reports environmental liabilities. Identify the key requirements of the Quality Control Program.

Trainee Prerequisites:
Persons being trained should have a general understanding of the Environmental Budget process and the development of CTC estimates.

RACER™
This 1.5-day course provides instruction on the use of the RACER™ software. RACER™ is a PC-based estimating tool used by the Army to produce supportable and auditable environmental liability estimates. This training will provide hands-on exercises to reinforce system navigation techniques and instructions on customizing a RACER™ cost estimate.

Intended Audience:
This course is intended for people who have not had RACER™ training or for those who need a refresher on system navigation.

Training Objectives:
The objective of this training is to provide RPM, BEC and engineers the necessary skills to utilize the RACER™ software to develop CTC estimates for DERP sites without a feasibility study.

Trainee Prerequisites:
It is recommended that individuals attending RACER™ training be comfortable working within a Windows Operating System environment and have a basic knowledge of environmental remediation methodologies.

AEDB-R
This 1.5-day training will provide in-depth software training on the AEDB-R application. The AEDB-R is a near real-time software application developed to support the collection, reporting, and management of the Army's DERP phase schedules, cost estimates, program funds, and other installation/site information. The designed learning methodology will include pre-class self-study information, proactive mentoring, hands-on classroom training, and continual training support.

Intended Audience:
For training purposes, all trainees will be considered new installation users with varying software and program experience and learning styles. All Headquarters/Command, program managers, RPM, BEC, and engineers are invited to attend this training.

Trainee Prerequisites:
None

AEDB-CC

This 1.5 Day software training will provide in-depth software training on the AEDB-CC application. The AEDB-CC is a near real-time software application developed to support the collection, reporting, and management of the Army's Compliance-Related Cleanup Program phase schedules, cost estimates, program funds, and other installation/site information. The class encourages proactive mentoring, hands-on classroom training, and a forum to address questions and concerns to Subject Matter Experts.

Intended Audience:
For training purposes, all trainees will be considered new installation users with varying software and program experience and learning styles. All Headquarters/Command, program managers, RPM, and engineers are invited to attend this training.

Trainee Prerequisites:
None

Instructors

Course Title	Instructor
Environmental Cleanup Liabilities	Bechtel-S
RACER™	BAH
AEDB-CC/AEDB-R	LogSec Corp

All courses will include hands-on classroom training, proactive mentoring, and continual training support. The class sizes will be limited so instructors can provide personal guidance to trainees throughout the most complicated technical concepts. Limiting the class size will also facilitate quality answer/question sessions that may arise during the course of training.

Attendees:
Persons being trained should have a general programmatic understanding of the Army DERP, Army Base Realignment and Closure (BRAC Environmental Restoration Program), and/or the Army Compliance-Related Cleanup Program. A general knowledge of Internet browsers and computer applications such as Microsoft (MS) Word, Excel, and Acrobat Reader is also required. Trainees should be prepared to participate in an interactive learning environment and utilize the classroom as a forum to discuss reporting, data collection, and data submittal lessons learned.

AEDB-R FY09 Data Call Schedule – **Legacy BRAC/BRAC 05**

Date	Action
10 Nov 08	AEDB-R opens for the FY09 Data Call – Spring update
Feb/Mar 09	BRAC Work Plan meeting
10 Apr 09	Installation level Spring data submission to QA level
17 Apr 09	QA level (USAEC/DAIM-ODB) Spring submission to Army Reviewing Level
20 Apr – 1 May 09	Installation and QA level access limited to Read-only
20 Apr – 1 May 09	CTC team performs QC review of BRAC financial data for installations not preparing an IAP
20 Apr – 1 May 09	USAEC/DAIM-ODB perform QA review of Spring data
1 – 4 May 09	DAIM-ISE/DAIM-ODB collaborates Spring data
4 May 09	USAEC creation of Army Approved Spring 2009 data Set
4 – 15 May 09	USAEC prepares/submits Spring data summary to ISE
5 May 09	USAEC provides BRAC Optimization Model (BOM) export report to DAIM-ODB
5 May – 22 May 09	DAIM-ODB review of initial BOM results
1 Jun 09	DAIM-ODB provides BOM import report to USAEC
5 Jun 09	USAEC completes import of BOM results (budget and programmed amounts)
8 Jun 09	USAEC provides DAIM-ODB Work Plan Template report
Late Jun 09	BRAC Work Plan meeting
Jun – Jul 09	Export Spring data to OSD via KBCRS
Jul 09	USAEC makes any needed adjustments to BRAC requirements. USAEC provides new BOM export file to DAIM-ODB. DAIM-ODB provides revised BOM import file to USAEC. USAEC imports revised BOM.
27 Jul 09	AEDB-R opens for BRAC Installations begin the FY09 Fall update for non-cost data
9 Sep 09	BRAC Installation level Fall data submission to QA level
16 Sep 09	BRAC QA level Fall submission to Army Reviewing Level (USAEC)
18 Sep – 4 Nov 09	USAEC/DAIM-ODB QA review of Fall data
4 – 6 Nov 09	DAIM-ISE/DAIM-ODB collaborates Fall data
Late Oct 09	USAEC enters BRAC Obligation data for FY09
6 Nov 09	USAEC creation of Army Approved Fall 2009 data Set
12 Oct – 4 Dec 09	Prepare FY09 data summary, export Fall data to OSD via KBCRS
4 Jan 10	DAMI-OBD validates, DAIM-ISE concurs & USAEC exports FY11 President's Budget Requirements to KBCRS

Encl 1

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
600 ARMY PENTAGON
WASHINGTON, DC 20310-0600

DAIM-IS

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: FY09 Army Environmental Database-Restoration (AEDB-R) Data Call

1. The official start of the FY09 Data Call is 10 Nov 08. Enclosures 1-3 provide a timeline for Spring and Fall data submissions based on installation type. Enclosure 1 contains the Legacy Base Realignment and Closure (BRAC) (BRAC 88, 91, 93 and 95) and BRAC 05 submittal schedule. The Active and non-BRAC Excess schedule is provided at Enclosure 2, while the Partial BRAC schedule (combination of Active, Legacy BRAC and/or BRAC 05) is shown in Enclosure 3. The Spring data submission covers the first half of FY09, 1 Oct 08 – 31 Mar 09. The Fall data submission covers the second half of FY09, 1 Apr 09 – 30 Sep 09. Users are strongly encouraged to run the data submission readiness checklists before starting the update and upon data submission.

2. Legacy BRAC/BRAC 05 installations update (refer to Enclosure 1 for the schedule):

a. Spring Submission: Installations must update all BRAC site-level data (Installation Restoration [IR], Munitions Response [MR] and Compliance), including cost-to-complete (CTC) estimates, cost requirements spread, and phase schedules, prior to 10 Apr 09. In addition, all CTC estimates must be released before the Spring data submission. Guidelines for developing and updating CTC estimates are provided at Enclosure 4.

b. Fall Submission: Installations must update all non-cost site-level data (IR, MR and Compliance), including phase schedules, prior to 9 Sep 09. The Operations Division BRAC will use the BRAC Optimization Model (BOM) for completing the programmed spreads for both Legacy and BRAC 05 requirements.

c. BRAC Installation Action Plans: Installations must update the BRAC Installation Action Plan (BIAP) for FY10 by 1 Oct 09, using the Installation Action Plan (IAP) tool located on Army Environmental Reporting Online (AERO). To meet this suspense, the AEDB-R must be updated and submitted no later then 9 Sep 09, so that the IAP tool used to produce a BIAP reflects supportable CTC requirements with proper supporting documentation. Refer to memorandum, DAIM-OBD, 15 Sep 08, subject: Fiscal Year 2009 Army Base Realignment and Closure Installation Action Plans.

3. Active and non-BRAC Excess installations update: Installations continue to be responsible for the update to AEDB-R and the preparation of CTC estimates for IR sites. The US Army Environmental Command (USAEC) will still remain responsible for the AEDB-R update and preparation of CTC estimates for MR sites at installations that have not initiated a beyond Site Inspection (SI) phase project. However, at installations where post-SI level projects were initiated, the installation is responsible for their AEDB-R and CTC updates. At a minimum, the installations or USAEC must update phase schedules in the Spring submission. If the installation will complete their IAP before 13 Mar 09, then the CTC, cost requirements spread, and programmed funding spread must be completed for the Spring submission. In these cases, installations with adequate supporting documentation for their CTC estimates will not be returned to the installation for Fall updates. Any phase schedule updates or other revisions will be accomplished at the Quality Assurance (QA) Level through coordination with the installation. Installations that will complete their IAP validation call after 13 Mar 09, must complete their CTC, cost requirements spread, and programmed funding spread for the Fall submission. Guidelines for developing and updating CTC estimates are provided at Enclosure 4. Refer to Enclosure 2 for the schedule.

a. For Active and non-BRAC Excess installations, the IAP data gathering is the primary forum through which IR site-level data, to include CTC estimates with requirements, and phase schedules are collected for input to AEDB-R. The IAP must accurately reflect the installation cleanup program. The AEDB-R must be updated and submitted within 20 working days following each installation's IAP data call. The IAP, and therefore AEDB-R, must reflect supportable CTC requirements with proper supporting documentation. The IAP process schedule is located on AERO.

b. Up through FY08 for the Environmental Restoration, Army (ER,A) funded Military Munitions Response Program (MMRP), USAEC performed all cost and non-cost AEDB-R updates. This central program requirements development of MR sites is being phased out, starting in FY09 as installations complete their SI phase and initiate post-SI level projects. In FY09, installations that were transitioned off of central program development will be responsible for updating all CTC estimates and non-cost data in AEDB-R. Enclosure 6 lists the central program development status for all MMRP installations with ongoing or future work. For those installations still under central program development, USAEC will continue to update all CTCs and data in AEDB-R. However, through the IAP process, the installation should actively participate with USAEC to fine-tune and make their cleanup completion strategy and CTC estimates as site-specific as possible.

4. Partial BRAC installations update: The AEDB-R business process does not easily support the Partial BRAC installations. The BRAC sites must follow the same

requirements as discussed in paragraph 2. Active sites (ER,A funded) must follow the same requirements as outlined in paragraph 3. The BRAC and Active installation points of contact should coordinate installation submission for the Spring data submission. The installation must be aware of the schedule provided in Enclosure 3 for partial BRAC installations.

5. Suspense Dates:

Suspense	Action
10-Apr-09	Spring data Active, non-BRAC Excess/BRAC Installation submit to QA level
17-Apr-09	Spring data QA level submit to USAEC Reviewing level
8-Jul-09	Fall data Active, non-BRAC Excess Installation submit to QA Level
15-Jul-09	Fall data Active, non-BRAC Excess QA level to USAEC Reviewing level
9-Sep-09	Fall data BRAC Installation submit to QA level
16-Sep-09	Fall data BRAC QA submit to USAEC Reviewing level
1-Oct-09	Final update to FY10 Installation Action Plan (IAP) via IAP tool

6. The USAEC will offer AEDB-R Refresher Training Workshops during the Nov 08-Sep 09 timeframe. Enclosure 5 contains training details, schedule, and registration information.

7. The OACSIM POC for Active sites is Mr. Charlie George, 703-601-1597; e-mail: Charles.George@us.army.mil. The OACSIM POC for BRAC sites is Ms. Karen Wilson, 703-602-2861, e-mail: Karen.Wilson@us.army.mil. Enclosure 7 provides specific contacts for technical, reporting, and program management assistance.

FOR THE ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT:

Kathleen Y. Marin

KATHLEEN Y. MARIN
Director, Installation Services

7 Encls
1. AEDB-R FY09 Data Call Schedule Legacy BRAC/BRAC05
2. AEDB-R FY09 Data Call Schedule Active and Non-BRAC Excess
3. AEDB-R FY09 Data Call Schedule Partial BRAC
4. Developing and Updating Cost-to-Complete (CTC) Estimates
5. Environmental Cleanup Reporting Workshop Training Plan
6. MMRP Installations on and off Central Program Management

DAIM-IS
SUBJECT: FY09 Army Environmental Database-Restoration (AEDB-R) Data Call

Encls (Cont)
7. AEDB-R Specific Contracts for Technical, Reporting, and Program Management Assistance

DISTRIBUTION:
HQDA (DAIM-ODB/COL JAMES BALOCKI/MS. KAREN WILSON/), 600 ARMY PENTAGON, WASH DC 20310-0600
HQDA (DAIM-ODR/MR. ALAN WAITE), 600 ARMY PENTAGON, WASHINGTON, DC 20310-0600
INSTALLATION MANAGEMENT COMMAND (IMCS/COL HERRING), 2511 JEFFERSON DAVIS HWY, TAYLOR BLDG (NC3), ARLINGTON, VA 22202-3926
NATIONAL GUARD BUREAU (NGB-ARZ/LTG CLYDE VAUGHN), (NGB-ART/ COL PHILLIP STEMPLE), (NGB-ARE/COL JEFFREY PHILLIPS), ARMY NATIONAL GUARD READINESS CENTER, 111 SOUTH GEORGE MASON DR, ARLINGTON, VA 22204-1382
US ARMY CORPS OF ENGINEERS (CEMP-C-D-SWD/MS. PATRICIA RIVERS/ MR. BOB FENLASON), 441 G ST, NW, WASHINGTON, DC 20314-1000
US ARMY MATERIEL COMMAND (AMCIM-I/MR. BILL METZ), 9301 CHAPEK RD, FT BELVOIR, VA 22060-5527
US ARMY SPACE & MISSILE DEFENSE COMMAND (SMDC-EN/COL HARVEY JONES, SMDC-EN-V/MR. DENNIS GALLIEN, SMCD-EN-VE/MR GLEN SHONKWILDER), BLDG 112, REDSTONE ARSENAL, AL 35898- 5349
US ARMY MEDICAL COMMAND (MCFA-E/MR. DAMON CARDENAS), 2050 WORTH RD, FT SAM HOUSTON, TX 78234-6000
US ARMY ENVIRONMENTAL COMMAND (IMAE-CO, COL MARIA GERVAIS), 5179 HOADLEY ROAD, ABERDEEN PROVING GROUND, MD 21010-5401

CF: (w/encls)
IMCOM NORTHEAST REGION (IMNE-PWD-E/MR. STEVE MCCALL), 5B NORTH GATE RD, FT MONROE, VA 23651-1047
IMCOM PACIFIC REGION (IMPA-PWD-E/MR. MICHAEL HARADA), H PLACE, BLDG 104, FT SHAFTER, HI 96858-5520
IMCOM SOUTHEAST REGION (IMSE-PWD-E/MR. RUDY STINE), 1593 HARDEE AVE, SW, BLDG 171, FT MCPHERSON, GA 30330-1057
IMCOM WEST REGION (IMWE-PWD-E/MS. MARY OLIVIER), 2450 STANLEY RD, SUITE 101, FT SAM HOUSTON, TX 78234-6102

AEDB-R FY09 Data Call Schedule – **Active and Non-BRAC Excess**

Date	Action
10 Nov 08	AEDB-R opens for the FY09 Data Call – Spring update
Nov 08 – May 09	IAP data gathering. CTC Team performs real time QC of the financial data based on the IAP schedule and AEDB-R update.
10 Apr 09	Installation level Spring data submission to QA level (USAEC)
17 Apr 09	USAEC Restoration Manager Spring submission to Army Reviewing Level (USAEC/DAIM-ISE)
20 Apr – 1 May 09	Installation and QA level (USAEC) access limited to Read-only
20 Apr – 1 May 09	USAEC QA review of Spring data and presents results to DAIM-ISE
1 – 3 May 09	DAIM-ISE validates Spring data set
4 May 09	USAEC creation of Army HQ Approved Spring 2009 data Set
4 – 15 May 09	USAEC prepares/submits Spring data summary to DAIM-ISE
8 May 09	AEDB-R opens for the FY09 Fall update
16 May – 1 Jun 09	DAIM-ISE validates/approves Spring data submission to KBCRS
Jun – Jul 09	Exports Spring data to OSD via KBCRS
8 Jul 09	Installation level Fall data submission to QA level (USAEC) (If CTC/IAP not completed in Spring)
15 Jul 09	QA level (USAEC RM) Fall submission to Army Reviewing Level (USAEC)
16 Jul – 4 Nov 09	Installation and QA level (USAEC) access limited to Read-only
17 Jul – 4-Nov 09	USAEC QA review of Fall data and presents results to DAIM-ISE
4 – 6 Nov 09	DAIM-ISE validates Fall data set
6 Nov 09	USAEC creation of Army HQ Approved Fall 2009 data set
12 Oct – 4 Dec 09	USAEC prepares/submits Fall data summary to DAIM-ISE
12 Oct – 4 Dec 09	DAIM-ISE validates/approves Fall data submission to KBCRS
12 Oct – 4 Dec 09	Exports Fall data to OSD via KBCRS
15 Dec 09 - 4 Jan 10	DAMI-ISE validates & USAEC exports FY11 President's Budget Requirements to KBCRS

Encl 2

AEDB-R FY09 Data Call Schedule – **Partial BRAC***

Date	Action
10 Nov 08	AEDB-R opens for the FY09 Data Call – Spring update
Feb/Mar 09	BRAC Work Plan meeting
10 Apr 09	Installation Level Spring Data Submission to QA Level (BRAC and ERA POCs coordinate submission)
17 Apr 09	QA level (USAEC/DAIM-ODB) Spring submission to Army Reviewing Level
20 Apr – 1 May 09	Installation and QA level access limited to Read-only
20 Apr – 1 May 09	CTC team performs final QC review of BRAC financial data for installations not preparing an IAP
20 Apr – 1 May 09	USAEC/DAIM-ODB QA review of Spring data
1 – 4 May 09	DAIM-ISE/DAIM-ODB collaborates Spring data
4 May 09	USAEC creation of Army Approved Spring 2009 data set
4 – 15 May 09	USAEC prepares/submits Spring data summary to DAIM-ISE
5 May 09	USAEC provides BRAC Optimization Model (BOM) export report to DAIM-ODB
8 May 09	AEDB-R opens for FY09 Fall update (BRAC installations kept at Army Reviewing)
5 May - 22 May 09	DAIM-ODB review of initial BOM results
1 Jun 09	DAIM-ODB provides BOM import report to USAEC
5 Jun 09	USAEC completes import of BOM results (budget and programmed amounts)
8 Jun 09	USAEC Provides DAIM-ODB Work Plan Template Report
Mid/Late Jun 09	BRAC Work Plan meeting
Jul 09	USAEC makes any needed adjustments to BRAC requirements. USAEC provides new BOM export file to DAIM-ODB. DAIM-ODB provides revised BOM import file to USAEC. USAEC imports revised BOM.
16Jul – 4 Nov 09	Installation and QA level access limited to Read-Only
17 Jul – 4 Nov 09	USAEC/DAIM-ISE QA Review of Fall ACTIVE Data
30 Jul – 9 Sep 09	USAEC updates BRAC data on installations' behalf
9 Sep – 4 Nov 09	USAEC/DAIM-ODB QA review of Fall BRAC data
4 – 6 Nov 09	DAIM-ISE/DAIM-ODB collaborates Fall data
Oct 09	BRAC Work Plan meeting
Late Oct 09	USAEC enters BRAC Obligation data for FY09
6 Nov 09	USAEC creation of Army Approved Fall 2009 data set
12 Oct – 4 Dec 09	Prepare FY09 data summary, export Fall data to OSD via KBCRS
4 Jan 10	DAMI-ODB validates, DAIM-ISE concurs & USAEC exports FY11 President's Budget Requirements to KBCRS

* Partial BRAC Installation List

(Devens Reserve Training Facility, Fort Meade, Letterkenny Army Depot, Sierra Army Depot, Red River Army Depot, Tooele Army Depot)

Encl 3

Data Submission Readiness Checklist

This checklist helps you assess the readiness of a data submission. By default, the checklist only shows proposed and approved sites with errors, but you may click on the *Show Sites without Errors* option if you want to view all of the proposed and approved sites in the data submission.

Advisory errors (errors that will not prevent you from approving this data submission) are listed as warnings.

Checklist options:
[Show Sites without Errors]

Part I. Readiness Summary

SENECA ARMY DEPOT ACTIVITY Data Submission Readiness Summary

A. 21 critical errors detected
B. 0 advisory errors (warnings) detected
C. installation-level critical errors and/or advisory errors (warnings) detected
D. 17 sites with critical errors and/or advisory errors (warnings)
E. this data submission is not ready to submit

Part II. Installation-level Readiness Checks

Installation SENECA ARMY DEPOT ACTIVITY

A.1. Are ROD/DD signature dates and statuses consistent with the reporting period end date?

OK	[ROD] Ash Landfill ROD signatures are consistent
OK	[DD] Boiler Blowdown Pit signatures are consistent
OK	[DD] DECISION DOC FOR ASH LANDFILL REM ACTION signatures are consistent
OK	[ROD] Deactivation Furnaces signatures are consistent
OK	[ROD] EBS Industrial Area signatures are consistent
OK	[ROD] Fire Training Areas DD signatures are consistent
OK	[ROD] Multiple Sites Rod With Risk Assessment signatures are consistent
OK	[ROD] Munition Destruction Areas signatures are consistent
OK	[ROD] Munitions Washout Facility ROD signatures are consistent
OK	[ROD] NFA/IC sites II signatures are consistent
OK	[ROD] PID IC ROD signatures are consistent
OK	[DD] Paint Disposal Areas signatures are consistent
OK	[ROD] Paint Disposal Areas ROD signatures are consistent
OK	[DD] RAD disposal site signatures are consistent
OK	[DD] RCRA Closure Plan signatures are consistent
OK	[ROD] Rad site, SEAD-48 signatures are consistent
OK	[ROD] SEAD 11 Old Construction Debris LF signatures are consistent
ERROR	[ROD] SEAD 12 RAD site ROD signatures are not consistent (BRAC Division)
OK	[ROD] SEAD-002-R-01 and SEAD-007-R-01 signatures are consistent
OK	[DD] Sludge piles removal signatures are consistent
OK	[ROD] Tank Farm signatures are consistent

A.2. Are all mandatory ROD/DD signatures entered?

OK [ROD] Ash Landfill ROD mandatory signature was entered
OK [DD] Boiler Blowdown Pit mandatory signature was entered
OK [DD] DECISION DOC FOR ASH LANDFILL REM ACTION mandatory signature was entered
OK [ROD] Deactivation Furnaces mandatory signature was entered
OK [ROD] EBS Industrial Area mandatory signature was entered
OK [ROD] Fire Training Areas DD mandatory signature was entered
OK [ROD] Multiple Sites Rod With Risk Assessment mandatory signature was entered
OK [ROD] Munition Destruction Areas mandatory signature was entered
OK [ROD] Munitions Washout Facility ROD mandatory signature was entered
OK [ROD] NFA/IC sites II mandatory signature was entered
OK [ROD] PID IC ROD mandatory signature was entered
OK [DD] Paint Disposal Areas mandatory signature was entered
OK [ROD] Paint Disposal Areas ROD mandatory signature was entered
OK [DD] RAD disposal site mandatory signature was entered
OK [DD] RCRA Closure Plan mandatory signature was entered
OK [ROD] Rad site, SEAD-48 mandatory signature was entered
OK [ROD] SEAD 11 Old Construction Debris LF mandatory signature was entered
OK [ROD] SEAD 12 RAD site ROD mandatory signature was entered
OK [ROD] SEAD-002-R-01 and SEAD-007-R-01 mandatory signature was entered
OK [DD] Sludge piles removal mandatory signature was entered
OK [ROD] Tank Farm mandatory signature was entered

B. Are LUC CTC costs less than total Action Item Phase costs?

OK no LUC CTC cost issues exist

C. Are five year review dates and statuses consistent with the reporting period end date? Has Responsible Party information been entered?

OK review starting 20100430 and ending 20101030 has status Planned

D. If the RAB adjournment date occurs before the reporting period end date, is the adjournment reason specified?

OK RAB is not adjourned

E. Is installation progress entry required for FY 2009 and, if so, is it present?

not required for Spring data calls

F. Are FOST, FOSET, and FOSL dates and statuses consistent with the reporting period end date?

OK BRAC IV FOST *Airfield* date and status are consistent
OK BRAC IV FOST *CONSERVATION* date and status are consistent
OK BRAC IV FOST *FAMILY HOUSING* date and status are consistent
OK BRAC IV FOST *FOST Amendment 2* date and status are consistent
OK BRAC IV FOST *FOST Amendment 3* date and status are consistent
OK BRAC IV FOST *FOST Amendment LRA 3B* date and status are consistent
OK BRAC IV FOST *FOST Amendment for LRA1B* date and status are consistent
OK BRAC IV FOST *FOST amendment 2A* date and status are consistent
OK BRAC IV FOST *FOST amendment 2B* date and status are consistent
OK BRAC IV FOST *FOST amendment 4* date and status are consistent
OK BRAC IV FOST *FOST amendment 5* date and status are consistent
OK BRAC IV FOST *FOST amendmment 1A* date and status are consistent
OK BRAC IV FOST *Jail Parcel* date and status are consistent
OK BRAC IV FOST *LRA 4A* date and status are consistent

OK BRAC IV FOST *NORTH DEPOT* date and status are consistent
OK BRAC IV FOST *PID/WAREHOUSE* date and status are consistent
OK BRAC IV FOST *PRISON* date and status are consistent
OK BRAC IV FOST *U.S. COAST GUARD* date and status are consistent
OK BRAC IV FOST *UTILITIES* date and status are consistent
OK BRAC IV Transfer *CONSERVATION/Conservation* date and status are consistent
OK BRAC IV Transfer *FAMILY HOUSING/FAMILY HOUSING* date and status are consistent
OK BRAC IV Transfer *Jail Parcel/County Jail Parcel* date and status are consistent
OK BRAC IV Transfer *NORTH DEPOT/NORTH DEPOT* date and status are consistent
OK BRAC IV Transfer *PID/WAREHOUSE/EDC* date and status are consistent
OK BRAC IV Transfer *PRISON/PRISON PARCEL* date and status are consistent
OK BRAC IV Transfer *U.S. COAST GUARD/Coast Guard Parcel* date and status are consistent
OK BRAC IV Transfer *UTILITIES/Water and Sewer System* date and status are consistent
OK BRAC IV FOSL *AIRFIELD* date and status are consistent
OK BRAC IV FOSL *PID PHASE II* date and status are consistent
OK BRAC IV Lease *AIRFIELD/Master Lease SEDA* date and status are consistent
OK BRAC IV Lease *PID PHASE II/Master Lease SEDA* date and status are consistent

G. Are the FOST and FOSET required acreage amounts within available acreage amounts?

OK BRAC IV FOST *Airfield* is not subject to this validation because its status is Complete No Transfer
OK BRAC IV FOST *CONSERVATION* requires 6,981.00 acres and 7,844.60 are available
OK BRAC IV FOST *FAMILY HOUSING* requires 193.00 acres and 1,574.00 are available
OK BRAC IV FOST *FOST Amendment 2* is not subject to this validation because its status is Complete No Transfer
OK BRAC IV FOST *FOST Amendment 3* is not subject to this validation because its status is Future
OK BRAC IV FOST *FOST Amendment LRA 3B* is not subject to this validation because its status is Future
OK BRAC IV FOST *FOST Amendment for LRA1B* is not subject to this validation because its status is Future
OK BRAC IV FOST *FOST amendment 2A* is not subject to this validation because its status is Future
OK BRAC IV FOST *FOST amendment 2B* is not subject to this validation because its status is Future
OK BRAC IV FOST *FOST amendment 4* is not subject to this validation because its status is Future
OK BRAC IV FOST *FOST amendment 5* is not subject to this validation because its status is Future
OK BRAC IV FOST *FOST amendmment 1A* is not subject to this validation because its status is Future
OK BRAC IV FOST *Jail Parcel* requires 25.00 acres and 888.60 are available
OK BRAC IV FOST *LRA 4A* is not subject to this validation because its status is Future
OK BRAC IV FOST *NORTH DEPOT* requires 173.00 acres and 1,554.00 are available
OK BRAC IV FOST *PID/WAREHOUSE* requires 967.00 acres and 1,830.60 are available
OK BRAC IV FOST *PRISON* requires 689.00 acres and 2,070.00 are available
OK BRAC IV FOST *U.S. COAST GUARD* requires 271.00 acres and 1,134.60 are available
OK BRAC IV FOST *UTILITIES* requires 7.00 acres and 1,388.00 are available

H. If a BCP Abstract is required, are one (1) to four (4) Compliance narratives identified for elevation to DoD?

OK BCP Abstract is required and 2 narratives are identified for elevation to DoD

OK BCP Abstract is required and both mandatory narratives (Execution/Conservation & Execution/Fast Track) are present

I. If a BCT is required, is one established?

OK BCT is required and is present

J. If BRAC sites exist, are BRAC Rounds established?

OK sites exist, and BRAC IV - Base Realignment And Closure 1995 is established

Part III. Site-level Readiness Checks

1. Approved Site SENECA ARMY DEPOT ACTIVITY : SEAD-001-R-01 (DEACTIVATION FURNACES)

A. Are all phases & remedial actions completely specified with dates and statuses that are consistent with the reporting period end date?

OK phase PA with status Complete starts 199901 and ends 200001

OK phase RI/FS with status Complete starts 200010 and ends 200609

OK phase RD with status Complete starts 200603 and ends 200705

OK phase RA(C) with status Complete starts 200603 and ends 200808

ERROR phase LTM with status Future starts 200810 and ends 203809

OK remedial action (FRA) WASTE REMOVAL - SOILS with status Complete starts 200603 and ends 200808

OK remedial action (FRA) INSTITUTIONAL CONTROLS with status Complete starts 200603 and ends 200808

B. Is the design phase followed by a construction phase?

OK both the design phase (RD) and construction phase (RA(C)) are present

C. Do all Future phases have an estimate? This applies to BRAC Sites only.

OK phase LTM has a K$261 estimate

D. Is the estimate released?

ERROR the estimate for this site is not released

E. Are programmed funding spreads consistent with the phase schedule?

OK phase LTM programmed funding is in-schedule

F. Are the programmed funding spread phase totals consistent with the requirements spread phase totals?

OK not required for Spring data calls

G. Are all remedial actions scheduled to begin within the year following the end of the reporting period associated with a ROD/DD?

OK not required for Spring data calls

H. Is relative risk information (including POC information) required and, if so, is it present?

OK relative risk is not required:
- site is BRAC IV - Base Realignment And Closure 1995/MR - Munitions Response
- site is response complete (200808)
- site is not remedy in place

I. Are there any additional phase schedule problems? These types of problems should only exist at sites where the phase schedule was entered under an earlier version of AEDBR and has not been modified under this version of AEDBR.

OK no additional phase schedule problems

J. Is MRSPP specified and documentation provided? Are MR Ordnance Types present? Are MR acreages specified? Is MR Area ID specified?

OK MRSPP priority is required and is present

OK	MRSPP Documentation is not required (this is an MR site with no MRSPP severity)
OK	MR Ordnance Types are not required (this is an MR site with no MRSPP severity or evaluation pending)
OK	Reason for changing MRSPP priority is 'Site achieved RIP/RC' (Site is RIP/RC)
OK	MR acreages are specified
OK	MR Area ID is specified

2. Approved Site SENECA ARMY DEPOT ACTIVITY : SEAD-002-R-01 (EAST EOD RANGES)

A. Are all phases & remedial actions completely specified with dates and statuses that are consistent with the reporting period end date?

OK	phase PA with status Complete starts 200011 and ends 200306
OK	phase RI/FS with status Underway starts 200110 and ends 200909
OK	phase IRA with status Underway starts 200502 and ends 200909
OK	phase LTM with status Future starts 200909 and ends 203905
OK	remedial action (IRA) UXO CLEARANCE with status Underway starts 200502 and ends 200909

B. Is the design phase followed by a construction phase?

OK	there is no design phase (RD) present

C. Do all Future phases have an estimate? This applies to BRAC Sites only.

OK	phase LTM has a K$25 estimate

D. Is the estimate released?

ERROR	the estimate for this site is not released

E. Are programmed funding spreads consistent with the phase schedule?

OK	phase RI/FS programmed funding is in-schedule
OK	phase IRA programmed funding is in-schedule
OK	phase LTM programmed funding is in-schedule

F. Are the programmed funding spread phase totals consistent with the requirements spread phase totals?

OK	not required for Spring data calls

G. Are all remedial actions scheduled to begin within the year following the end of the reporting period associated with a ROD/DD?

OK	not required for Spring data calls

H. Is relative risk information (including POC information) required and, if so, is it present?

OK	relative risk is not required: • site is BRAC IV - Base Realignment And Closure 1995/MR - Munitions Response • MR chemical constituent contamination is present • site is not response complete (200909) • site is not remedy in place

I. Are there any additional phase schedule problems? These types of problems should only exist at sites where the phase schedule was entered under an earlier version of AEDBR and has not been modified under this version of AEDBR.

OK	no additional phase schedule problems

J. Is MRSPP specified and documentation provided? Are MR Ordnance Types present? Are MR acreages specified? Is MR Area ID specified?

OK	MRSPP priority is required and is present
OK	MRSPP Documentation is not required (this is an MR site with no MRSPP severity)
	MR Ordnance Types are required, and are present (this is an MR site with MRSPP

OK	severity or evaluation pending)
OK	Reason for changing MRSPP priority is required and is present (MRSPP priority has changed)
OK	MR acreages are specified
OK	MR Area ID is specified

3. Approved Site SENECA ARMY DEPOT ACTIVITY : SEAD-003-R-01 (EOD RANGE 1)

A. Are all phases & remedial actions completely specified with dates and statuses that are consistent with the reporting period end date?

OK	phase PA with status Complete starts 200111 and ends 200206
OK	phase RI/FS with status Underway starts 200210 and ends 201005
OK	phase RD with status Future starts 201009 and ends 201012
OK	phase RA(C) with status Future starts 201009 and ends 201112
OK	phase LTM with status Future starts 201201 and ends 204208
OK	remedial action (FRA) WASTE REMOVAL - SOILS with status Future starts 201009 and ends 201112
OK	remedial action (FRA) INSTITUTIONAL CONTROLS with status Future starts 201009 and ends 201112

B. Is the design phase followed by a construction phase?

OK	both the design phase (RD) and construction phase (RA(C)) are present

C. Do all Future phases have an estimate? This applies to BRAC Sites only.

OK	phase RD has a K$37 estimate
OK	phase RA(C) has a K$410 estimate
OK	phase LTM has a K$95 estimate

D. Is the estimate released?

ERROR	the estimate for this site is not released

E. Are programmed funding spreads consistent with the phase schedule?

OK	phase RI/FS programmed funding is in-schedule
OK	phase RD programmed funding is in-schedule
OK	phase RA(C) programmed funding is in-schedule
OK	phase LTM programmed funding is in-schedule

F. Are the programmed funding spread phase totals consistent with the requirements spread phase totals?

OK	not required for Spring data calls

G. Are all remedial actions scheduled to begin within the year following the end of the reporting period associated with a ROD/DD?

OK	not required for Spring data calls

H. Is relative risk information (including POC information) required and, if so, is it present?

OK	relative risk is not required: • site is BRAC IV - Base Realignment And Closure 1995/MR - Munitions Response • MR chemical constituent contamination is present • site is not response complete (201112) • site is not remedy in place

I. Are there any additional phase schedule problems? These types of problems should only exist at sites where the phase schedule was entered under an earlier version of AEDBR and has not been modified under this version of AEDBR.

OK	no additional phase schedule problems

J. Is MRSPP specified and documentation provided? Are MR Ordnance Types present? Are MR acreages specified? Is MR Area ID specified?

OK MRSPP priority is required and is present

OK MRSPP Documentation is not required (this is an MR site with no MRSPP severity)

OK MR Ordnance Types are required, and are present (this is an MR site with MRSPP severity or evaluation pending)

OK Reason for changing MRSPP priority is not required (MRSPP priority has not changed)

OK MR acreages are specified

OK MR Area ID is specified

4. Approved Site SENECA ARMY DEPOT ACTIVITY : SEAD-004 (MUNITIONS WASHOUT FACILITY LEACH FIELD)

A. Are all phases & remedial actions completely specified with dates and statuses that are consistent with the reporting period end date?

OK phase PA with status Complete starts 197905 and ends 198001

OK phase SI with status Complete starts 199106 and ends 199512

OK phase RI/FS with status Complete starts 199503 and ends 200809

OK phase RA(C) with status Underway starts 200602 and ends 200907

OK phase LTM with status Future starts 200909 and ends 201309

OK remedial action (FRA) OTHER with status Underway starts 200602 and ends 200907

B. Is the design phase followed by a construction phase?

OK there is no design phase (RD) present

C. Do all Future phases have an estimate? This applies to BRAC Sites only.

OK phase LTM has a K$68 estimate

D. Is the estimate released?

ERROR the estimate for this site is not released

E. Are programmed funding spreads consistent with the phase schedule?

OK phase RA(C) programmed funding is in-schedule

OK phase LTM programmed funding is in-schedule

F. Are the programmed funding spread phase totals consistent with the requirements spread phase totals?

OK not required for Spring data calls

G. Are all remedial actions scheduled to begin within the year following the end of the reporting period associated with a ROD/DD?

OK not required for Spring data calls

H. Is relative risk information (including POC information) required and, if so, is it present?

OK relative risk is required and is present:
- site is BRAC IV - Base Realignment And Closure 1995/IR - Installation Restoration
- site is not response complete (200907)
- site is not remedy in place

I. Are there any additional phase schedule problems? These types of problems should only exist at sites where the phase schedule was entered under an earlier version of AEDBR and has not been modified under this version of AEDBR.

OK no additional phase schedule problems

J. Is MRSPP specified and documentation provided? Are MR Ordnance Types present? Are MR acreages specified? Is MR Area ID specified?

OK this is not an MR site

5. Approved Site SENECA ARMY DEPOT ACTIVITY : SEAD-005 (SEWAGE SLUDGE WASTE PILES)

A. Are all phases & remedial actions completely specified with dates and statuses that are consistent with the reporting period end date?

OK phase PA with status Complete starts 199008 and ends 199307
OK phase SI with status Complete starts 199008 and ends 199409
OK phase RI/FS with status Underway starts 200106 and ends 200909
OK phase IRA with status Complete starts 200106 and ends 200605
OK phase LTM with status Future starts 200909 and ends 203709
OK remedial action (IRA) REMOVAL with status Complete starts 200106 and ends 200605

B. Is the design phase followed by a construction phase?

OK there is no design phase (RD) present

C. Do all Future phases have an estimate? This applies to BRAC Sites only.

OK phase LTM has a K$325 estimate

D. Is the estimate released?

ERROR the estimate for this site is not released

E. Are programmed funding spreads consistent with the phase schedule?

OK phase RI/FS programmed funding is in-schedule
OK phase LTM programmed funding is in-schedule

F. Are the programmed funding spread phase totals consistent with the requirements spread phase totals?

OK not required for Spring data calls

G. Are all remedial actions scheduled to begin within the year following the end of the reporting period associated with a ROD/DD?

OK not required for Spring data calls

H. Is relative risk information (including POC information) required and, if so, is it present?

OK relative risk is required and is present:
- site is BRAC IV - Base Realignment And Closure 1995/IR - Installation Restoration
- site is not response complete (200909)
- site is not remedy in place

I. Are there any additional phase schedule problems? These types of problems should only exist at sites where the phase schedule was entered under an earlier version of AEDBR and has not been modified under this version of AEDBR.

OK no additional phase schedule problems

J. Is MRSPP specified and documentation provided? Are MR Ordnance Types present? Are MR acreages specified? Is MR Area ID specified?

OK this is not an MR site

6. Approved Site SENECA ARMY DEPOT ACTIVITY : SEAD-006 (ASH LANDFILL (SEAD-3,6,8,14,15))

A. Are all phases & remedial actions completely specified with dates and statuses that are consistent with the reporting period end date?

OK phase PA with status Complete starts 198009 and ends 198707
OK phase SI with status Complete starts 198809 and ends 198907
OK phase RI/FS with status Complete starts 198910 and ends 199410
OK phase RD with status Complete starts 199804 and ends 200609

OK phase IRA with status Complete starts 199409 and ends 199506
OK phase RA(C) with status Complete starts 200109 and ends 200612
OK phase RA(O) with status Underway starts 200701 and ends 202201
OK phase LTM with status Future starts 202202 and ends 205201
OK remedial action (FRA) GROUND WATER TREATMENT with status Complete starts 200109 and ends 200612
OK remedial action (IRA) OTHER with status Complete starts 199409 and ends 199506

B. Is the design phase followed by a construction phase?

OK both the design phase (RD) and construction phase (RA(C)) are present

C. Do all Future phases have an estimate? This applies to BRAC Sites only.

OK phase LTM has a K$244 estimate

D. Is the estimate released?

ERROR the estimate for this site is not released

E. Are programmed funding spreads consistent with the phase schedule?

OK phase RA(O) programmed funding is in-schedule
OK phase LTM programmed funding is in-schedule

F. Are the programmed funding spread phase totals consistent with the requirements spread phase totals?

OK not required for Spring data calls

G. Are all remedial actions scheduled to begin within the year following the end of the reporting period associated with a ROD/DD?

OK not required for Spring data calls

H. Is relative risk information (including POC information) required and, if so, is it present?

OK relative risk is not required:
- site is BRAC IV - Base Realignment And Closure 1995/IR - Installation Restoration
- site is not response complete (202201)
- site is remedy in place (200701)

I. Are there any additional phase schedule problems? These types of problems should only exist at sites where the phase schedule was entered under an earlier version of AEDBR and has not been modified under this version of AEDBR.

OK no additional phase schedule problems

J. Is MRSPP specified and documentation provided? Are MR Ordnance Types present? Are MR acreages specified? Is MR Area ID specified?

OK this is not an MR site

7. Approved Site SENECA ARMY DEPOT ACTIVITY : SEAD-006-R-01 (OPEN BURN/OPEN DETONATION GROUNDS)

A. Are all phases & remedial actions completely specified with dates and statuses that are consistent with the reporting period end date?

OK phase PA with status Complete starts 200111 and ends 200206
OK phase RI/FS with status Underway starts 200208 and ends 201709
OK phase IRA with status Future starts 201404 and ends 201709
OK phase LTM with status Future starts 201710 and ends 204709
OK remedial action (IRA) UXO CLEARANCE with status Future starts 201404 and ends 201709

B. Is the design phase followed by a construction phase?

OK there is no design phase (RD) present

C. Do all Future phases have an estimate? This applies to BRAC Sites only.

OK phase IRA has a K$17232 estimate

OK phase LTM has a K$2998 estimate

D. Is the estimate released?

ERROR the estimate for this site is not released

E. Are programmed funding spreads consistent with the phase schedule?

OK phase RI/FS programmed funding is in-schedule

OK phase IRA programmed funding is in-schedule

OK phase LTM programmed funding is in-schedule

F. Are the programmed funding spread phase totals consistent with the requirements spread phase totals?

OK not required for Spring data calls

G. Are all remedial actions scheduled to begin within the year following the end of the reporting period associated with a ROD/DD?

OK not required for Spring data calls

H. Is relative risk information (including POC information) required and, if so, is it present?

OK relative risk is not required:

- site is BRAC IV - Base Realignment And Closure 1995/MR - Munitions Response
- MR chemical constituent contamination is present
- site is not response complete (201709)
- site is not remedy in place

I. Are there any additional phase schedule problems? These types of problems should only exist at sites where the phase schedule was entered under an earlier version of AEDBR and has not been modified under this version of AEDBR.

OK no additional phase schedule problems

J. Is MRSPP specified and documentation provided? Are MR Ordnance Types present? Are MR acreages specified? Is MR Area ID specified?

OK MRSPP priority is required and is present

OK MRSPP Documentation is not required (this is an MR site with no MRSPP severity)

OK MR Ordnance Types are required, and are present (this is an MR site with MRSPP severity or evaluation pending)

OK Reason for changing MRSPP priority is not required (MRSPP priority has not changed)

OK MR acreages are specified

OK MR Area ID is specified

8. Approved Site SENECA ARMY DEPOT ACTIVITY : SEAD-007-R-01 (RIFLE GRENADE RANGE)

A. Are all phases & remedial actions completely specified with dates and statuses that are consistent with the reporting period end date?

OK phase PA with status Complete starts 200211 and ends 200306

OK phase RI/FS with status Underway starts 200410 and ends 200909

OK phase IRA with status Complete starts 200602 and ends 200809

OK phase LTM with status Future starts 200910 and ends 203809

OK remedial action (IRA) REMOVAL with status Complete starts 200602 and ends 200809

B. Is the design phase followed by a construction phase?

OK there is no design phase (RD) present

C. Do all Future phases have an estimate? This applies to BRAC Sites only.

OK phase LTM has a K$25 estimate

D. Is the estimate released?

ERROR the estimate for this site is not released

E. Are programmed funding spreads consistent with the phase schedule?

OK phase RI/FS programmed funding is in-schedule

OK phase LTM programmed funding is in-schedule

F. Are the programmed funding spread phase totals consistent with the requirements spread phase totals?

OK not required for Spring data calls

G. Are all remedial actions scheduled to begin within the year following the end of the reporting period associated with a ROD/DD?

OK not required for Spring data calls

H. Is relative risk information (including POC information) required and, if so, is it present?

OK relative risk is not required:
- site is BRAC IV - Base Realignment And Closure 1995/MR - Munitions Response
- site is not response complete (200909)
- site is not remedy in place

I. Are there any additional phase schedule problems? These types of problems should only exist at sites where the phase schedule was entered under an earlier version of AEDBR and has not been modified under this version of AEDBR.

OK no additional phase schedule problems

J. Is MRSPP specified and documentation provided? Are MR Ordnance Types present? Are MR acreages specified? Is MR Area ID specified?

OK MRSPP priority is required and is present

OK MRSPP Documentation is not required (this is an MR site with no MRSPP severity)

OK MR Ordnance Types are required, and are present (this is an MR site with MRSPP severity or evaluation pending)

OK Reason for changing MRSPP priority is required and is present (MRSPP priority has changed)

OK MR acreages are specified

OK MR Area ID is specified

9. Approved Site SENECA ARMY DEPOT ACTIVITY : SEAD-009 (MULT NFA SITES (OLD SCRAP WD PILE))

A. Are all phases & remedial actions completely specified with dates and statuses that are consistent with the reporting period end date?

OK phase PA with status Complete starts 197905 and ends 198001

OK phase SI with status Complete starts 199408 and ends 199409

OK phase RI/FS with status Complete starts 199907 and ends 200709

OK phase LTM with status Underway starts 200710 and ends 203710

B. Is the design phase followed by a construction phase?

OK there is no design phase (RD) present

C. Do all Future phases have an estimate? This applies to BRAC Sites only.

OK this site has no Future phases

D. Is the estimate released?

ERROR the estimate for this site is not released

E. Are programmed funding spreads consistent with the phase schedule?

OK phase LTM programmed funding is in-schedule

F. Are the programmed funding spread phase totals consistent with the requirements spread phase totals?

OK not required for Spring data calls

G. Are all remedial actions scheduled to begin within the year following the end of the reporting period associated with a ROD/DD?

OK not required for Spring data calls

H. Is relative risk information (including POC information) required and, if so, is it present?

OK relative risk is not required:
- site is BRAC IV - Base Realignment And Closure 1995/IR - Installation Restoration
- site is response complete (200709)
- site is not remedy in place

I. Are there any additional phase schedule problems? These types of problems should only exist at sites where the phase schedule was entered under an earlier version of AEDBR and has not been modified under this version of AEDBR.

OK no additional phase schedule problems

J. Is MRSPP specified and documentation provided? Are MR Ordnance Types present? Are MR acreages specified? Is MR Area ID specified?

OK this is not an MR site

10. Approved Site SENECA ARMY DEPOT ACTIVITY : SEAD-011 (OLD CONSTRUCTION DEBRIS LANDFILL)

A. Are all phases & remedial actions completely specified with dates and statuses that are consistent with the reporting period end date?

OK phase PA with status Complete starts 198001 and ends 198803

OK phase SI with status Complete starts 199010 and ends 199512

OK phase RI/FS with status Underway starts 199503 and ends 200909

OK phase IRA with status Complete starts 200502 and ends 200809

OK phase LTM with status Future starts 200909 and ends 201210

OK remedial action (IRA) WASTE REMOVAL - SOILS with status Complete starts 200502 and ends 200809

B. Is the design phase followed by a construction phase?

OK there is no design phase (RD) present

C. Do all Future phases have an estimate? This applies to BRAC Sites only.

OK phase LTM has a K$55 estimate

D. Is the estimate released?

ERROR the estimate for this site is not released

E. Are programmed funding spreads consistent with the phase schedule?

OK phase RI/FS programmed funding is in-schedule

OK phase LTM programmed funding is in-schedule

F. Are the programmed funding spread phase totals consistent with the requirements spread phase totals?

OK not required for Spring data calls

G. Are all remedial actions scheduled to begin within the year following the end of the reporting period associated with a ROD/DD?

OK not required for Spring data calls

H. Is relative risk information (including POC information) required and, if so, is it present?

relative risk is required and is present:

- site is BRAC IV - Base Realignment And Closure 1995/IR - Installation Restoration

OK
- site is not response complete (200909)
- site is not remedy in place

I. Are there any additional phase schedule problems? These types of problems should only exist at sites where the phase schedule was entered under an earlier version of AEDBR and has not been modified under this version of AEDBR.

OK no additional phase schedule problems

J. Is MRSPP specified and documentation provided? Are MR Ordnance Types present? Are MR acreages specified? Is MR Area ID specified?

OK this is not an MR site

11. Approved Site SENECA ARMY DEPOT ACTIVITY : SEAD-012 (RADIOACTIVE BURIAL SITES (3))

A. Are all phases & remedial actions completely specified with dates and statuses that are consistent with the reporting period end date?

OK phase PA with status Complete starts 197905 and ends 198001

OK phase SI with status Complete starts 199310 and ends 199409

OK phase RI/FS with status Underway starts 199503 and ends 200909

ERROR phase RA(C) with status Future starts 200810 and ends 201006

OK phase LTM with status Future starts 201007 and ends 201010

ERROR remedial action (FRA) REMOVAL with status Future starts 200810 and ends 201006

B. Is the design phase followed by a construction phase?

OK there is no design phase (RD) present

C. Do all Future phases have an estimate? This applies to BRAC Sites only.

OK phase RA(C) has a K$2685 estimate

OK phase LTM has a K$113 estimate

D. Is the estimate released?

ERROR the estimate for this site is not released

E. Are programmed funding spreads consistent with the phase schedule?

OK phase RI/FS programmed funding is in-schedule

OK phase RA(C) programmed funding is in-schedule

OK phase LTM programmed funding is in-schedule

F. Are the programmed funding spread phase totals consistent with the requirements spread phase totals?

OK not required for Spring data calls

G. Are all remedial actions scheduled to begin within the year following the end of the reporting period associated with a ROD/DD?

OK not required for Spring data calls

H. Is relative risk information (including POC information) required and, if so, is it present?

OK
relative risk is required and is present:
- site is BRAC IV - Base Realignment And Closure 1995/IR - Installation Restoration
- site is not response complete (201006)
- site is not remedy in place

I. Are there any additional phase schedule problems? These types of problems should only exist at sites where the phase schedule was entered under an earlier version of AEDBR and has not been modified under this version of AEDBR.

OK no additional phase schedule problems

J. Is MRSPP specified and documentation provided? Are MR Ordnance Types present? Are MR acreages specified? Is MR Area ID specified?

OK this is not an MR site

12. Approved Site SENECA ARMY DEPOT ACTIVITY : SEAD-013 (IRFNA DISPOSAL SITE (6))

A. Are all phases & remedial actions completely specified with dates and statuses that are consistent with the reporting period end date?

OK phase PA with status Complete starts 197905 and ends 198001

OK phase SI with status Complete starts 199106 and ends 199512

OK phase RI/FS with status Complete starts 199503 and ends 200708

OK phase RA(C) with status Complete starts 200603 and ends 200809

OK phase RA(O) with status Underway starts 200708 and ends 202708

OK remedial action (FRA) NATURAL ATTENUATION with status Complete starts 200603 and ends 200809

B. Is the design phase followed by a construction phase?

OK there is no design phase (RD) present

C. Do all Future phases have an estimate? This applies to BRAC Sites only.

OK this site has no Future phases

D. Is the estimate released?

ERROR the estimate for this site is not released

E. Are programmed funding spreads consistent with the phase schedule?

OK phase RA(O) programmed funding is in-schedule

F. Are the programmed funding spread phase totals consistent with the requirements spread phase totals?

OK not required for Spring data calls

G. Are all remedial actions scheduled to begin within the year following the end of the reporting period associated with a ROD/DD?

OK not required for Spring data calls

H. Is relative risk information (including POC information) required and, if so, is it present?

OK relative risk is not required:
- site is BRAC IV - Base Realignment And Closure 1995/IR - Installation Restoration
- site is not response complete (202709)
- site is remedy in place (200809)

I. Are there any additional phase schedule problems? These types of problems should only exist at sites where the phase schedule was entered under an earlier version of AEDBR and has not been modified under this version of AEDBR.

OK no additional phase schedule problems

J. Is MRSPP specified and documentation provided? Are MR Ordnance Types present? Are MR acreages specified? Is MR Area ID specified?

OK this is not an MR site

13. Approved Site SENECA ARMY DEPOT ACTIVITY : SEAD-024 (ABANDONED POWDER BURNING PIT)

A. Are all phases & remedial actions completely specified with dates and statuses that are consistent with the reporting period end date?

OK phase PA with status Complete starts 198902 and ends 199102

OK phase SI with status Complete starts 199106 and ends 199512
OK phase RI/FS with status Underway starts 199903 and ends 200909
OK phase IRA with status Complete starts 199903 and ends 200605
OK phase LTM with status Future starts 200909 and ends 200910
OK remedial action (IRA) REMOVAL with status Complete starts 199903 and ends 200605

B. Is the design phase followed by a construction phase?

OK there is no design phase (RD) present

C. Do all Future phases have an estimate? This applies to BRAC Sites only.

OK phase LTM has a K$47 estimate

D. Is the estimate released?

ERROR the estimate for this site is not released

E. Are programmed funding spreads consistent with the phase schedule?

OK phase RI/FS programmed funding is in-schedule
OK phase LTM programmed funding is in-schedule

F. Are the programmed funding spread phase totals consistent with the requirements spread phase totals?

OK not required for Spring data calls

G. Are all remedial actions scheduled to begin within the year following the end of the reporting period associated with a ROD/DD?

OK not required for Spring data calls

H. Is relative risk information (including POC information) required and, if so, is it present?

OK relative risk is required and is present:
- site is BRAC IV - Base Realignment And Closure 1995/IR - Installation Restoration
- site is not response complete (200909)
- site is not remedy in place

I. Are there any additional phase schedule problems? These types of problems should only exist at sites where the phase schedule was entered under an earlier version of AEDBR and has not been modified under this version of AEDBR.

OK no additional phase schedule problems

J. Is MRSPP specified and documentation provided? Are MR Ordnance Types present? Are MR acreages specified? Is MR Area ID specified?

OK this is not an MR site

14. Approved Site SENECA ARMY DEPOT ACTIVITY : SEAD-025 (FIRE TRAINING AND DEMO PAD)

A. Are all phases & remedial actions completely specified with dates and statuses that are consistent with the reporting period end date?

OK phase PA with status Complete starts 199002 and ends 199102
OK phase SI with status Complete starts 199106 and ends 199512
OK phase RI/FS with status Complete starts 199503 and ends 200010
OK phase RD with status Complete starts 199909 and ends 200510
OK phase RA(C) with status Complete starts 200502 and ends 200607
OK phase LTM with status Underway starts 200608 and ends 203805
OK remedial action (FRA) REMOVAL with status Complete starts 200502 and ends 200607

B. Is the design phase followed by a construction phase?

OK both the design phase (RD) and construction phase (RA(C)) are present

C. Do all Future phases have an estimate? This applies to BRAC Sites only.

OK this site has no Future phases

D. Is the estimate released?

ERROR the estimate for this site is not released

E. Are programmed funding spreads consistent with the phase schedule?

OK phase LTM programmed funding is in-schedule

F. Are the programmed funding spread phase totals consistent with the requirements spread phase totals?

OK not required for Spring data calls

G. Are all remedial actions scheduled to begin within the year following the end of the reporting period associated with a ROD/DD?

OK not required for Spring data calls

H. Is relative risk information (including POC information) required and, if so, is it present?

OK relative risk is not required:
- site is BRAC IV - Base Realignment And Closure 1995/IR - Installation Restoration
- site is response complete (200607)
- site is not remedy in place

I. Are there any additional phase schedule problems? These types of problems should only exist at sites where the phase schedule was entered under an earlier version of AEDBR and has not been modified under this version of AEDBR.

OK no additional phase schedule problems

J. Is MRSPP specified and documentation provided? Are MR Ordnance Types present? Are MR acreages specified? Is MR Area ID specified?

OK this is not an MR site

15. Approved Site SENECA ARMY DEPOT ACTIVITY : SEAD-048 (PITCHBLEND STORAGE AREAS)

A. Are all phases & remedial actions completely specified with dates and statuses that are consistent with the reporting period end date?

OK phase PA with status Complete starts 198707 and ends 198709

OK phase SI with status Complete starts 198808 and ends 199409

OK phase RI/FS with status Underway starts 199503 and ends 200909

OK phase LTM with status Future starts 200909 and ends 200910

B. Is the design phase followed by a construction phase?

OK there is no design phase (RD) present

C. Do all Future phases have an estimate? This applies to BRAC Sites only.

OK phase LTM has a K$46 estimate

D. Is the estimate released?

ERROR the estimate for this site is not released

E. Are programmed funding spreads consistent with the phase schedule?

OK phase RI/FS programmed funding is in-schedule

OK phase LTM programmed funding is in-schedule

F. Are the programmed funding spread phase totals consistent with the requirements spread phase totals?

OK not required for Spring data calls

G. Are all remedial actions scheduled to begin within the year following the end of the reporting period associated with a ROD/DD?

OK not required for Spring data calls

H. Is relative risk information (including POC information) required and, if so, is it present?

relative risk is required and is present:

OK
- site is BRAC IV - Base Realignment And Closure 1995/IR - Installation Restoration
- site is not response complete (200909)
- site is not remedy in place

I. Are there any additional phase schedule problems? These types of problems should only exist at sites where the phase schedule was entered under an earlier version of AEDBR and has not been modified under this version of AEDBR.

OK no additional phase schedule problems

J. Is MRSPP specified and documentation provided? Are MR Ordnance Types present? Are MR acreages specified? Is MR Area ID specified?

OK this is not an MR site

16. Approved Site SENECA ARMY DEPOT ACTIVITY : SEAD-059 (FILL AREA WEST 135)

A. Are all phases & remedial actions completely specified with dates and statuses that are consistent with the reporting period end date?

OK phase PA with status Complete starts 199008 and ends 199307
OK phase SI with status Complete starts 199310 and ends 199409
OK phase RI/FS with status Underway starts 199503 and ends 200909
OK phase IRA with status Complete starts 200109 and ends 200304
OK phase LTM with status Future starts 200909 and ends 203909
OK remedial action (IRA) REMOVAL with status Complete starts 200109 and ends 200304

B. Is the design phase followed by a construction phase?

OK there is no design phase (RD) present

C. Do all Future phases have an estimate? This applies to BRAC Sites only.

OK phase LTM has a K$294 estimate

D. Is the estimate released?

ERROR the estimate for this site is not released

E. Are programmed funding spreads consistent with the phase schedule?

OK phase RI/FS programmed funding is in-schedule
OK phase LTM programmed funding is in-schedule

F. Are the programmed funding spread phase totals consistent with the requirements spread phase totals?

OK not required for Spring data calls

G. Are all remedial actions scheduled to begin within the year following the end of the reporting period associated with a ROD/DD?

OK not required for Spring data calls

H. Is relative risk information (including POC information) required and, if so, is it present?

relative risk is required and is present:

OK
- site is BRAC IV - Base Realignment And Closure 1995/IR - Installation Restoration
- site is not response complete (200909)
- site is not remedy in place

I. Are there any additional phase schedule problems? These types of problems should only exist at sites where the phase schedule was entered under an earlier version of AEDBR and has not been modified under this version of AEDBR.

OK no additional phase schedule problems

J. Is MRSPP specified and documentation provided? Are MR Ordnance Types present? Are MR acreages specified? Is MR Area ID specified?

OK this is not an MR site

17. Approved Site SENECA ARMY DEPOT ACTIVITY : SEAD-121 (EBS SITES- INDUSTRIAL AREA)

A. Are all phases & remedial actions completely specified with dates and statuses that are consistent with the reporting period end date?

OK phase PA with status Complete starts 199602 and ends 199703

OK phase SI with status Complete starts 199801 and ends 199902

OK phase RI/FS with status Underway starts 200010 and ends 200909

OK phase LTM with status Future starts 200909 and ends 203909

B. Is the design phase followed by a construction phase?

OK there is no design phase (RD) present

C. Do all Future phases have an estimate? This applies to BRAC Sites only.

OK phase LTM has a K$133 estimate

D. Is the estimate released?

ERROR the estimate for this site is not released

E. Are programmed funding spreads consistent with the phase schedule?

OK phase RI/FS programmed funding is in-schedule

OK phase LTM programmed funding is in-schedule

F. Are the programmed funding spread phase totals consistent with the requirements spread phase totals?

OK not required for Spring data calls

G. Are all remedial actions scheduled to begin within the year following the end of the reporting period associated with a ROD/DD?

OK not required for Spring data calls

H. Is relative risk information (including POC information) required and, if so, is it present?

OK relative risk is required and is present:
- site is BRAC IV - Base Realignment And Closure 1995/IR - Installation Restoration
- site is not response complete (200909)
- site is not remedy in place

I. Are there any additional phase schedule problems? These types of problems should only exist at sites where the phase schedule was entered under an earlier version of AEDBR and has not been modified under this version of AEDBR.

OK no additional phase schedule problems

J. Is MRSPP specified and documentation provided? Are MR Ordnance Types present? Are MR acreages specified? Is MR Area ID specified?

OK this is not an MR site

Supervisory Review Check List

Installation Name_____ Review Date_____

Estimator Name_____ Date Estimates Prepared_____

	Yes	No
1. Are sound estimating methodology and reasonable assumptions used?		
2. Did the estimator compare prior year estimates to the current year estimates?		
3. Does the estimate include all relevant phases and costs to complete the cleanup?		
4. Is the estimate consistent with the operational plans of the installation?		
5. Does the estimator have proper qualifications and required training to develop the estimate?		
6. Is there an adequate audit trail to support the estimate?		
7. Is there adequate documentation to support the underlying assumptions used to develop the estimate?		
8. Does the supervisor agree with the underlying assumptions used to develop the estimate?		
9. Is the estimate maintained in the current cost basis?		

Supervisor's Signature_____ Date_____

Note: The above checklist is being used to assess the reasonableness of the installation's estimates and to document supervisory review. The signed checklist reflecting final approval will be maintained with the estimates as part of the audit trail and attached electronically to the data reporting system.