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# <u>Final of the Project Coordination Plan</u> <u>for the Sampling of Soils Below Floor Slabs at LLs-2,3,4 and</u> <u>Excavation and Transportation of Contaminated Soils to Load Line</u> <u>4 (Buildings G-1, G-1A, and G-3)</u>

Ravenna Army Ammunition Plant 8451 St. Route 5 Ravenna, OH 44266-9297

Contract No. W912QR-04-D-0025 Delivery Order No. 0006



US Army Corps of Engineers®

Prepared for: U.S. Army Corps of Engineers 600 Martin Luther King, Jr. Place P.O. Box 59 Louisville, Kentucky 40201-0059

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March 13, 2008

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A Monthly Report Format



AEC	Army Environmental Command
AOC	Area of Concern
BRACD	Base Realignment and Closure Division
CLIN	Contract Line Item
COR	Contracting Officer Representative
CPR	Cardio Pulmonary Resuscitation
ESS	Explosives Safety Submission
HASP	Health and Safety Plan (or Safety and Health Plan)
HAZWOPER	OSHA Hazardous Waste Operations
ITR	Independent Technical Review
JSA	Job Safety Analysis
MARC	Multiple Award Remediation Contract
MI	Multi-Increment
MKM	MKM Engineers, Inc. (now PIKA)
OHARNG	Ohio Army National Guard
Ohio EPA	Ohio Environmental Protection Agency
OSHA	Occupational Safety and Health Administration
PCP	Project Coordination Plan
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
RDX	Hexahydro-1,3,5-trinitro-1,3,5-triazine (Royal Demolition Explosive)
REIMS	Ravenna Environmental Information Management System
ROD	Record of Decision
ROS	Remediation Operating Services
RVAAP	Ravenna Army Ammunition Plant
SOW	Scope of Work
TNT	Trinitrotoluene (also 2,4,6-trinitrotoluene)
URS	URS Group, Inc.
USACE	United States Army Corps of Engineers
URS	

# Acronyms and Abbreviations

The U.S. Army Corps of Engineers (USACE) Louisville District has awarded URS Group, Inc. (URS) a Firm Fixed-Price contract for sampling of soils below floor slabs of demolished buildings at Load Lines 2, 3, and 4, and excavation and transportation of contaminated soils to Load Line 4 (Buildings G-1, G-1A, and G-3) at the Ravenna Army Ammunition Plant, OH (RVAAP). The work is a delivery order under the URS Multiple Award Remediation Contract (MARC) (W912QR-04-D0025, Delivery Order 0006).

The removal of the majority of the buildings down to the floor slabs has been completed by MKM Engineers, Inc. (MKM) under a contract from the Base Realignment and Closure District (BRACD). The BRACD has exercised a Contract Line Item (CLIN) to remove floor slabs and any associated foundation walls to grade at these buildings. Under contract to the Army Environmental Command (AEC), Shaw E & I has completed its remediation of surface soils and dry sediments outside the footprints of the buildings at Load Lines 1, 2, 3, and 4.

Floor slab removal by the BRACD contractor is scheduled to begin in early 2008 and will take approximately 9 to 10 weeks per load line. Work will be sequenced so that the areas thought to represent the least potential for residual contamination will be addressed first. This means that work will begin at Load Line 4, then Load Line 3, and finally at Load Line 2. Within each load line, work will similarly be staged beginning with the buildings thought to represent the least potential for residual contamination and ending with those buildings where residual contamination is more probable (i.e., melt pour buildings).

This Project Coordination Plan (PCP) is being prepared to address activities that will be undertaken to provide data to support removal actions to resolve residual contamination once the floor slabs are removed.



This PCP identifies the activities that will be performed by URS for this project under the contract Scope of Work (SOW) and develops an approach to coordinate these activities among the other groups and stakeholders operating at RVAAP.

This PCP is meant to serve as the management plan for the work performed under the MARC Delivery Order 006. The PCP will adhere to, and includes references to, the existing facility-wide documents, where applicable.

This PCP is a living document that will be updated as needed to reflect changes in project execution. Any change to this PCP will be included as an attachment to the monthly report. Any changes will be subsequently distributed to all stakeholders and other RVAAP contractors identified within this PCP.



The Contract SOW, dated December 11, 2007, is to complete both pre-slab removal at selected buildings and post-slab removal sampling at 105 buildings within Load Lines 2, 3, and 4. Evaluation of the sampling results will be done to determine if any areas require excavation and transport of earth fill from the load lines to buildings at Load Line 4 (Buildings G-1, G-1A, and G-3). The individual tasks listed in the SOW are summarized in Table 3-1.

Floor slab removal may occur at Load Line 1 and Buildings F-15 and F-16 at a future date. In the event that a separate contract action is executed for completion at these locations, this PCP may be applicable to that work as well.

The URS approach to completing this work is designed to meet the SOW requirements in an efficient manner without the disruption of the slab removal activities being performed by PIKA (formerly MKM).

The SOW tasks can be grouped into five primary tasks:

- Preparation of Plans,
- Pre-Slab Removal Sampling and Evaluation,
- Characterization and Removal of Load Line 4 Piles,
- Post-Slab Removal Sampling and Evaluation, and
- Excavation and Transportation of Material to Load Line 4 Buildings.

These five primary tasks are discussed in the following subsections.

#### **3.1 PREPARATION OF PLANS**

In addition to this PCP, a Work Plan and an amendment to the current Explosives Safety Submission (ESS) will be required in order to implement the work described in the SOW. This PCP describes the work items and schedules, focusing on the coordination of the URS work with the slab removal work being performed by PIKA and on-going work being performed by other contractors at RVAAP.

The Work Plan will be completed in two segments: 1) work to be done prior to the slab removal (in letter report format) and 2) a full Work Plan containing all SOW elements. Attachments to the full Work Plan will include a site-specific Health and Safety Plan (HASP) and amendments to the *Facility-Wide Field Sampling and Analysis Plan* (SAIC, 2001b), which includes the *Facility-Wide Quality Assurance Project Plan* (QAPP) for chemical analyses by a fixed analytical laboratory. Detail regarding the following tasks will be included in the full Work Plan.

#### 3.2 PRE-SLAB REMOVAL SAMPLING AND EVALUATION

Prior to slab removal two efforts will be undertaken:

- Field screening sampling at two areas within Load Lines 2 and 3, and
- Multi-increment sampling at six piles at Load Line 4.



Results from these analyses will be used to direct additional sampling once building slabs are removed and to characterize six existing Load Line 4 piles so that a decision regarding their disposition can be made.

#### 3.3 REMOVAL OF LOAD LINE 4 SOIL/DEBRIS PILES

The analytical results from the soil/debris pile sampling within the buildings at Load Line 4 will be transmitted to the designated disposal facility for profiling and approval. The piles at Load Line 4 will then be removed and disposed of in accordance with all applicable federal, state, and local rules, laws, and regulations, as well as any permit requirements for the receiving facility.

#### 3.4 POST-SLAB REMOVAL SAMPLING AND EVALUATION

Once building slabs are removed, a sampling program will be implemented according to the SOW. The purpose of the soil sampling is to provide sufficient data so that any required removal actions can be planned and executed at each load line building when the slabs are removed. The sampling design for the 105 building locations is included in the SOW for each load line. The design is based on historical information such as past usage and past investigations at other ammunition plants, primarily Joliet Army Ammunition Plant. Field screening (for 2,4,6-trinitrotoluene (TNT) and hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)) and fixed laboratory analyses are planned. A cover system (plastic or spray on, if approved) may be used as a potential means to minimize the length of time that under slab soil remains exposed and to alleviate scheduling and coordination issues. The sampling design and flow of work will be detailed in the full Work Plan.

The sampling results will be used to determine if any earth fill requires removal. The field investigations and evaluation of the data will be included in reports submitted to the USACE and stakeholders listed in the SOW.

#### 3.5 EXCAVATION AND TRANSPORTATION OF MATERIAL TO LOAD LINE 4 BUILDINGS

All materials determined to require removal will be excavated and transported to Buildings G-1, G-1A, and G-3 within Load Line 4.



The MARC contract is administered through the URS Group, Inc., Omaha, Nebraska under the direction of the Program Manager, Steve Cox. This group will provide overall contractual support, including monthly reporting and client invoicing.

The project will be implemented by the Environmental Group of URS-Cleveland, under the direction of the Project Manager, Jo Ann Bartsch. The Cleveland Environmental Group is managed by Keith Mast. This section identifies key members of the project staff and their roles within the project.

#### 4.1 PERSONNEL ROLES AND RESPONSIBILITIES

The key project positions are identified and assigned as follows:

- **Program Manager** The URS Program Manager for the MARC Contract is Steve Cox, P.E. Mr. Cox will provide overall contractual management as well as monthly reporting and invoicing services from his Contract Group in Omaha.
- **Project Manager** The URS Project Manager for Delivery Order 0006 is Jo Ann Bartsch. The Project Manager will be responsible for the overall planning, staffing, execution, and completion of this Delivery Order. Ms. Bartsch will serve as the point of contact for the USACE on Delivery Order-specific issues. The Project Manager will be responsible for interactions with the USACE, the Ohio EPA, and the other RVAAP stakeholders. Ms. Bartsch will also be responsible for reviewing project costs, schedule, and general progress.
- **Technical Project Manager** The URS Technical Project Manager is Mr. Stan Levenger. Mr. Levenger will be responsible for the direct daily oversight of project activities and will maintain overall responsibilities for the preparation and submission of project deliverables. The technical practice groups throughout URS will be available to Mr. Levenger for any particular staffing needs he may identify.
- **UXO Support Services**: Mr. Mac Reed will be responsible for providing UXO support services at various stages of this project. Mr. Reed is the URS Eastern Division UXO Practice Leader. He will be responsible for the amendment to the ESS to cover URS activities at the load lines. A member of his staff will be assigned during field work to provide UXO oversight. A UXO technician will be part of each sampling field crew. Any UXO staff assigned to this project will have graduated from the Indian Head MS/UXO School, or equivalent and have extensive experience with potentially explosive contaminated soil.
- **Remediation Services:** If any material is determined to require excavation and transportation to buildings at Load Line 4, that effort will be managed by a URS Remediation Operating Services (ROS) group. Mr. Tom Malatesta, of ROS-Pittsburgh will be responsible for planning, organizing, and implementing this effort.

The key project positions and supporting technical staff organization are visually represented in Figure 4-1. URS will notify the USACE Contracting Officer's Representative (COR) if any changes in key personnel are necessary.



#### 4.2 **PROJECT STAKEHOLDERS**

Within the SOW, five stakeholders were identified: the Army Environmental Command (AEC), the Louisville USACE, the Ohio Army National Guard (OHARNG), the Ohio Environmental Protection Agency (Ohio EPA), and the Restoration Advisory Board (RAB).

Other organizations and interested parties, including the slab removal contractor, have also been identified. Contact information for these persons/entities is included in Table 4-1. The URS Project Manager should be notified in writing of any changes in designated representatives so that a corrected, updated contact list can be maintained and distributed as needed. In the event that the Ohio EPA Project Manager is changed, the Army Project Manager will be notified by the Ohio EPA. The Army Project Manager will then notify URS.



URS will maintain a schedule of tasks including deliverables and field activities using Microsoft Project® software. This schedule will be uploaded to the USACE P2 program for use in coordination with other RVAAP activities. An initial proposed schedule is included as Figure 5-1. Once a start date for slab removal is determined, the schedule will be updated for many of the tasks.

#### 5.1 FACILITY-WIDE SCHEDULE

A facility-wide schedule of other activities will be obtained from the USACE in order to coordinate with the appropriate parties once field activities are planned. Updates to this facility-wide schedule will be routinely (i.e., biweekly) requested and reviewed.

It will be particularly important to maintain close contact regarding the slab removal schedule. The SOW contains time restrictions regarding when the URS soil sampling must begin and be completed upon the removal of individual building slabs. Therefore, weekly teleconferences will be held between the PIKA Project Manager and the URS Technical Project Manager to identify which slabs are scheduled for removal and the completion of slab removal at any individual building. As slab removal progresses, the frequency of these calls may be increased. The URS Technical Project Manager will maintain a spreadsheet for each load line summarizing all buildings and the status of each slab. The spreadsheet will be used to communicate the progress of slab removal and the scheduling of subsequent sampling to other stakeholders.

#### 5.2 FIELD ACTIVITIES COORDINATION

As shown in the organizational chart (Figure 4-1), URS will report directly to USACE. Field activities will be coordinated with installation personnel, including the Army and OHARNG on an as-needed basis. URS will also coordinate with other contractors working at RVAAP, as required. URS will attend the biweekly scheduling calls organized through USACE and weekly contractor meetings at RVAAP during periods of active field work. The Technical Project Manager will attend these meetings and teleconferences; the Program Manager will be the backup.

#### 5.3 **PAYMENT SCHEDULE**

Each month the URS Program Management Office in Omaha will prepare pay estimates and invoices for this delivery order. The percent complete indications on the monthly progress report will be the basis for the pay estimate and invoice.



#### 6.1 **BRIEFINGS**

Briefings in the form of conference calls will be held periodically to discuss the project status with USACE and other stakeholders. The URS Project Manager will prepare and distribute a draft agenda (electronically in Microsoft Office Word® format) 2 business days prior to each conference call for review and comment by the stakeholders. A revised agenda will then be distributed at the meeting that addresses any comments.

The URS PM will be responsible for leading the conference call and the discussion of each agenda item. Minutes of the conference call will be prepared by URS and distributed (electronically in Microsoft Office Word® format) for review and comment to each conference call participant. URS will incorporate comments and distribute the final minutes to all stakeholders within 1 week of the conference call. Stakeholder representatives will be responsible for transmitting comments on both the draft agenda and draft minutes to URS in a timely fashion. Draft agenda comments will be addressed if received at least 24 hours before the teleconference; comments on the draft minutes will be addressed if received within 3 days after the draft minutes are transmitted.

#### 6.2 **MEETINGS**

As discussed in Section 5.2, the URS Technical Project Manager will attend the weekly contractor meetings at RVAAP during periods of active field work. No other regularly scheduled meetings are anticipated. Should a meeting be needed to discuss the project status with USACE and other stakeholders, the same agenda and minutes procedure described in the briefings (Section 6.1) will be followed.

The RVAAP RAB generally holds meetings on a quarterly basis. The URS Project Manager will attend any RAB meetings scheduled during the performance of this delivery order. The Project Manager will be prepared to answer any questions or provide a project status update during those meetings.



URS will prepare both monthly status reports and contract deliverables under this delivery order. Delivery dates for deliverables are shown on the schedule (Figure 5-1).

#### 7.1 **PROGRESS REPORTING**

By the first Tuesday after the end of each URS fiscal month, the Project Manager will provide a monthly progress report to the URS Program Manager. The URS Program Manager will review and forward the progress report to the USACE COR by the 5<sup>th</sup> of each month so that the USACE COR can prepare monthly reports for all the RVAAP contractors for delivery to Ohio EPA by the 10<sup>th</sup> of each month. The progress report template is provided as Appendix A.

#### 7.2 CONTRACT DELIVERABLES

Under the SOW this PCP and a full Work Plan (with Field Sampling Plan, QAPP, and HASP) are required. In addition, the current ESS will require amendment. Finally, evaluation reports documenting the field work, the analyses, and the comparison to cleanup goals are included in several SOW tasks (Table 3-1).

All documents will be produced with preliminary draft, draft, and final versions. Formats will be in accordance with the RVAAP deliverable document formatting guidelines (SpecPro, 2007). The preliminary draft will be submitted to the USACE COR in electronic form. Comments will be provided to URS within ten business days. Once initial comments are addressed, the draft version will be produced and submitted to the stakeholders listed in the SOW for concurrent review and comment. In accordance with the Director's Final Findings and Orders, the Ohio EPA will be given a 45 calendar day period to submit comments. Responses to Ohio EPA comments, and those of other stakeholders, will be submitted within 15 calendar days of the Army's receipt of Ohio EPA's comments. Upon resolution of the comments, a final document will be prepared and submitted for an additional 45 calendar day review by Ohio EPA. The final document will be submitted to the stakeholders within 30 calendar days of the Army's receipt of Ohio EPA's comments.

One electronic copy of all draft and final documents will be furnished to the Facility Manager for placement in each of the public repositories and the Facility Administrative Record located at Building 1037.



#### 8.1 **DOCUMENT CONTROL**

URS will maintain both printed copy and electronic formats (to the extent that both exist) of all project-related information pertinent to this delivery order. This will ensure that documentation is available for project reviews or justifications and will provide a clear record of the approach and implementation of this delivery order. The documentation is expected to include field data, analytical reports, correspondence, and deliverables. Legible copies of all documents will be included with the final report as attachments or appendices. This repository of information is the property of the Army.

Any deliverables produced under this delivery order will also be incorporated by the Facility Manager and/or the Administrative Records Officer into the existing repositories in the Administrative Record, located at RVAAP in Building 1037, and the two public repositories at the Ravenna and Newton Falls Libraries.

The Ravenna Environmental Information Management System (REIMS) will also be provided with an electronic deliverable for uploading by the REIMS Manager to the RVAAP data management system. This will be done so that the information will be available in the REIMS at the same time as the draft document is under review.

The URS Project Manager will be responsible for ensuring that all project personnel use the appropriate formats for these documents.

#### 8.2 ELECTRONIC FORMATS

Electronic text documents will be in Adobe Acrobat format. Engineering drawings will adhere to the Department of Defense (DOD) criteria for computer-assisted design. Analytical and field data will be prepared in an electronic format suitable for submission into a USACE-designated database and then converted to Adobe Acrobat for report submission.



Goods and services procured under this delivery order will be acquired in accordance with the URS Federal Procurement Manual (URS, 2007). The URS Project Manager will ensure that all personnel follow the requirements of this manual, including adherence to the budget and schedule established for this work.

The number of samples to be collected and subsequently analyzed by the fixed laboratory may cause issues in turnaround time due to capacity constraints. To address this potential issue, subcontracts may be issued to multiple analytical laboratories, and their capacity to provide the data in a timely fashion will be closely monitored by a URS chemist. An additional fixed laboratory subcontract will only be issued with the prior approval of the USACE COR and the Ohio EPA.

A similar circumstance could arise with truck availability should large amounts of earth fill require transportation to Load Line 4 Buildings. To address this potential issue, URS ROS-Pittsburgh will coordinate with multiple trucking firms and monitor their availability to provide transportation services as needed.



#### **10.1** QUALITY ASSURANCE STRATEGY AND APPROACH

The URS Quality Assurance (QA) Corporate Manual (URS, 2001) will be followed in order to:

- Ensure that all the required steps for each of the tasks are appropriately monitored,
- Ensure that the appropriate acceptance criteria are applied to applicable portions of the project, and
- Ensure that the appropriate technical review of deliverables occurs for each deliverable.

Quality assurance inspections by the USACE COR are proposed for various stages of the project, including implementation of the field testing, observation of the multi-increment sampling, and excavation and transportation of material to Load Line 4. Quality assurance oversight for munitions and explosives chemical safety will be provided through USACE, Rock Island District.

The URS Technical Project Manager will function as the Quality Assurance officer during field work; the URS Project Manager will function as the Quality Assurance officer for all deliverables.

#### **10.2 DOCUMENTATION**

All deliverable documents will be reviewed by the URS Project Manager and another technical person associated with the project. URS' QA manual requires a series of specific procedures and forms for documenting the initial review, the comment disposition, and a back check of required corrections. This Independent Technical Review (ITR) process will be documented in the URS project files maintained for this Delivery Order.

#### **10.3** FIELD OPERATIONS

The Field Team Leader will conduct daily inspections of the field work and will also inspect any equipment arriving and leaving the site. These inspections will be documented on a daily inspection form that includes entry space for activities, equipment, personnel and any issues or corrective actions. Photographs will be taken as needed to document processes or issues. Any issue that impacts the schedule will be brought to the URS Project Manager's attention through the URS Technical Project Manager.

The URS Technical Project Manager will be responsible for proper implementation of best management practices with regard to minimizing risks to on-site workers and surrounding communities. The procedures used to transport contaminated fill to Load Line 4 include:

- Suppression of dust,
- Covering of loads, and
- Dust level monitoring.

During the course of field work, issues may arise that require changes in the previously approved field activities or procedures. The URS Technical Project Manager will notify the USACE COR,



Ohio EPA, and the RVAAP Facility Manager of the issue and any proposed change to resolve it. Changes will not be executed unless approved by Ohio EPA, USACE, and RVAAP.

#### **11.1 FACILITY-WIDE REQUIREMENTS**

There are facility-wide security measures in place at RVAAP for personnel visiting or performing work at the facility. The RVAAP security offices operate on weekdays during daylight hours and on weekends with pre-approval.

A roster of all personnel and subcontractors who will be working at the RVAAP will be submitted to PIKA at least one week in advance of field operations. The roster will be maintained and submitted on a weekly basis. Any person with a felony conviction will not be allowed to enter the RVAAP. The URS Project Manager will be responsible for verifying the records of all URS personnel and subcontractors.

All personnel approved to enter the RVAAP must provide government issued identification (e.g., driver's license, passport) in order to enter. Any person required to work within an area of concern (AOC) will be required to provide adequate training documentation of the following:

- 40-Hour Occupational Safety and Health Administration (OSHA) Hazardous Waste operations (HAZWOPER) Training.
- 8-Hour OSHA HAZWOPER Refresher Training.

In addition, most URS field personnel will possess current First Aid and Cardio Pulmonary Resuscitation (CPR) Training. Training documentation will be submitted to PIKA prior to entering an AOC to perform work.

Personnel are expected to observe posted speed limits at the RVAAP or the default of 35 miles per hour (mph) during daylight hours and 25 mph at night.

Smoking will not be allowed within the RVAAP; no matches, cigarettes, lighters, or other flameproducing devices will be brought onto the facility. Food will be consumed only in designated areas of the RVAAP.

#### **11.2 DELIVERIES**

Twenty-four hour notice will be given to RVAAP security for any deliveries. Trucks are subject to search by RVAAP security at any time.

#### **11.3** COMMUNICATION

The use of two-way radios and cell phones are permitted at RVAAP. Personnel will have a backup form of communication in the event that service is not available in the work area.

#### 11.4 HAZARDOUS AND NONHAZARDOUS WASTE

All waste generated during project work will be removed by URS. The area identified by RVAAP as the temporary waste storage area is Bldg 1036. All waste stored in this area will be labeled as "On Hold Pending Analysis – (Waste Description)". Wastes generated during the project will be properly profiled, manifested, and transported to a disposal facility based upon waste characterization results. All wastes identified as Resource Conservation and Recovery Act (RCRA) hazardous will be moved to the RVAAP hazardous waste, 90-day storage area (Bldg 1047) within three business days, pending disposal. The RVAAP Facility Manager will generate



hazardous waste manifests and incorporate them into the facility disposal log. Copies of manifests will be promptly returned to the Facility Manager for facility records. The Army will be noted as the generator for any waste produced, unless the waste is a result of URS' negligence.

As discussed previously, a project-specific Health and Safety Plan (HASP) will be prepared. It will incorporate facility-wide procedures as detailed in the *Facility-Wide Safety and Health Plan* (SAIC, 2001a). Project-specific considerations will be included in the URS HASP as part of the Job Safety Analysis (JSA) done for every URS project requiring a HASP. The JSA will include a determination of job hazards associated with the soil sampling, excavation, and transportation and an analysis of methods and activities to mitigate them. The URS HASP will include an emergency response and contingency plan. It will identify emergency contacts such as police, fire, and ambulance services and directions to the nearest hospital. As identified in the *Facility-Wide HASP*, Post 1 at 330-358-2017 will be the first contact in the event of an on-site emergency.

The URS Technical Project Manager will also ensure that any subcontractors hired for projectrelated tasks are familiar with both the *Facility-Wide Safety and Health Plan* and the URS HASP. Any subcontractors will be accompanied by URS personnel who will ensure that they observe RVAAP security procedures and the HASPs when performing work at the Facility.



- MKM Engineers, Inc. 2005. <u>Explosives Safety Submission for the Thermal Decomposition and</u> <u>Demolition of Load Lines 1-5, 7, 8, 10, 11 Buildings 1039, F-15, 1200 S-4605, and T-4602.</u> February 24, 2005.
- SAIC. 2001a. <u>Facility-Wide Safety and Health Plan for Environmental Investigations at the</u> <u>Ravenna Army Ammunition Plant. Ravenna, Ohio.</u> Prepared for the US Army Corps of Engineers, Louisville District. March 2001.
- SAIC. 2001b. <u>Facility-Wide Sampling and Analysis Plan for Environmental Investigations at</u> <u>the Ravenna Army Ammunition Plant. Ravenna, Ohio.</u> Prepared for the US Army Corps of Engineers, Louisville District. March 2001.
- SpecPro. 2007. <u>Deliverable Document Formatting Guidelines</u>. <u>Ravenna Army Ammunition</u> <u>Plant.</u> SpecPro Technical Services. November 30, 2007.
- URS. 2001. URS Quality Assurance Manual. April, 2001.
- URS. 2007. URS Federal Procurement Manual. URS Group, Inc. October, 2007 (Rev. 8).

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TABLES

#### Table 3-1 Summary of Tasks and Activities Included in the SOW Ravenna Army Ammunition Plant Ravenna, Ohio

Task								
No.	Description	Activities						
1	Project Coordination Plan	Prepare concise PCP to ensure all stakeholders are informed of project status, existing or						
		potential problems, and any project changes.						
2A	Work Plan for Pre (Floor Slab) Removal Field	Prepare Work Plan to address field screening at three locations.						
	Screen Testing	Letter report Work Plan to include the sampling that will be done to characterize the existing						
		piles within the buildings at Load Line 4.						
		Letter report Work Plan to be included in full Work Plan for entire project.						
2B	Explosives Safety Submission for Pre (Floor	Prepare an amendment to the existing ESS (MKM, 2005) to include the field screening sampling						
	Slab) Removal Field Screen Testing	that will occur before the slabs are removed.						
2C	Completion of Sampling Specified on Table 1	Collect 10 samples at two building locations on Load Lines 2 and 3 and test for TNT and RDX						
	(Selected Buildings)	using EnSys Soil Test System.						
2D	Preliminary Evaluation of Pre (Floor Slab)	Provide a preliminary evaluation of the results of the field testing at the two buildings sampled in						
	Removal Contamination Beneath Selected	Task 2C.						
	Buildings at Load Lines 2,3,4							
2E	Characterize the Six Piles at Buildings G-1, 1A	Collect one, 30-increment, multi-increment (MI) sample from each of the six piles and analyze						
	and 3 at Load Line 4	for a full suite of analytes.						
2F	Remove Six Piles of Soil/Concrete Debris at	Remove six piles of soil/debris at Load Line 4.						
	Buildings G-1, G-1A, and G-3 at Load Line 4	Dispose of as special waste.						
3A	Initial sampling and Analysis of 92 Buildings	At most of the 105 buildings (92), collect a biased sample for field screening.						
	not Listed on Table 2	If the TNT or RDX cleanup goals are exceeded, collect 4'cores as described in Task 4D.						
3B	Short Report of the Sampling and Analysis of the 92 Buildings Not Listed on Table 2.	Prepare a short report of the field screening efforts at all 92 buildings sampled as part of task 3A.						
4A	Work Plan for Initial After (Floor Slab)	Prepare a section within the full Work Plan addressing the sampling that will occur after the slabs						
	Removal Field Screening Testing	are removed. Include Field Sampling Plan and QAPP addenda, and a site-specific HASP.						
4B	Explosives Safety Submission for Initial After	Prepare an amendment to the existing ESS (MKM, 2005) to include the field screening sampling						
	(Floor Slab) Removal Field Screen Testing	that will occur after the slabs are removed. Include this information along with the amendment						
		in Task 2B.						
4C	Initial Sampling and Analysis of 13 Buildings	For those buildings representing a higher probability of residual contamination, collect multiple						
	Listed on Table 2	4' cores and perform field screening (TNT/RDX) at five depths.						
		Collect an additional 10 samples representative of a range of field screening concentrations and						
		submit to the fixed laboratory for TNT/RDX analysis (to allow for correlation to future work).						

#### Table 3-1 Summary of Tasks and Activities Included in the SOW Ravenna Army Ammunition Plant Ravenna, Ohio

Task		
No.	Description	Activities
4D	Initial Sampling and Analysis of Contingency Samples (from 3A)	If TNT or RDX cleanup levels are exceeded during the initial field screening tests at the 92 buildings, collect a deep core for further analysis. Send five samples per core to the fixed laboratory for TNT/RDX analyses.
		If TNT or RDX cleanup levels are exceeded based on fixed laboratory analyses, proceed to excavation and transportation tasks.
4E	Short Report of the Sampling and Analysis of 13 Buildings Listed on Table 2	Prepare a short report of the field screening efforts at the 13 higher probability buildings, including the 4' contingency cores, as well as a summary of areas requiring excavation.
5A	Work Plan for Final (MI) Sampling	Prepare a section within the full Work Plan addressing the MI sampling that will occur after the slabs are removed.
5B	Final Sampling and Analyses at Load Line 4	Conduct final MI sampling. Submit to the fixed laboratory for selected analyses. Compare results to Interim Record of Decision (ROD) cleanup levels.
5C	Evaluation of Final Sampling at Load Line 4	Prepare a report of the field sampling effort as well as the conclusions regarding the need for excavation.
5D	Final Sampling and Analyses at Load Line 3	Conduct final MI sampling. Submit to the fixed laboratory for selected analyses. Compare results to Interim ROD cleanup levels.
5E	Evaluation of Final Sampling at Load Line 3	Prepare a report of the field sampling effort as well as the conclusions regarding the need for excavation.
5F	Final Sampling and Analyses at Load Line 2	Conduct final MI sampling. Submit to the fixed laboratory for selected analyses. Compare results to Interim ROD cleanup levels.
5G	Evaluation of Final Sampling at Load Line 2	Prepare a report of the field sampling effort as well as the conclusions regarding the need for excavation.
6A	Explosives Safety Submission for Excavation and Transportation of Contaminated Soils to Load Line 4	Prepare an amendment to the existing ESS (MKM, 2005) to include the excavation of contaminated soil and transportation to the Load Line 4 Buildings. Include this information along with the amendment in Task 2B
6B	Mobilization and Demobilization for Excavation and Transportation of Contaminated soils	Mobilize all necessary equipment, supplies, and staff resources for excavation of earth fill materials. Demobilize when all removals and transportation activities at all three load lines are complete.
6C	Price to Excavate and Transport Contaminated Soils from Load Line 4 to Load Line 4 Buildings	Excavate earth fill determined to be impacted and transport material to Load Line 4 buildings.

#### Table 3-1 Summary of Tasks and Activities Included in the SOW Ravenna Army Ammunition Plant Ravenna, Ohio

Task		
No.	Description	Activities
6D	Price to Excavate and Transport Contaminated Soils from Load Line 3 to Load Line 4 Buildings	Excavate earth fill determined to be impacted and transport material to Load Line 4 buildings.
6E	Price to Excavate and Transport Contaminated Soils from Load Line 2 to Load Line 4 Buildings	Excavate earth fill determined to be impacted and transport material to Load Line 4 buildings.

# Table 4-1Contact InformationRavenna Army Ammunition PlantRavenna, Ohio

Name	Association	Address	Telephone, Fax, e-mail
Steve Cox	URS Program Manager	12120 Shamrock Plaza,	T:402-952-2542
	2 2	Suite 200	F: 402-334-1984
		Omaha, NE 68154	steven_cox@urscorp.com
Jo Ann Bartsch	URS Project	1375 Euclid Ave.,	T: 216-622-2229
	Manager	Suite 600	F: 216-622-2480
	C C	Cleveland, OH 44115-1808	jo_ann_bartsch@urscorp.com
Stan Levenger	URS Technical Project	5550 Blazer Parkway,	T: 614-726-3575
8	Manager	Suite 175	F: 614-726-3599
	C C	Dublin, OH 43017	stan_levenger@urscorp.com
Keith Mast	URS Cleveland	1375 Euclid Ave.	T: 216-622-2229
	Environmental Group	Suite 600	F: 216-622-2480
	Manager	Cleveland, OH 44115-1808	keith_mast@urscorp.com
Tom Malatesta	URS-ROS	Foster Plaza 4	T: 412-503-4666
		501 Holiday Drive	F: 412-503-4668
		Suite 300	thomas_malatesta/urscorp.com
		Pittsburgh, PA 15220	r in the second s
David Shuck	US Army Corps of	Louisville District, CT	T: (502) 315-6182
	Engineers – Louisville,	600 Martin Luther King Jr. Place	F: (502) 315-6195
	Contract Specialist	Louisville, KY 40201	david.l.shuck@usace.army.mil
Cynthia A. Ries	US Army Corps of	Louisville District, ED-EE	T: (502) 315-6347
0,11111111111	Engineers – Project	600 Martin Luther King Jr. Place	F: (502) 315-6309
	Engineer/COR	Louisville, KY 40202-2232	cynthia.a.ries@usace.army.mil
Glen Beckham	US Army Corps of	CELRL-PM-M-E	T: (502) 315-6799
	Engineers – Louisville,	Room 821	F: (502) 315-6195
	Project Manager	600 Martin Luther King Jr. Place	glen_beckham@usace.army.mil
	5 6	Louisville, KY 40201	
Mark Patterson	RVAAP Facility Manager	RVAAP	T: (330) 358-7312
	, , , , , , , , , , , , , , , , , , , ,	Building 1037	F: (330) 358-7314
		8451 State Route 5	mark.c.patterson@us.army.mil
		Ravenna, OH 44266-9244	1 5
Irv Venger	RVAAP Industrial	RVAAP	T: (330) 358-7304
0	Specialist	Building 1037	F: (330) 358-7314
		8451 State Route 5	irving.b.venger@us.army.mil
		Ravenna, OH 44266-9244	grand grand grand
Katie Elgin	Ohio Army National	1438 State Route 534, SW	T: (614) 336-6136
	Guard, Environmental	Newton Falls, OH 44444-8503	F: (614) 336-6135
	Specialist 2		katie.elgin@us.army.mil
Eileen Mohr	Ohio EPA, Project	NE District, DERR	T: (330) 963-1221
	Manager	2110 E. Aurora Road	F: (330) 487-0769
		Twinsburg, OH 44087	eileen.mohr@epa.state.oh.us
Todd Fisher	Ohio EPA, Project	NE District, DERR	T: (330) 963-1148
- 544 - 151101	Manager	2110 E. Aurora Road	F: (330) 487-0769
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Brian Stockwell	PIKA	RVAAP	T: (330) 388-2920
Brian Stockwell		Building 1038	F: (330) 388-2924
		8451 State Route 5	bstockwell@pikainc.com
		Ravenna, OH 44266	ostockwen e pikanie.com
	<u> </u>	Kavolilla, OII 44200	

FIGURES



Figure 4-1 Organization Chart

ID	Task Name			Qtr 4, 2007		, 2008		Qtr 3, 200			
1	Project Schedule		 Jul  Aug Sep	Oct Nov Dec	Jan  I	-eb Mar	Apr  May  Jun	Jul  Aug	Sep Oct Nov I	Dec Jan Feb Mar	Apr   May
					-						
2	Task 1: Project Coordina	ation Plan									
3	Prepare Plan Internal	Army Draft	 	Prepare Plan   1/7	Interna		Draft				
4	Internal Draft Review	(USACE)		Internal Dra 1/	aft Rev /22 _1		ACE)				
5	Comment Resolution					lesolutio 2/4	<b>on</b>				
6	Prepare Draft					P Draft 2/14					
7	Submit Draft (Stakeh	older Review)		Submit D	)raft (S 2/15	takeholo 2 25	der Review)				
8	Comment Resolution			(	Comm 2/2	ent Bes 26 3/					
9	Prepare Final					repar F 3/11 3					
10	Submit Final for (Stak	keholder Review)		Sub		nal for ( 3/14	Stakeholder R	eview)			
11	Submit Final						•	6/20			
12	Task 2										
13	Task 2A: Letter Rep	ort Work Plan				,					
14	Prepare Internal	Army Draft		Prepare Int 1/10	ernal / 0 - 1/	Army Dra 18	aft				
15	Internal Army Re	eview			l Army 21   1	/Review /22					
16	Comment Resolu	ution				solut or /24	1				
17	Submit Draft					1/25					
	·										
Figure 5	-1	Task	Milestone	•			External Task	s			
Project:	RVAAP Sub Slab nu 3/13/08	Split	 Summary				External Miles	•			
		Progress	Project Sumn	nary			Deadline	$\overline{\mathbb{C}}$			
RVAAP	Sub Slab 12 Mar 08_Schedule		Page	e 1					as require	ects durations a d by Findings an rations may be e	d Orders.

ID	Task Name				Qtr 4, 2007		, 2008		Qtr 3, 2008	Qtr 4, 2008		Qtr 2, 20
18	Poviow Droft (St	akeholders)		Jul Aug Sep				r Apr May Jun	Jul  Aug Se	p Oct Nov Dec	Jan  Feb  Mar	Apr May
10	Review Draft (Stakeholders)				Review	Draft ( 2/1		naers)				
19	Comment Resolu	ution			Com		Resolut 2/6	ion				
20	Prepare Final				I		e Final 2/6					
21	Comment Resolu	ution			Com		Resolu 2/7	tion				
22	Submit Final						t Final 2/7					
23	Task 2B/4B/6A: ESS						·					
24	Prepare Internal	Army Draft			Prepare Int 1/8	ernal		▼ raft				
25	Internal Army Dra	aft Review (USACE)		1	Internal Army		Review	(USACE)				
26	Comment Resolu	ution			Com	iment 2/4	Resolut 2/8	lion				
27	Submit Draft						<b>Δ</b> 2/ε					
28	Stakeholder Rev	iew			Stal		▼ ler Re /i 2/6	ew				
29	Comment Resolu	ution			Com		Resolut 2/6	tion				
30	Prepare Final						re Final 2/8					
31	Submit Final						<b>2/ε</b>					
32	Final Review (US	SATES; DDESB)			Final Re	eview 2/11		S; DDESB) 7				
33	Approval USATE	S				Арр	oroval U 3/10 3	SATES 9/10				
34	Approval DDESE	3				Ар 2/	proval   28	DDESB 3/28				
	I						6000200	3.			1	
Figure 5	.1	Task		Milestone	•			External Task	S			
Project:	RVAAP Sub Slab nu 3/13/08			Summary		_		External Miles	•			
		Progress		Project Summ	ary			Deadline	$\overline{\mathbf{U}}$			
₹VAAP	Sub Slab 12 Mar 08_Schedule			Page	2				S	chedule reflect as required b Actual durat	s durations an y Findings and ions may be e	d Orders

ID	Task Name			Qtr 4, 2007		, 2008		Qtr 3, 2008	Qtr 4, 2008	Qtr 1, 2009	Qtr 2, 20
35	Task 2C: Table 1 So	Jul ∣Aug Sep	Oct Nov Dec	Jan		Apr  May  Jun	Jul  Aug Sep	Oct Nov Dec	Jan  ⊦eb Mar	Apr Ma	
						Ŵ					
36	Field Mobilization			-	d Mobili 3/7						
37	Field Sample Collection					ample ( 3/14 3	Collection				
38	Sample Analysis					mple An 3/14 3					
39	Task 2D: Preliminar	y Evaluation of Pre-Floor Removal Sample				Ţ					
40	Evaluation						uation 4/25				
41	Task 2E: Characteriz	zation of Six Soil Piles G-1, G-1A, G-3					4/25				
42	Field Mobilization	1				d Mobili					
43	Field Sample Co	llection			Field S	3/7 3 Sample (	Collection				
44	Laboratory Analy			La		/14 y Analysis					
45	Laboratory Resu	It Evolution				3/17	4/16	* <b>!</b> ~ ~			
45	Laboratory nesu				Lap		Result Evalua 7 4/23	tion			
46	Task 2F: Remove Si	x Soil Piles at G-1, G-1A, G-3									
47	Field Mobilization	1					d Mobilization	; 1			
48	Removal of Six S	Soil Piles					val of Six Soil 5/9 5/15	Piles			
49	Task 3										
50	Task 3A: Initial Sam on Table 2)	pling and Analysis of 92 Buildings (Not									
51	Field Mobilization					d Mobili 3/7 3					
Figure 5	-1	Task	Milestone	•			External Task	s			
Project:	te: Thu 3/13/08 Split		Summary				External Miles	•			
		Progress	Project Sumn	nary			Deadline	$\hat{\nabla}$			
RVAAP	Sub Slab 12 Mar 08_Schedule		Page	93				So		s durations an y Findings an ions may be e	d Orders

ID	Task Name		Qtr 3, 2007	Qtr 4, 2007		, 2008	Qtr 2, 2008	Qtr 3, 2008	Qtr 4, 2008	Qtr 1, 2009	Qtr 2, 20
52	Field Sampling		Jul  Aug Sep	o Oct Nov Dec	Jan I		Apr May Jun Sampling	Jul Aug Sep	Oct Nov Dec	Jan  Feb Mar	Apr Ma
52	r leid Sampling					3/14	5/2				
53	Field Screening					Field \$ 3/14	Screening 5/2				
54	Task 3B: Short Repo (Not on Table 2)	rt for Sampling & Analysis from 92 Bldgs									
55	Report						Report 5/5	6/30			
56	Task 4										
57	Task 4A/5A: Full Wo	rk Plan									
58	Prepare Internal	Army Draft		Prepare 1/7		al Army _2/ <sup>°</sup> 8					
59	Internal Army Re	view		In	ternal 2/19	Army Re 9 - 2/21	eview				
60	Comment Resolu	ition		С		nt <b>Beso</b> 2 22					
61	Submit Draft					2/	26		••••••		
62	Review Draft (Sta	akeholders)		I		Draft,(S	Stakeholders) 4/15				
63	Comment Resolu	ition				Comm 1/1	ent Besolutior 16 4/29	 I			
64	Prepare Final						Prepare Final 4/30 5/12				
65	Review Final (Sta	akeholders)				Rev	/iew Final (Sta 5/13	keholders) 6/27			
66	Submit Final						Subm 6/30	it Final 7/2			
67	Task 4C: Initial Sam	ble from 13 Buildings on Table 2									
68	Field Mobilization							d Mobilization 7/29 7/30			
Figure 5	-1	Task	Milestone	•			External Task	s			
Project:	RVAAP Sub Slab u 3/13/08	Split	Summary				External Miles	•			
		Progress	Project Sum	mary			Deadline	$\overline{\mathbf{v}}$			
RVAAP	Sub Slab 12 Mar 08_Schedule		Pag	je 4				Sc	as required b	s durations any y Findings any ions may be e	d Orders

ID	ID Task Name		Qtr 3, 2007	Qtr 4, 2007	Qtr 1, 2008	Qtr 2, 2008	Qtr 3, 2008	Qtr 4, 2008	Qtr 1, 2009	Qtr 2, 20	
69	Field Sampling					F	In Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Field Sampling 7/31 8/20				
70	Laboratory Analy	vsis					Laboratory 8/21				
71	Laboratory Analy	Laboratory Analysis Evaluation					Laboratory Analysis Evaluation 10/23 11/5				
72	Task 4D: Initial Sam	pling & Analysis of Contingency Samples 1						<u>licia</u>			
73	Field Mobilization				Field Mcbi 3/14						
74	Field Sampling				Field 3/21	Sampling 5/9					
75	Laboratory Analysis				Labora 3/21	tory Analysis 5/9					
76	Laboratory Result Evaluation				Labo	oratory Result I	Evaluation 5/16				
77	Task 4E: Short Repo	ort of the Sampling & Analysis of the 92 Blo									
78	Report					Report 5/12 6/	9				
79	Task 5					[22222222]					
80	Task 5B: Final Sampling and Analysis at LL#4										
81	Field Mobilization						Mobilization				
82	Field Sampling						d Sampling 6 7/29				
83	Laboratory Analysis						Laboratory An	alysis 9/30			
84	Task 5C: Evaluation of Final Sampling at LL#4 from Task 5B										
85	Laboratory Analysis Evaluation						Laboratory A 9/30	nalysis Evalua 10/27	tion		
	1		1					productions	1	]	
Figure 5-1     Task       Project: RVAAP Sub Slab     Split       Date: Thu 3/13/08     Progress		Task	Milestone	•		External Task	s				
			Summary			External Miles	•				
		Progress	Project Sumr	nary		Deadline	$\bigcirc$				
RVAAP Sub Slab 12 Mar 08_Schedule       Page 5       Schedule reflects durations and cycles as required by Findings and Orders.         Actual durations may be expedited.       Actual durations may be expedited.											

ID Task Name			Qtr 3, 2007	Qtr 4, 2007 Oct Nov Dec	Qtr 1, 2008		Qtr 2, 2008		3, 2008 Aug Ser	Qtr 4, 2008	Qtr 1, 2009	
86	Task 5D: Final Sam	ling & Analysis at LL#3				iai						
87	Field Mebilization											
0/	Field Mobilization	I								d Mobilization 0/28   10/28	1	
88	88 Field Sampling					•••••				ield Sampling		••••
									1	0/28 11/1		
89	Laboratory Analy	SIS								Laboratory	Analysis 1/16	
90	Task 5E: Evaluation	of Final Sampling at LL#3										
91	Evaluation of Lal	poratory Analysis				<u></u>					of Laborato	
92	Task 5F: Final Samp	ling & Analysis at LL#2				•••••						
93	Field Mobilization	1									ld Mobilizatio 1/30   1/30	n
94	Field Sampling										Field Sampli 2/2 2/2	
95	Laboratory Analy	sis				o()					Laborato 2/20	ry Analysis 4/23
96	Task 5G: Evaluation of Final Sampling at LL#2											
97	Evaluation of Laboratory Analysis					·····					Evaluati	on of Labo 4/30
98	Task 6B: Mob/Demob for Excavation/Transport				Task 6B: I	Mob	D/Demob fo 6/9		ation/Tra	ansport		<u>[::::::</u> ]
99	99 Task 6C: Excavate/Transport Load Line 4				Task 60	Ċ: E	Excavate/Tr 6/9		Load Li	ne 4		
100 Task 6D: Excavate/Transport Load Line 3					Task 6D	Э: Е	Excavate/Ti 6/9		t Load Li	ine 3		
101 Task 6E: Excavate/Tr		/Transport Load Line 2			Task 6l				sport Load Line 2			
							6/9	6/9 :				
							<u> </u>					
Figure 5-1 Project: RVAAP Sub Slab Date: Thu 3/13/08		Task	Milestone	<b>•</b>			External Ta		•			
		Split	Summary			I	External Mi	ilestone				
		Progress	Project Sumr	nary			Deadline		$\overline{\mathbf{v}}$			
RVAAP Sub Slab 12 Mar 08_Schedule       Page 6       Schedule reflects durations and cycles as required by Findings and Orders. Actual durations may be expedited.												
ATTACHMENT A Monthly Report Format

## NOVEMBER MONTHLY REPORT

Date: 05 December 2007 Contract Number: XXXXXX-XX-XXXXX

Contractor: (Contractor name and address)

Location: Ravenna Army Ammunition Plant, Ravenna, OH

Project Name: (project name per scope of work)

# **SUMMARY OF ACTIVITIES:**

Task 1 – (Describe Task)

(Provide update)

Task 1 is XX% completed.

## Task 2 – (Describe Task)

(Provide update) Task 2 is XX% completed.

Task XX – (Describe Task)

(Provide update)

.

Task XX is XX% completed.

# HEALTH AND SAFETY PERFORMANCE:

(Provide update, such as "There were no health and safety performance issues this month.")

### **PROBLEMS ENCOUNTERED/RESOLUTION:**

(Provide update, such as "There were no problems encountered this month.", or other as appropriate.

## PLANNED ACTIVITIES FOR THE FOLLOWING MONTH:

Task 1 – (Describe Task)

Provide update of activities planned for following month.

*Task 2 – (Describe Task)* Provide update of activities planned for following month.

# Task XX – (Describe Task)

. .

Provide update of activities planned for following month.

# ACTIVITY AND PROGRESS COMPLETION TABLES:

Target/Milestone Activity	Scheduled Completion Date	Actual Completion Date	Status
Task 1 –		2	
			XX%
			completed.
Task 2 –			
			XX%
			completed
Task 3 –			
			XX%
			completed
Task XX			
			XX%
			completed

## CHANGES IN KEY PERSONNEL:

Example: "There were no changes in key personnel."; or other statement as appropriate.

## **DEVIATION IN SCHEDULE:**

Example: "There are no deviations in the schedule at this time."; or other statement as appropriate.

### **INVESTIGATIVE DERIVED WASTE (IDW):**

Example: "There is no IDW to address."; or other statement as appropriate.

## **REMARKS:**

There are no remarks for this month.

## **PROJECT REPRESENTATIVE:**

//Signed// XXXXX X. XXXXXX Principal Company Name

Page 1 of 15

Comment Number	Page No/ Line No.	Comment	Recommendation	Response
			Katie Elgin, OHARNG	
1	Pg 3-1, Line 25	" work to be done prior to slab removal by MKM" Here is sounds like the work plan is going to detail the work that will be done by MKM prior to slab removal. Recommend deleting "by MKM".		This edit has been made. The sentence now reads: 1) work to be done prior to the slab removal (in letter report format)
2	Pg 4-2, Line 2	"Within the SOW, six stakeholders were identified: the AEC, Louisville USACE, the OHARNG, the Ohio EPA, and the RAB." You mention that 6 stakeholders were listed and then you only listed 5. Are you missing one?		A stakeholder was not missed. The sentence was edited to read as follows: Within the SOW, five stakeholders were identified
3	Pg 5-1, Line 22	"Field activities will however require additional coordination with the Ohio Army National Guard/Ravenna Training and Logistics Site (OHARNG/RTLS) and any other RVAAP contractors working at RVAAP." While		Agreed. The text now reads: Field activities will be coordinated with installation personnel, including the Army and the OHARNG, on an as-needed basis. URS will also coordinate with other contractors working at RVAAP, as required.

Page No/ Comment Number Line No. Comment Recommendation Response it is true that coordination with OHARNG may be needed on some issues (especially road usage), I don't think this sentence is needed, especially since you do not discuss coordination with the Army. It also sounds like you will be coordinating all 'field activities" with the OHARNG which is not true. Suggested rephrase: "Filed activities will be coordinated with installation personnel, including the Army and the OHARNG, on an as needed basis. URS will also coordinate with other contractors working at RVAAP as required." Irv Venger, RVAAP Change to: "...Floor Slabs at LLs Rewrite without parentheses Title The title of the task order cannot be and include ll1 and F15 & 16 1,2,3,4, Buildings F15 & F16 and changed. However, the following from the Excavation and Transportation of full work plan was added to Page 3-1: Contaminated Soil to Buildings G1, Floor slab removal may occur at Load Line G1A and G3 in Load Line 4 1 and Buildings F-15 and F-16 at a future date. In the event that a separate contract action is executed for completion at these

Page 2 of 15

Page No/ Comment Comment Recommendation Response Number Line No. locations, this PCP may be applicable to that work as well. Title Page 2 Refers to Volume One. Is If no volume two delete the Volume There is no Volume 2. there a Volume 2 One text In accordance with the March 10, 2008. revision to the Formatting Guidelines, the Volume designation will be removed. In any future submissions, the Volume designation will be omitted when there is only one volume. 3 Pg iv The acronym RDX stands for Include both the acronym name and Both the chemical name and the acronym **Royal Demolition Explosive** line25 chemical name name will be included in the Acronym and not the chemical name Abbreviations List. Pg vi Include both the acronym and 4 Acronym TNT stands for The acronym, TNT, can be used both for Trinitrotoluene not the chemical name the chemical name and the more generic chemical name trinitrotoluene. Both definitions will be included in the Acronym and Abbreviations List. Reads: "...floor slabs at load Pg 1-1 line 3-Change to "...floor slabs of 5 This change has been made. The sentence lines 2,3 &4..." demolished buildings at load lines now reads: 2.3&4..." ... below floor slabs of demolished buildings at Load Lines 2. 3. and 4.... Pg 2-1 line 4-6 Delete last sentence "This The sentence is not needed and infers The sentence has been deleted.

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Page No/ Comment Number Line No. Comment Recommendation Response 6 PCP lays out a formal that all parties have agreed to the exchange..." methods described. The BRAC contractor's SOW does not include formal meetings and teleconferences. Pg 2-1 line 14 Does the COR or Contract 7 Changes to the PCP do not require COR or Officer need to approve Contracting Officer approval unless the changes? change is a change in scope. Pg 3-1 line 3 Reference to sampling at 105 Para 3.2 says that only two samples 8 The sentence has been revised as follows: buildings prior to slab removal The Contract SOW... is to complete both pre-slab removal sampling at selected buildings and post-slab removal sampling at 105 buildings within Load Lines 2, 3, and 4. Pg 3-1 line 7 Extra words Delete " and activities included in the 9 The phrase noted in the comment has been task" deleted. 10 Pg 3-1 line 9-Extra words Delete "in an efficient manner in The phrase noted in the comment has been coordination with,and"-remove 10 deleted. comma Pgf 3-1 line 11 Needs clarification The numbers 1) and 2) have been added to Insert (1) before 'work' and 2 before 26 27 the sentence. 'a full work plan' Pg 3-1 line 34 Needs more detail What areas? Exactly how many 9 This detail is in the approved Letter Report samples? If more than 2, why?

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Page No/ Comment Line No. Comment Recommendation Response Number Work Plan and does not need to be repeated in the PCP. A sentence referencing the Work Plans was added as follows: "Details regarding the following tasks will be included in the full Work Plan." 10 Pg 3-1 line 36 Needs more detail Suggest "Multi-increment sampling at This text is verbatim from the approved the six existing piles in building G3 at Letter Report Work Plan and was not load line 4 changed in the PCP for consistency. Change to "...soil/debris pile Pg 3-2 line 5 Add clarity 11 The revision has been made as follows: sampling in the buildings in Load Line 4". *The analytical results from the soil/debris* pile sampling within the buildings at Load Line 4 will be.... Simplify wording 12 Pg 3-2 lines Change to: ...data so that any required The sentence has been revised as follows: 12-13 removal actions can be planned and executed at each building when the The purpose of the soil sampling is to slabs are removed. provide sufficient data so that any required removal actions can be planned and executed at each building when the slabs are removed. Change to "...information of past 13 Pg 3-2 lines Simplify wording The sentence has been revised as follows: usage of the individual buildings and 15-16 previous investigations at other ...." The design is based on historical

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				information of past usage of the individual buildings and previous investigations at other
14	Pg 3-2 line 16	Simplify wording	Change to "Field screening and fixedlaboratory analysis are planned for TNT and RDX."	The word "both" has been deleted from this sentence.
15	Pg 3-2 llines18-19	Clarify text	Change to "A protective cover system, (either plastic sheeting or spray on cementateous material) will be applied to extend the underslab fill remains protected (not exposed) to minimize issures arising from the time restriction to obtain samples and perform any required removal action(s).	The recommended text does not provide additional clarity. The report text is from the approved Letter Report Work Plan and was not changed to maintain consistency between documents.
16	Pg 3-2 line 23	Remove extra word	Delete "explicitly"	Explicitly has been deleted from this sentence.
17	Pg 3-2 line 24	The fill is not necessarily earthern	Remove the word "earth"	Earthen fill is the broad term used in the SOW for this project to include all local soils, sands, and gravels that were used to backfill the elevated foundations. The intent was to cover the possible mixture of these materials and not to imply that nonsoil materials may have been used. URS prefers to maintain the use of the term throughout the planning documents.

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Page No/ Comment Comment Recommendation Response Number Line No. No change to the text has been made. Pg 5-1 line 22 Delete "in accordance with 18 We all assume that URS will conform The suggested deletion has been made. the contract" to the contract it is not necessary to restate it 19 Pg 5-1 line 26 Change to "the PM will attend these Use active voice The sentence was revised as follows: meetings..." The PM will be available. The Technical Project Manager will attend (I assume he will be available whether these meetings and teleconferences; the needed or not!) Project Manager will be the backup. Pg 6-1 lines 20 Statement says nothing Delete the 3 lines The two referenced sentences have been 2-4 except Briefings & Meetings deleted. will be held periodically. 21 Pg 6-1 line 15 Will minutes be distributed Clarify text Minutes will be distributed to all to all stakeholders: even stakeholders. The sentence has been those not in attendance? revised as follows: URS will incorporate comments and distribute the final minutes to all stakeholders within 1 week of the conference call. 22 Pg 6-1 line 17 Define timely To me timely is within three months. Timely is defined as 24 hours before the conference call or 3 days after the draft minutes are transmitted. The following sentence was added:

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				Draft agenda comments will be addressed if received at least 24 hours before the teleconference; comments on the draft minutes will be addressed if received within 3 days after the draft minutes are transmitted.
23	Pg 7-1 line 7	The contractor should include detailed photo documentation of the project to be included with the periodic report. Also supply a CD of these photos for the archives at the RVAAP		Photo documentation of the project will be included in the deliverable reports, not in the monthly report. Photos will be included in the report CD for the RVAAP archives.
24	Pg 7-1 line 8	What is a URS fiscal Month? Is it different from calendar month?		The URS fiscal month is not identical to the calendar month. The URS fiscal month is usually the last Friday of the calendar month. No changes to the text were made.
25	Pg 7-1 line 12	Why is URS dictating USACE responsibilities to supply reports to all RVAAP Contractors?	Did you mean to say that they would consolidate the contractor's reports for delivery to the EPA?	The referenced paragraph was not meant to be dictatorial, but rather explain the next step in the process. The sentence has been revised as follows:
				to the USACE COR by the 5 <sup>th</sup> of each month so that the USACE COR can prepare monthly reports for all the RVAAP contractors for delivery to Ohio EPA by the 10 <sup>th</sup> of each month.

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Page No/ Comment Line No. Comment Recommendation Number Response Pg 7-1 line 20 Guidelines require a Conformance to Format Guidelines 26 The term "Internal Army Draft" is the 'preliminary draft for Army and Findings and Orders is all that is wording in the SOW as a required only review not an 'internal required. Added detail and explanation deliverable. The wording in the Formatting is not needed. Army draft" Guidelines is "Preliminary Draft." The latter will be used for future submissions. "Internal Army Draft" has been replaced with "Preliminary Draft" in the referenced paragraph. URS feels that the detail is necessary. The paragraph was edited, however, to add further detail suggested by the Ohio EPA in their Comment #5. 27 Pg 7-1 line 23 Is the COR the only one to The SOW states that the Army, through the review the document? If not, COR, will receive the internal Army draft is 10 days enough? documents in electronic form, and will provide comments to the Contractor within 10 business days. The COR may assign additional Army reviewers. No changes to the text of the PCP were made. 28 Pg7-1 line 26 Stakeholders are not given Agreed. The text has been revised as 45 days to review. EPA may & 30 follows: take up to 45 days but if they finish early, no one else's In accordance with the Director's Final

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		time matters, the DFFO clock starts.		Findings and Orders, the Ohio EPA will be given a 45 calendar day period to submit comments. Responses to Ohio EPA comments and those of other stakeholders will be submitted within 15 calendar days of the Army's receipt of Ohio EPA's comments. Upon resolution of comments, a final document will be prepared and submitted for an additional 45 calendar day review by Ohio EPA. The final document will be submitted to the stakeholders within 30 calendar days of the Army's receipt of Ohio EPA's comments.
29	Pg7-1 line 32	Who places the copies in the repositories?; Also RVAAP gets two printed and two CDs of all documents.		As directed by the USACE COR, the repository CDs to date have been delivered to Mark Patterson with a notation to forward them to Gail Harris (SpecPro) for placing in the public repositories. If the procedure should be changed, please let URS know.
				The last sentence has been revised as follows:
				One electronic copy of all draft and final documents will be furnished to the Facility Manager for placement in each of the public repositories
				The Formatting Guidelines clearly indicate that the RVAAP gets two printed and two

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				electronic copies of all documents.
30	Pg8-1 line 1	"Hard" copy is a bit vernacular	Refer to 'printed'' copy	The word "hard" has been changed to "printed".
31	Pg 8-1 line 4	Aside from URS maintaining copies, ledgible copies of all documents should be included with the final report as attachments or appendices.	Adjust text	The following sentence was added to the document control paragraph (before the last sentence of the first paragraph): Legible copies of all documents will be included with the final report as attachments or appendices.
32	Pg 8-1 line 1	How and by whom will the administrative record be updated?	Add details	The URS SOW does not include any tasks to update the Administrative Record. The second paragraph has been revised as follows: Any deliverables produced under this delivery order will also be incorporated by the Facility Manager and/or the Administrative Records Officer into the existing repositories
33	Pg 8-1 line 16	With respect to REIMS see No 32		existing repositories The URS SOW does not include any tasks to update the REIMS. The phrase by the <i>REIMS Manager</i> has been added to the referenced sentence.

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Page No/ Comment Line No. Comment Recommendation Response Number Pg 8-1 line 34 I like Word format. However Correct text The text has been revised as follows: 19 etal the Guidelines require PDF with Bookmarks and 508 Electronic text documents will be in Adobe Acrobat format (SpecPro, 2007).... compliant Analytical and field data will be prepared in an electronic format suitable for submission into a USACE-designated database and then converted to Adobe Acrobat for report submission. Pg 10.1 line 3 It is nice to know that URS 35 Delete all sales pitches The first sentence in Section 10.1 will be wants to satisfy its customer. deleted. Very complex wording Pg 10-1 lines Suggest simplify to: "All delierable The sentence has been revised as follows: documents will be reviewed by the 21-23 URA PM and a technical person All deliverable documents will be reviewed by the URS PM and another technical associated with the project." person associated with the project. Pg 10-1 line Too complex simpligy Suggest: "The procedures used to The text has been revised as follows: 37-39 transport contaminated fill to load line 4 include:---then use simple sentences The procedures used to transport for the bullets contaminated fill to Load Line 4 include: Suppression of dust, Covering of loads, and Dust level monitoring. Pg 10-2 line 7 It seems the contracting The USACE COR acts on behalf of the officer is left out of the loop.

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		Is this intentional?		Contracting Officer. For field changes, approval by the USACE COR is appropriate.
	•		Eileen Mohr, Ohio EPA	
1.	Pg iv, Line 4	Change BRACO acronym to BRACD (Base Realignment and Closure Division)		This change will be made.
2.		Do a search and replace the document for BRACO and replace it with BRACD.		A search and replace for this acronym was done.
3.	Pg. 4-2, Line 2	Change Army Environmental Center to Army Environmental Command		"Center" has been changed to "Command".
4.	Pg. 4-2, Lines 6-8	Under the terms of the June 2004 Directors Final Findings and Orders, in the event that the Project Manager at Ohio EPA is changed, the Agency notifies the Army Project Manager.		Noted. The following sentence was added: In the event that the Ohio EPA Project Manager is changed, the Army Project Manager will be notified by the Ohio EPA. The Army Project Manager will then notify URS.
5.	Pg. 701, lines 20-22	Please add text to the paragraph that indicates that the contractor is to have responses to comments (RTCs) to the stakeholders		The paragraph has been revised as follows: In accordance with the Directors Final Findings and Orders, the Ohio EPA will be given a 45 calendar day period to submit

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Page No/ Comment Line No. Comment Recommendation Number Response within fifteen (15) calendar comments. Responses to Ohio EPA days of the Army's receipt of comments and those of other stakeholders Ohio EPA's comments. will be submitted within 15 calendar days Additionally, a revised of the Army's receipt of Ohio EPA's document needs to be comments. Upon resolution of comments, a final document will be prepared and submitted to the stakeholders within thirty (30) days of the submitted for an additional 45 calendar day review by Ohio EPA. The final Army's receipt of Ohio document will be submitted to the EPA's comments. stakeholders within 30 calendar days of the Army's receipt of Ohio EPA's comments. Additional discussion needs 6. Pg. 9-1, lines Agreed. The following text was added to 7-9 to occur among stakeholders the end of the second paragraph: regarding the potential use of An additional fixed laboratory subcontract multiple fixed based will only be issued with the prior approval laboratories. In the interim. of the USACE COR and the Ohio EPA. please revise this text to indicate that this will be done only with prior approval of the stakeholders. 7. Pg. 11-1, Reviews of MSDS can be Agreed. The last part of that sentence has Lines 36-37 used in determining what been deleted. The sentence now reads: constituents the wastes will Wastes generated.....based upon waste be tested for: however. characterization results. MSDS cannot be used for determining disposal criteria. 8. Schedule, The schedule for Task The schedule for Task 2B/4B/6A has been

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	pg. 2	2B/4B/6A: The ESS can be adjusted, as Ohio EPA previously indicated that we did not need to review the revised ESS. (Specifically, adjust the schedule to account for USATCES reviews, not the 45 day Order clock.)		revised to reflect actual dates. Stakeholder review has been deleted from this task.
9.	Schedule, pg. 3	Tasks 2E and 2F need to be accelerated. The letter workplan and health and safety plan (HASP) are in place. There is no need to hold off on the sampling and disposal of the six (6) soil piles.		Since the letter Work Plan and HASP are in place and approved, the schedule for Tasks 2E and 2F have been accelerated. The schedule has been updated to reflect a March 14, 2008 date to begin the sampling. The revised schedule included in the final PCP is current as of March 11, 2008.

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