



RAVENNA ARSENAL, INC.
8451 STATE ROUTE 5, RAVENNA, OHIO 44266-9297
TELEPHONE: (216) 358-7111 • FAX: (216) 297-3216

September 3, 1993

JAC
3 Sept 93
THRU: Contracting Officer's Representative
Ravenna Army Ammunition Plant
8451 State Route 5
Ravenna, Ohio 44266-9297

TO: State Fire Marshall - BUSTR
Permit Application Section
ATTN: Bev Spears
Post Office Box 687
Reynoldsburg, Ohio 43068-0687

Subject: Permit Application to Remove One Underground Storage Tank

Dear Ms. Spears:

Attached is a permit application and fee for the removal of one registered underground storage tank at Ravenna Army Ammunition Plant. This is the last remaining registered underground tank at the Ravenna Army Ammunition Plant. The tank to be removed is as follows:

One 285 gallon steel tank, of unknown dimensions, used for storing gasoline for use in an emergency generator at Post #1.

Once removed, the tank will be rendered un reusable, cleaned, marked as scrap and sold as scrap by the tank removal contractor.

Please contact Susan M^cCauslin, Ravenna Arsenal, Inc., Environmental Engineer, at (216) 297-3220 if you have any questions or need further information. The Government point of contact is Robert J. Kasper, Commander's Representative, (216) 297-3124.

Sincerely,

H.R. Cooper
H.R. Cooper
Plant Engineer

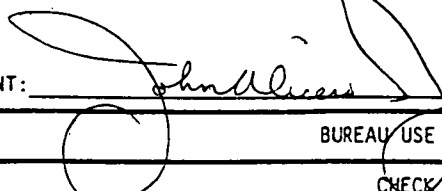
:bp/UST2.SM

c: N. Wulff

T. Chanda

File

STATE OF OHIO
DEPARTMENT OF COMMERCE - DIVISION OF STATE FIRE MARSHAL
BUREAU OF UNDERGROUND STORAGE TANK REGULATIONS
8895 EAST MAIN STREET, P.O. BOX 687
REYNOLDSBURG, OHIO 43068-0687
APPLICATION FOR UNDERGROUND STORAGE TANK PERMIT

I. OWNERSHIP OF TANKS			OWNER NO:			II. LOCATION OF TANKS			FACILITY NO.		
OWNER/OPERATOR NAME U.S. Army						FACILITY NAME Ravenna Army Ammunition Plant					
ADDRESS 8451 State Route 5						ADDRESS 8451 State Route 5					
CITY Ravenna		STATE OH		ZIP CODE 44266		CITY Ravenna		STATE OH		ZIP CODE 44266	
ATTN: (CONTACT PERSON) Robert J. Kasper			AREA CODE-PHONE (216) 297-3124			AREA CODE-PHONE (216) 297-3124			COUNTY Portage		
III. CONTRACTOR						IV. LOCAL FIRE DEPARTMENT					
CONTRACTOR'S NAME Ravenna Arsenal, Inc.						FIRE DEPARTMENT NAME Ravenna Arsenal, Inc.					
CONTACT PERSON Susan McCauslin			AREA CODE-PHONE (216) 297-3220			ADDRESS 8451 State Route 5					
ADDRESS 8451 State Route 5						CITY Ravenna		STATE OH		ZIP CODE 44266	
CITY Ravenna		STATE Ohio		ZIP CODE 44266		30-DAY NOTIFICATION LETTER SENT FOR REMOVAL OF TANK TO BUSTR DATE: <u>September 3, 1993</u>					
V. FEE CALCULATION (NOTE: PERMIT EXPIRES SIX (6) MONTHS FROM DATE OF ISSUE. FEE IS NON-REFUNDABLE)											
TANK INSTALLATION (INCLUDES PIPING)				NO. OF TANKS		X \$75.00 PER TANK		=			
TANK <u>REMOVAL</u> OR ABANDONMENT (CIRCLE ONE) (THESE INCLUDE PIPING)				1		X \$100.00 PER TANK		=		\$100.00	
TANK UPGRADE				NO. OF TANKS		X \$75.00 PER TANK		=			
TANK REPLACEMENT				NO. OF TANKS		X \$175.00 PER TANK		=			
TANK REPAIR				NO. OF TANKS		X \$50.00 PER TANK		=			
PIPING INSTALLATION ONLY						X \$25.00 PER FACILITY		=			
PIPING REMOVAL ONLY OR ABANDONMENT ONLY (CIRCLE ONE)						X \$100.00 PER FACILITY		=			
PIPING UPGRADE OR REPAIR (CIRCLE ONE)						X \$25.00 PER FACILITY		=			
PIPING REPLACEMENT						X \$100.00 PER FACILITY		=			
LEAK DETECTION UPGRADE						X \$25.00 PER FACILITY		=			
CHANGE IN SERVICE OR TEMPORARY CLOSURE (CIRCLE ONE)						X \$100.00 PER SYSTEM		=			
										TOTAL FEE: \$100.00	
SIGNATURE OF APPLICANT: 						DATE: <u>3 Sept 93</u>					
BUREAU USE ONLY											
AMOUNT PAID: _____				CHECK NO: _____				FEE NO: _____			
SUPERVISOR/INSPECTOR: _____				PERMIT NO: _____				DATE ISSUED: _____			



DEPARTMENT OF THE ARMY
 HEADQUARTERS, U.S. ARMY ARMAMENT, MUNITIONS AND CHEMICAL COMMAND
 ROCK ISLAND, ILLINOIS 61299-6000



REPLY TO
 ATTENTION OF

September 1, 1993

GOCO Branch/Team A

Mr. Norm Wulff
 Vice President and General Manager
 Ravenna Arsenal, Inc.
 8451 State Route 5
 Ravenna, OH 44266-9297

General Manager Ravenna Arsenal, Inc. FWD FOR
<input type="checkbox"/> Information
<input checked="" type="checkbox"/> Compliance is applicable
<input checked="" type="checkbox"/> Reply NLT

Dear Mr. Wulff,

Reference Layaway Scope of Work (SOW) for Project 5938000-6, Removal of Underground Storage Tank for Ravenna Army Ammunition Plant (RVAAP) (enclosure).

Request your company review and accept the enclosed SOW and provide a cost estimate for this effort.

Request the estimate be provided as soon as possible to enable physical accomplishment of the work not later than September 30, 1993. Please provide the estimate to this office with a copy furnished to AMSMC-PBS-L (R).

The POCs are Messrs. Gumpert and Nabb, AMSMC-PBS-L, DSN 793-1389 and 793-0084, respectively, and Ms. Wise, AMSMC-PAI-G/TEAM A, DSN 793-3764.

Enclosure

Thomas A. Bolton
 THOMAS A. BOLTON
 Contracting Officer

CF:
 Commander's Representative
 Ravenna Army Ammunition Plant

RECEIVED
 SEP 2 1993
 ENGINEERING

Matsuo
~~*Cooper*~~
Jenkins
Wulff

LAYAWAY SCOPE OF WORK
PROJECT 5938000-6
REMOVAL OF UNDERGROUND STORAGE TANK
RAVENNA ARMY AMMUNITION PLANT (AAP)

1. SCOPE:

1.1. The purpose of this scope of work (SOW) is to provide specifications for the transition of Ravenna Army Ammunition Plant to a "modified caretaker" status. This project effort consists of proposed actions to minimize annual maintenance costs since the mobilization mission to load, assemble and pack munitions has been removed.

1.2. The project effort consists of: cleaning; decontamination; piping removal/disposal; and underground storage tank (UST) removal.

1.3. The contractor shall provide all necessary labor, supplies, utilities, supervision, and other services necessary to perform tasks required in this SOW. Security will be maintained according to the approved plant security plan.

1.4. The cost proposal shall break out costs relative to each discrete effort identified in paragraphs 8.1., and 8.2. In-house efforts shall identify labor hours and materials required for each discrete effort. If various labor disciplines are required for the effort, they shall be identified by labor category or craft identification. Effort that is subcontracted using an Invitation For Bid (IFB) need not have direct-hours broken out but shall be supported by either three actual subcontractor quotes, the smallest of which shall be the funded level of this project effort, or a quote from a subcontractor that is performing similar work on the plant.

2.0. APPLICABLE DOCUMENTS: Work shall be performed IAW the following document(s):

AMC-P 235-1	Maintenance and Layaway of Government-owned, Contractor-operated Facilities
40 CFR 280 & 40 CFR 281	Federal Register, Volume 53, No. 185

Tailoring, to identify specific requirements, is shown at encl 1. In case of any conflict between reference documents and provisions contained in this SOW, the SOW will take precedence. Regardless of precedence the contractor shall ensure that there are no materials used during this project that contain any Ozone Depleting Chemicals (ODCs) listed at encl 3.

3. REQUIREMENTS:

3.1. Tasks are to be accomplished in accordance with (IAW) provisions contained in paragraphs 4 through 11 of this SOW.

3.2. PERFORMANCE PERIOD: All tasks will be completed by 30 Sep 93. Financial closeout will take place as soon as possible after final acceptance.

4. SAFETY AND ENVIRONMENTAL - GENERAL REQUIREMENTS:

4.1. The contractor is responsible for meeting all federal, state, and local safety and environmental regulations, including, but not limited to Occupational Safety and Health Act (OSHA), Environmental Protection Agency (EPA), state, local, and Armament, Munitions, and Chemical Command (AMCCOM) regulations.

4.2. All hazardous wastes, acid, and contaminated material generated by the execution of this project will be disposed of IAW all applicable federal, state, and local laws and regulations. All transport and decontamination will be performed IAW all applicable federal, state, interstate and local laws and regulations.

4.3. In case of any conflict between provisions contained in this SOW and federal, state, or local laws/regulations, the most stringent of the laws or regulations will take precedence. The layaway office, AMSMC-PBS-L(R), shall be contacted in case of any conflict.

4.4. During the execution of this project, a need for additional safety and environmental work which was not anticipated may become apparent. Such safety and environmental efforts within or adjacent to the facilities included in this project may be accomplished as a part of this project. The AMCCOM Procuring Contracting Officer (PCO) must be contacted for approval, specific instructions, and additional funding, if required, prior to initiating work.

5. DECONTAMINATION (as applicable):

5.1. EXPLOSIVE AND CHEMICAL DECONTAMINATION

5.1.1. Explosive and chemical decontamination Standing Operating Procedures (SOPs) will be reviewed for applicability for the facilities in this project and additional SOPs written where required. The SOPs required to decontaminate the facilities in this project will be reviewed and approved by the Contracting Officer's Representative (COR) Staff prior to beginning any decontamination work. All explosive, acid, and chemical decontamination work required for this project shall be performed IAW these approved SOPs.

30 AUG 1993

5.1.2. The contractor is responsible for obtaining all necessary environmental permits and approvals prior to performing any decontamination work.

5.1.3. Explosive or chemical decontamination to Level XXX must be accomplished immediately upon funding and prior to cleaning or beginning any other work in the area.

5.2. POLYCHLORINATED BIPHENYL TESTING AND DECONTAMINATION: Polychlorinated Biphenyl (PCB) decontamination or testing is not expected to be needed as part of this project. If required, qualified personnel will verify on DD 1342 or other applicable property records that none of the equipment included in this project is contaminated with PCBs. When there is reasonable doubt as to whether PCB contaminants are present or not, the operating fluids will be tested by a subcontractor certified by the state of Ohio. In the event that contamination is determined through the testing procedures, disposal shall be IAW all applicable federal, state, and local environmental regulations. If PCB contaminants are found, the PCO at Headquarters, U.S. Army Armament, Munitions and Chemical Command (HQ, AMCCOM) will be contacted for further instructions, and if necessary, the contractor will submit a request for additional funds.

5.3. ASBESTOS DECONTAMINATION:

5.3.1. Asbestos abatement SOPs will be reviewed for applicability for the facilities in this project and will be reviewed and approved by the COR Staff prior to beginning any asbestos decontamination work.

5.3.2. All insulation containing friable asbestos is to be removed from the piping and equipment included in this project. All steam piping required for fuel oil heating shall be removed and disposed of. If practicable, the asbestos removal, and piping removal may be accomplished at the same time. The asbestos removal and disposal, whether by in-house or subcontractor personnel, shall be accomplished IAW Ravenna AAP SOPs and all applicable OSHA, EPA, federal, state, and local requirements.

5.3.3. All subcontractors who perform any asbestos removal work on this project are required to be certified to perform asbestos removal work in the state of Ohio. The subcontractor must present evidence of this certification to Ravenna Arsenal Inc. and the Ravenna AAP COR Staff prior to beginning work.

5.3.4. Air tests and environmental monitoring will be performed as required by OSHA and EPA regulations.

6. DISCONNECTION AND DISASSEMBLY (for only those items considered salvageable):

6.1. Disconnection: Included in this project is the requirement for the contractor to perform utility and process line disconnection. Electrical disconnection will be at the junction box, panel, or buss duct. The disconnected electrical leads, wires or conduit will individually identify (tagged or matchmarked) the positive (with service or voltage required, and amps drawn), negative, neutral, etc., posts. In all cases, the cutting of electrical lines between equipment and junction boxes will not be allowed. The electrical work performed by this project shall conform to applicable National Electrical Code (NEC) standards, specifications and procedures. Mechanical disconnection will be at appropriate junctions or distribution points (i.e. flanges) as to minimize protruding process system appendages with no purpose. In all cases, process line disconnection will be matchmarked at both disconnect points and flanged at open ends. All disconnection and disassembly shall be performed after decontamination procedures have been accomplished.

6.2. Disassembly: The disassembly of individual equipment items will be minimized to the extent necessary for adequate removal and safe transportation. If disassembly of an equipment item is required, decontamination shall be performed prior to this action, and all points of disassembly matchmarked for ease of reassembly.

7. DETAILED SPECIFICATIONS:

7.1. Remove and dispose of one underground storage tank (identified at encl 2): The storage tank and its process line shall be cleaned, sludge and remaining product (gasoline) removed and disposed of. After removal, the tank shall be disposed of.

7.2 As applicable, all salvageable gasoline will be transferred to active lines or installations or otherwise removed IAW paragraph 3-8.p.(1) of AMC-P 235-1. The UST and distribution piping will be emptied, purged and cleaned of all product. Any residual oil, cleaning rags and solvent used for cleaning will be disposed of IAW EPA, state, and local regulations. A Preliminary Assessment Screening (PAS) statement of findings relative to the tank removal and a DD Form 337 are required to be submitted and approved prior to commencement of excavation. The tank and associated piping, and any contaminated soil shall be removed and disposed of IAW federal (40 CFR Part 280 and 281), state, and local EPA regulations. For the UST, after tank removal, the excavated holes will be filled with compacted dirt. The area will be seeded or paved as appropriate to match the surrounding area.

8. CLEANING AND PRESERVATION; GENERAL SPECIFICATIONS: Cleaning, drying, and equipment painting is not required under this effort.

9. MISCELLANEOUS:

9.1. Electrical services for those facilities being transferred from an active state to modified caretaker will not be maintained. For the equipment being inactivated as part of this project, the power source will be locked out from the production equipment. Fuzes will be removed, bagged and attached to the switchbox.

9.2. Accessories and fixtures to the basic piece of equipment shall be properly identified with the parent machine. Items of this type which are of an appropriate size and shape to permit shelf storage, will be stored on substantial shelves in lieu of being boxed or skidded, providing shelf storage area is protected from access and is adequate to provide dry, clean storage.

10. DOCUMENTATION REQUIREMENT:

10.1. Included in this SOW is the requirement to retain, at a minimum, all of the applicable, existing (updated) documents essential to the timely and efficient disposition of the facilities covered by this SOW. The documents include, but are not limited to, Plant, Building and Utility Drawings; Equipment Drawings; Line Layouts; Equipment and Facility Maintenance Records; and SOPs. The documents are considered essential to the operations and must be on hand at the plant. Care must be taken to provide adequate protection for these documents, not only from the elements, but also from possible destruction by fire or flood.

10.2. During execution of this SOW, Ravenna AAP's Maintenance Plan, Appendix B must be updated to include changes in the status of the facilities. It also must include a description of standby maintenance, provision for inspection at stated intervals, and provision for records of standby maintenance and inspection.

10.3. During execution of the SOW, Ravenna AAP's as built drawings are to be revised/deleted due to tasks accomplished in this SOW.

11. INSPECTION/FINAL ACCEPTANCE:

11.1. Contractor performance on this SOW will be monitored by the Ravenna AAP COR Staff. Unless otherwise specified, the contractor is responsible for the performance of all inspection and test requirements.

11.2. Inspections and Tests. Each piece of equipment/facility or task will be examined to assure compliance with the requirements set forth in this SOW and to assure that the defects noted in the initial visual, operational, and analytical inspections and test have been corrected. These quality conformance examinations will be completed on each item prior to being offered for acceptance; failure to pass any examination or test will be cause for rejection.

11.3. Upon project completion, the COR Staff will inspect facilities and, if acceptable, notify HQ, AMCCOM in writing that facilities are ready for final acceptance inspection.

11.4. Final acceptance inspection will be performed by a representative of HQ, AMCCOM unless this is delegated, in writing, to the COR Staff.

11.5. The final acceptance of this project will take place upon receipt by the contractor of written approval from HQ, AMCCOM/PCO.

3 Encls
as stated

DOCUMENT SUMMARY LIST
PROJECT 5938000-6
RAVENNA AAP

DOCUMENT CATEGORY:

Category 1 - The requirements contained in the directly cited document contractually applicable to the extent specified. Unless otherwise specified in the solicitation, contract or contract modification, all requirements contained in reference and subsequently referenced documents are contractually for guidance and information only.

Category 2 - The requirements contained in the directly cited document and the reference documents identified in the directly cited document are contractually applicable to the extent specified. Unless otherwise specified in the solicitation, contract or contract modifications, all requirements contained in subsequently referenced documents within reference documents are contractually for guidance and information only.

Category 3 - Unless otherwise specified in the solicitation, contract or contract modifications, all requirements contained in the directly cited document and all reference and subsequently referenced documents are contractually applicable to the extent specified.

<u>Document Number</u> (Contract Reference) <u>Applicable Tailoring</u>	<u>Document Title</u>	<u>Document Date/</u> <u>Document Category</u>
1. AMC-P 235-1 (SOW Para 8.2.)	Maintenance and Layaway of Government-owned, Contractor-operated Facilities	10 Jul 90 Cat 1
2. 40 CFR 280 & 40 CFR 281 (SOW Para 8.2.)	Federal Register, Volume 53, No. 185	23 Sep 88 Cat 3

30 AUG 1993

RAVENNA ARMY AMMUNITION PLANT (AAP)
PROJECT 5938000-6
UNDERGROUND TANK TO BE REMOVED

TANK NO.	LOCATION	DIKE	SIZE	CONTENTS
3	POST # 1	N/A	285	GASOLINE

ENCL 2

List Of Restricted Chlorofluorocarbons (CFC) And Halons

<u>Names</u>	<u>Synonyms</u>	<u>Formula</u>
CFC-11	Freon-11, R-11, Trichlorofluoromethane	CFCL ₃
CFC-12	Freon-12, R-12, Dichlorodifluoromethane	CCL ₂ F ₂
CFC-113	Freon-113, R-113, Trichlorotrifluoroethane	CCL ₂ F-CCLF ₂
CFC-114	R-114, Dichlorotetrafluoroethane	CF ₂ CL-CCLF ₂
CFC-115	R-115, Chloropentafluoroethane	CCLF ₂ -CF ₃
CFC-13	Chlorofluorocarbon-13	UNFURNISHED
CFC-111	Chlorofluorocarbon-111	UNFURNISHED
CFC-112	Chlorofluorocarbon-112	UNFURNISHED
CFC-211	Chlorofluorocarbon-211	UNFURNISHED
CFC-212	Chlorofluorocarbon-212	UNFURNISHED
CFC-213	Chlorofluorocarbon-213	UNFURNISHED
CFC-214	Chlorofluorocarbon-214	UNFURNISHED
CFC-215	Chlorofluorocarbon-215	UNFURNISHED
CFC-216	Chlorofluorocarbon-216	UNFURNISHED
CFC-217	Chlorofluorocarbon-217	UNFURNISHED
Halon 1211	Bromochlorodifluoromethane	CF ₂ BrCL
Halon 1301	Bromotrifluoromethane	CF ₃ Br
Halon 2402	Dibromotetrafluoroethane	C ₂ F ₄ Br ₂
Methyl Chloroform (MCF)	1,1,1 Trichloroethane	CH ₃ CCL ₃
Carbon Tetrachloride	Tetrachloromethane	CCL ₄



RAVENNA ARSENAL, INC.
8451 STATE ROUTE 5, RAVENNA, OHIO 44266-9297
TELEPHONE: (216) 358-7111 • FAX: (216) 297-3216

August 26, 1993

THRU: Contracting Officer's Representative
Ravenna Army Ammunition Plant
8451 State Route 5
Ravenna, Ohio 44266-9297

TO: Commander
U.S. Army Armament, Munitions and Chemical Command
ATTN: AMSMC-PBS-L (R)
Rock Island, Illinois 61299-6000

Subject: Cleaning and Removal of Below Ground Storage Tank #3 at
Post #1
(REF: Letter dated 24 Aug 1993, Subject: SAB)

Dear Sir:

Attached for further action is the required P17 documentation for the above subject matter. Preparation and submission of this documentation has been completed in accordance with the following directive: GOCO LAP Section B dated 23 July 1992, Subject: Preparation of P17's for transitioning RVAAP into modified caretaker status.

Point of contact for the Ravenna Arsenal, Inc. is Ms. Sue McCauslin, DSN 346-3220.

Sincerely,

RAVENNA ARSENAL, INC.

H.R. Cooper
Engineering Manager

Concurrence:

David E. Kanavy
Accounting Manager

:DJ/bk/USTPOST1.P17

cf: AMSMC-IR (Disposal)
AMSMC-EH
AMSMC-PAI-G/Team A
AMSMC-EQ

c: N. Wulff
S. McCauslin
T. Davis

J. McGee
D. Kanavy
D. Jendrisak

File

LAYAWAY AND/OR REDISTRIBUTION PROJECT
RCS DRC-836

1. Project No. _____ (AMCCOM) 2. Appropriation _____
3. Project Execution Date FY93 Proposed
4. Title: Cleaning and Removal of Inactive Below Ground Storage Tank #3 at Post #1
5. Total Cost \$ 9,394 6. Annual Maintenance Cost N/A
7. Facility/Contractor: Ravenna Army Ammunition Plant (GOCO)
Ravenna Arsenal, Inc.
8. Item(s) Produced/Support:
 - a. On reactivation, is facility scheduled to produce new items? No
 - b. If so, list item(s) N/A
9. Production lines being laid away: N/A
10. Estimated completion date: 30 SEP 93
11. Purpose: To eliminate the need for yearly inspection of registered below ground tanks and to eliminate the requirement to upgrade this UST to required standards.
12. Layaway is: In place X On Site _____ Central Storage _____
13. State of Readiness: N/A
14. Remarks: None
15. Production Capability: N/A
16. Mobilization Data: N/A
17. Tank #3 is a registered underground gasoline storage tank that served the emergency generator at Post #1.
18.
 - a. Collect and dispose of existing product (gasoline).
 - b. Clean tank and lines; and remove, collect and dispose of sludges, water, residues.
 - c. Excavate and damage or cut up tank for disposal IAW approved UST removal specifications.
 - d. Assess soils in tank area for contamination, and remove and dispose of any contaminated soil.
 - e. Backfill and final grade excavated area.

19. Acquisition value of facility to be laid away with this project.

a.	Land improvements	\$	N/A
b.	Building	\$	N/A
c.	DIPEC reportable production equipment	\$	N/A
d.	Non-DIPEC reportable production equipment	\$	N/A
e.	Non-production equipment	\$	N/A

20. Replacement value of facility to be laid away with this project.

a.	Land improvements	\$	N/A
b.	Building	\$	N/A
c.	DIPEC reportable production equipment	\$	N/A
d.	Non-DIPEC reportable production equipment	\$	N/A
e.	Non-production equipment	\$	N/A

21. Layaway quantities.

	<u>QUANTITY</u>
a. Number of IPE items (DIPEC reportable)	-0-
b. Number of production equipment items (NON-DIPEC)	-0-
c. Number of non-production items	-0-

22. Detailed Cost Data: See attached M.O. cost estimate.

23. Alternate Courses of Action: None

RAVENNA ARMY AMMUNITION PLANT
8451 STATE ROUTE 5
RAVENNA, OHIO 44266-9297

ENVIRONMENTAL DOCUMENTATION

Ravenna Arsenal, Inc.

August 25, 1993

Environmental impacts of actions to be taken under the proposed underground storage tank cleaning/removal project has been considered within an Environmental Assessment to be prepared by the Corps of Engineers, under contract to AMCCOM, as part of the transitioning of RVAAP to modified caretaker status.

Ravenna Arsenal, Inc.

RAVENNA ARMY AMMUNITION PLANT
Ravenna, Ohio 4426-9297

COST ESTIMATE - REMOVAL OF TANK #3 - POST 1

1. Equipment								

N/A								
2. Structure								

Quantity	Item Nomenclature	Decontam	Clean	Preserv	(Subcontract) Rehab/Repair	Other		
-----	-----	-----	-----	-----	-----	-----		
1 EACH	Clean and Remove Tank and Appurtenances, Sample, Remove and Dispose Contaminated Soils, Backfill and Final Grade	-0-	-0-	-0-	\$3,800	-0-		
3. Utilities								

N/A								
4. Electrical Instrumentation and Line Work								

N/A								
Subcontract					\$3,800			
Engineering					\$39			
Overhead/Fee					\$5,555			
-----					-----			
Total Costs					\$9,394			

RAVENNA ARSENAL INC.

DATE: 12-Aug-93

COST ESTIMATE FOR: CLEANING & REMOVAL of USTs and CLEANING of ASTs

REFERENCE: PARA. NEW - REMOVE UG GAS TANK AT POST 1

PROJECT # : 5938327-4

N
N UST812

FY93 BUDGET - 31-DEC-92 (NEW DISCLOSURE)

DIRECT MISC: MATERIALS AND SERVICES	\$0	
SUBCONTRACTS	\$3,800	
	-----	\$3,800

DIRECT LABOR:	HOURS	AVG RATE	LABOR	
2320 GEN MTCE	0.0	\$0.00	\$0	
2580 RDS & GRDS MTCE	0.0	\$0.00	\$0	
22x0 UTILITY MTCE	0.0	\$0.00	\$0	
2560 PACKAGE LINES	0.0	\$0.00	\$0	
2100 OTHER HOURLY LABOR	0.0	\$0.00	\$0	
TOTAL HOURLY COST	-----		-----	\$0
2540 ENGINEERING	2.0	\$19.50	\$39	
TOTAL SALARY COST	-----		-----	\$39
TOTAL HOURS	2.0			

DIRECT FRINGES:		RATE	DOLLARS	
HOURLY	\$0	75.83%	\$0	
SALARIED	\$39	43.10%	\$17	
			-----	\$17

TOTAL DIRECT LABOR AND FRINGES AND OTHER COSTS:	-----	\$3,856
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ALLOCATED OVERHEAD:	UNITS	RATE	DOLLARS	
MAINTENANCE	0.0	\$29.581	\$0	
TOTAL ALLOCATED OVERHEAD			-----	\$0

TOTAL COST INPUT			-----	\$3,856
GENERAL OVERHEAD		109.536%		\$4,224
G&A OVERHEAD		12.375%		\$1,000
FEE		3.463%		\$314
			-----	\$9,394

TOTAL FUNDS ESTIMATE - WITH OVERHEADS	=====	\$9,394
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RAVENNA ARSENAL INC.

DATE: 12-Aug-93

COST ESTIMATE FOR: CLEANING & REMOVAL of USTs and CLEANING of ASTs
PARA. NEW - REMOVE UG GAS TANK AT POST 1

DETAIL OF MATERIAL AND LABOR CHARGES: **

MATERIAL AND SERVICES:	UNITS	UOM	COST/UOM	TOTAL COST
DESCRIPTION	0	EA	\$0.00	\$0.00
DESCRIPTION	0	EA	\$0.00	\$0.00
DESCRIPTION	0	EA	\$0.00	\$0.00
DESCRIPTION	0	EA	\$0.00	\$0.00

SUBCONTRACTS:	UNITS	UOM	COST/UOM	TOTAL COST
REMOVE GAS TANK	1	EA	\$3,800.00	\$3,800.00
DESCRIPTION	0	EA	\$0.00	\$0.00
DESCRIPTION	0	EA	\$0.00	\$0.00
DESCRIPTION	0	EA	\$0.00	\$0.00
DESCRIPTION	0	EA	\$0.00	\$0.00

LABOR - DEPT:	HOURS	RATE	LABOR COST
2320 W-031 Millwright	0.0	\$13.95	\$0.00
2320 W-034 Electrician	0.0	\$13.95	\$0.00
2320 W-104 Sheetmetal	0.0	\$13.95	\$0.00
2320 W-152 Instr Rpr	0.0	\$14.03	\$0.00
2320 W-038 Plumber	0.0	\$13.95	\$0.00
2320 W-091 Carpenter	0.0	\$13.89	\$0.00
2100 W-180 Auto Mech	0.0	\$13.78	\$0.00
2580 W-003 Mtce Laborer	0.0	\$12.67	\$0.00
2580 W-025 Trk Driver	0.0	\$13.02	\$0.00
2580 W-075 Hvy Eqp Oper	0.0	\$13.95	\$0.00
2200 W-033 Oper Eng-Stm	0.0	\$13.95	\$0.00
2260 W-088 Water Plt Op	0.0	\$13.86	\$0.00
2260 W-191 Util Eqp Mch	0.0	\$14.03	\$0.00
2280 W-086 Sewg Disp Op	0.0	\$13.86	\$0.00
2560 W-158 Mech Eqp Ins	0.0	\$14.00	\$0.00
2540 ENGINEERING	2.0	\$19.50	\$39.00