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NAS CECIL FIELD, FL
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DECONTAMINATION PROCEDURES REPORT NAS CECIL FIELD FL
4/1/1999
HARDING LAWSON ASSOCIATES

DECONTAMINATION PROCEDURES REPORT

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

UNIT IDENTIFICATION CODE: N65928
CONTRACT NO.: N62467-89-D-0317/151

APRIL 1999

SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORTH CHARLESTON, SOUTH CAROLINA
29418

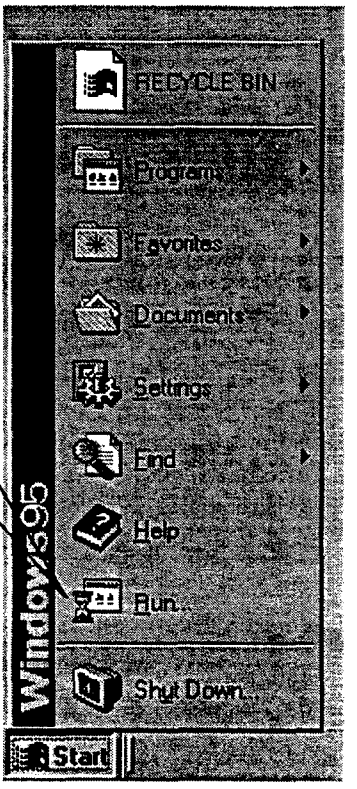
PRINTED ON RECYCLED PAPER

DP3 Installation Instructions

Hardware and Software Requirements
The program was developed for use with Microsoft Access-97™, and compatible updates, running on a Windows 95™ operating System. In addition, the program invokes data stored in Microsoft Excel™ and Word™ files. Therefore, these Microsoft Office-97™ software components are also required in order to properly run DP3.0. A CD-ROM reader is required for the initial installation to your computer's hard drive. Suggested minimum system hardware requirements for satisfactory performance include at least 100 MB free space on the hard drive, a 75Mhz CPU, and 32 MB RAM. Of course, more is always better. A screen resolution of 800x600 or 1024x768 DPI, with a display capable of a minimum 256 colors is recommended.

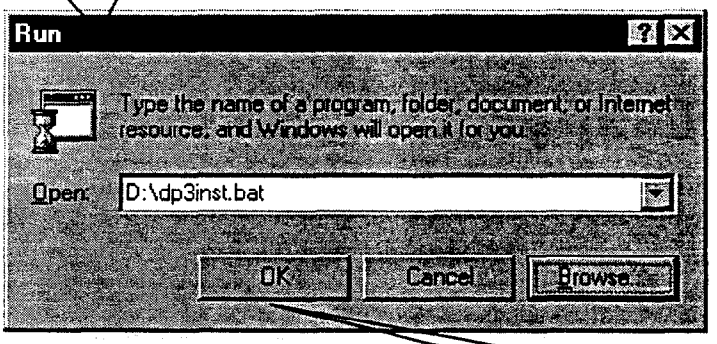
1. Click the Start Button (after inserting the CD)

2. Click the Run Button when the menu appears



3. When the run dialog box opens, type in the drive path of your CD-ROM, and the file name "DP3inst.bat"

(or use the Browse feature)



4. Click "OK" to begin the Installation Process

04870

This software was produced by Gerald B. Girardot, Harding Lawson Associates, for Southern Division Naval Facilities Engineering Command. The program provides a graphical user interface to access information published in **Decontamination and Closure Report for Naval Air Station Cecil Field, Jacksonville, Florida (HLA, 1999).**

Hardware and Software Requirements

The program was developed for use with Microsoft Access-97™, and compatible updates, running on a Windows 95™ operating System. In addition, the program invokes data stored in Microsoft Excel™ and Word™ files. Therefore, these Microsoft Office-97™ software components are also required in order to properly run DP3.0. A CD-ROM reader is required for the initial installation to your computer's hard drive. Suggested minimum system hardware requirements for satisfactory performance include at least 100 MB free space on the hard drive, a 75Mhz CPU, and 32 MB RAM. Of course, more is always better. A screen resolution of 800x600 or 1024x768 DPI, with a display capable of a minimum 256 colors is recommended.

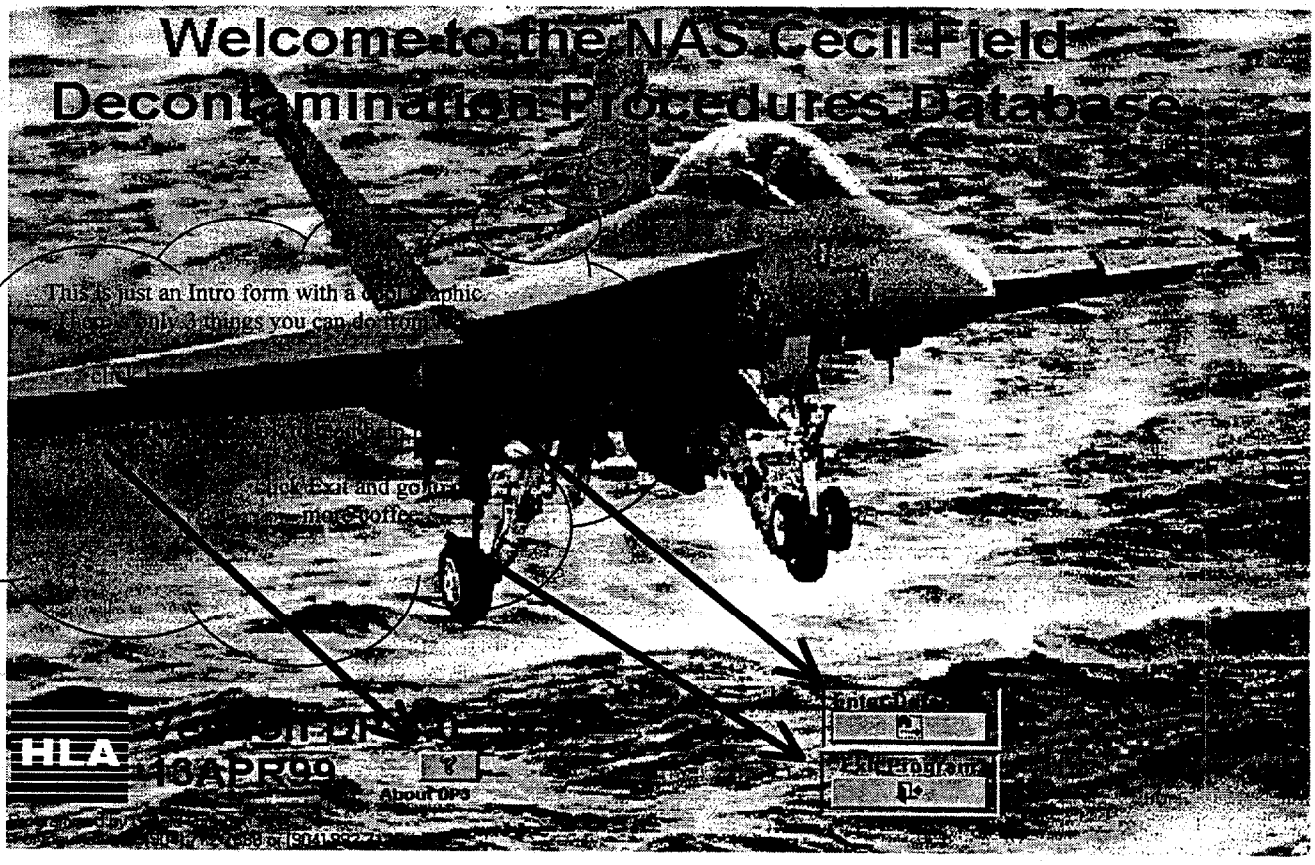
Functionality

When opening forms used to view Excel™ and Word™ files, the windows may be stretched to the desired area. Files may be printed or saved to separate directories from these forms.

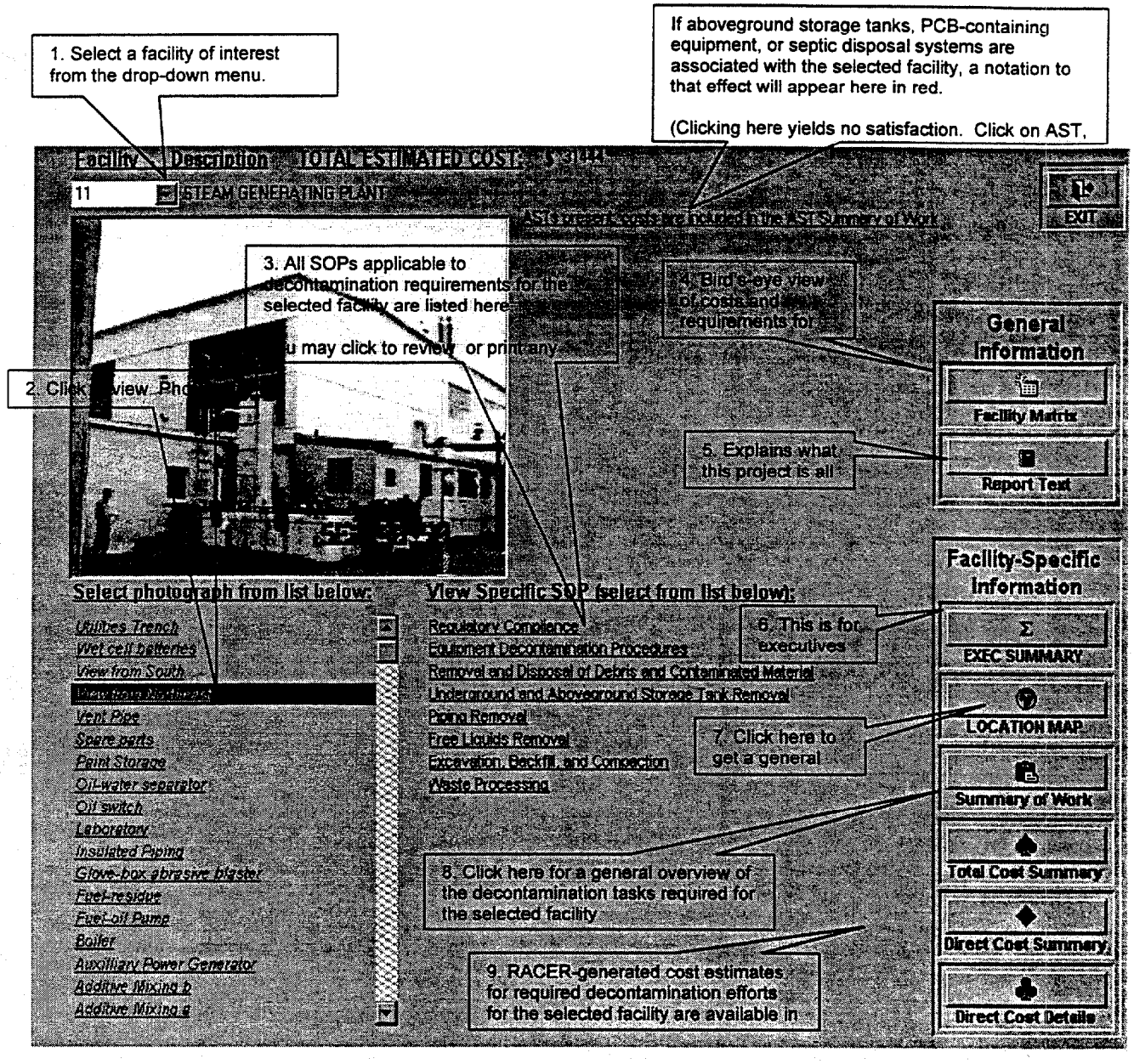
(Known) Bugs

Bugs encountered in beta test versions of this software include, error messages when closing forms used to view Excel™ and Word™ files. We believe that these problems have been solved for this version. However, in so doing, the user is now enabled access to the underlying files. Care should be exercised to avoid changing data. If this occurs, the original program may be reloaded from the compact disk. If an error occurs while closing a form viewer, hit the escape key 3 times before attempting to click on the exit button. Additional bugs may be reported to HLA, for correction in subsequent versions of this software.

What to do.



What to do Next (we'll assume you clicked on the binoculars).



Decontamination Procedures Report

Naval Air Station Cecil Field
Jacksonville, Florida

April 1999

Southern Division
Naval Facilities Engineering Command
North Charleston, South Carolina 29418

Decontamination Procedures Report

Naval Air Station Cecil Field
Jacksonville, Florida

April 1999

Southern Division
Naval Facilities Engineering Command

This document was prepared for the sole use of Naval Air Station Cecil Field and Southern Division, Naval Facilities Engineering Command, the only intended beneficiaries of our work.

Rao Angara
Project Manager

Robert C. Lunardini, Jr., P.E.
Project Engineer

This document meets standards prescribed in project planning documents and has been reviewed by qualified professionals.

Dirk R. Brunner
Quality Control Reviewer

The engineering design and professional opinions rendered in this set of planning documents that describe the Decontamination Procedures Report for Naval Air Station Cecil Field, Jacksonville, Florida, were conducted or developed in accordance with commonly accepted procedures consistent with applicable standards of practice. These planning documents are intended to be implemented by Southern Division, Naval Facilities Engineering Command's Response Action Contract Contractor or Comprehensive Long-Term Environmental Action, Navy Contractor. The plan for decontaminating these buildings is based on assessment information collected between December 1998 and February 1999 and engineering detailed in the text and appended to this report. If conditions are determined to exist differently than those described, the undersigned professional engineer should be notified to evaluate the effects of any additional information on the design described in this report.

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4/23/99

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Expires: February 28, 2001

Decontamination Procedures Report
April 1999

Naval Air Station Cecil Field
Jacksonville, Florida

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1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

The purpose of this report is to identify regulated waste and other items that require decontamination or removal from buildings at NAS Cecil Field prior to the transfer of ownership of these buildings. The Navy's objective is to transfer properties that are clean from an environmental standpoint and in compliance with existing environmental regulations. Harding Lawson Associates (HLA) has been contracted by the Navy to visually examine the buildings, identify items that require action, prepare standard operating procedures (SOPs) for implementing required actions, and provide a cost estimate to implement the required actions.

1.2 APPROACH

The Navy provided HLA with a list of 100 buildings. Each building was grouped into one of three priority categories: high, medium, or low based on its anticipated transfer date. Approximately 30 to 35 buildings are in each group.

Starting with the high priority buildings HLA conducted a walkover of each individual building. HLA videotaped each walkover concentrating on items that require action. If the building was occupied the tenant was interviewed. Vacant buildings were videotaped only. Some outlying buildings that weren't on the list were added to the list if they were obviously supporting the building being inspected. For example, some of the hangars had electrical equipment located in an adjacent building that serviced the hanger.

For each building a summary of work was developed. The summary of work lists the former use of the building and the required actions. For each action a standard operating procedure was created. Finally, for each building a cost estimate was prepared based on the decontamination procedures required. The cost estimating software RACER, version 3.2, was used to prepare the cost estimates. In some cases, components (e.g., Underground Storage Tank) of RACER were used to estimate costs for similar closure activities (e.g., subsurface oil/water separators).

The remaining chapters of this report are as follows.

2.0 Regulatory Requirements – lists the regulations that were considered for this work.
3.0 SOP Development – explains how each SOP was developed.
4.0 Costing Approach - explains how the cost estimates were created.
5.0 Facility Summary – explains how the facility summaries were prepared and provides summary matrices for each priority group.

Chapters 1.0 through 5.0 explain how the work was accomplished. The appendices contain the summaries of work, SOPs, and cost estimates. Appendix A contains the Summary of Work for each of the buildings. Each Summary of Work lists the SOPs that apply to that building. Appendix B contains all the SOPs. Appendix C contains all the cost estimates.

2.0 REGULATORY REQUIREMENTS

Federal, State, and local environmental regulations, rules and ordinances were evaluated for this work. Identified regulations, rules, and ordinances that have applicability, in whole or part, to this work are listed here and in the Regulatory Compliance SOP. The Contractor is expected to comply with all rules, ordinances, and regulations relating to buildings, employment, transportation, disposal, and the preservation of public health and safety.

2.1 APPLICABLE FEDERAL REGULATIONS

The following federal regulations, laws, ordinances, and rules were identified to apply to this work.

a. Resource Conservation and Recovery Act of 1976 (RCRA)
b. Identification and Listing of Hazardous Wastes (40 CFR 261)
c. Generator Standards (40 CFR 262)
d. Transporter Standards (40 CFR 263)
e. TSDF Standards (40 CFR 264)
f. RCRA Land Disposal Restrictions (40 CFR 268)
g. Hazardous Waste Permit Program (40 CFR 270)
h. Toxic Substances Control Act (TSCA)
i. PCB Manufacturing, Processing, Distribution, and Use Prohibitions (40 CFR 761)
j. All applicable U.S. Dept. of Transportation rules and regulations
k. Hazardous Waste Management Systems (40 CFR 260)
l. Standards Applicable to Generators (40 CFR 262)
m. Standards Applicable to Transporters of Hazardous Waste (40 CFR 263)
n. United States Department of Labor (USDOL) Occupational Safety and Health Standards (29 CFR 1910)
o. U.S. DOT Hazardous Material Regulations (49 CFR Subchapter C, Parts 171-177)
p. U.S. DOT Container Specifications (49 CFR 178-179)
q. USDOL Occupational Safety and Health Standards (29 CFR 1910, 1926)
r. USEPA Hazardous Waste Management Systems (40 CFR 260)
s. Standards Applicable to Generators of Hazardous Waste (40 CFR 262)
t. Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities (40 CFR 264)
u. Title II of Toxic Substances Control Act of 1979 (TSCA)
v. Asbestos Hazard Emergency Response Act (AHERA)
w. Asbestos School Hazard Abatement Reauthorization Act (ASHARA)
x. National Emission Standards for Asbestos (40 CFR 61, Subpart M)
y. Asbestos Abatement Regulations (40 CFR 763)
z. Asbestos OSHA Regulations (29CFR 1926.58)
aa. Clean Air Act Amendments (CAAA)

2.2 APPLICABLE STATE REGULATIONS

The following State of Florida regulations, laws, ordinances, and rules were identified to apply to this work.

a. Chapter 62-4 Permits
b. Chapter 62-7 Resource Recovery and Management
c. Chapter 62-63 Local Tank Regulation Programs
d. Chapter 62-107 Short-term Emergency Response
e. Chapter 62-150 Hazardous Substance Release Notification
f. Chapter 62-160 Quality Assurance
g. Chapter 62-2 Air Pollution
h. Chapter 62-257 Asbestos Fees
i. Chapter 62-701 Solid Waste Facilities
j. Chapter 62-707 Degradable Materials
k. Chapter 62-710 Used Oil
l. Chapter 62-711 Waste Tires
m. Chapter 62-712 Biohazardous and Biological Waste Management Rule
n. Chapter 62-730 Hazardous Waste
o. Chapter 62-761 Underground Storage Tank Systems
p. Chapter 62-762 Aboveground Storage Tank Systems

2.3 APPLICABLE LOCAL REGULATIONS

The Contractor will be responsible for complying with all applicable facility, county, and municipal ordinances, codes, rules, and regulations and obtain all required permits including seasonal load limits that may be imposed to cover transportation on certain roads

2.4 OTHER CODES, STANDARDS, AND GUIDANCE DOCUMENTS

In addition to regulatory requirements, the Contractor will be responsible for following the codes, standards, and guidance documents cited in other sections of the SOPs such as, but not limited to API Recommended Practices, USEPA Guidance Documents, and ASTM Standards. Other national codes which the Contractor will comply with for all site work that are not specifically cited in other sections include the following.

a. BOCA - Building Officials and Code Administrators - "Basic Building Code".
b. AGC - Associated General Contractors of America - "Manual of Accident Prevention in Construction".
c. NEC - National Electrical Code.

3.0 STANDARD OPERATING PROCEDURE DEVELOPMENT

The development of procedures to decontaminate and close a wide variety of buildings (e.g., power plants to craft shops) and facilities (e.g., swimming pools) at NAS Cecil Field was based the desire to maintain flexibility in its application to all such buildings and facilities, yet retain awareness to and compliance with regulatory and reuse concerns and needs. The procedures are also expected to be applicable to other installations in addition to NAS Cecil Field. A consistent format, similar to CSI format, was used throughout the SOP development process. One SOP, the Summary of Work, presents the summary of all work planned at a specific building or facility. This summary of work SOP identifies specific work, including quantities, and activities described in specific technical SOPs that are referenced in the summary of work SOP. A summary of work is prepared for each building or facility.

3.1 FORMAT

To capture essential work items and scope expected for decontamination and closure activities, the format of the SOPs was based on the specification format of the CSI. The CSI format was selected because it is commonly used and accepted in the industry, including the technical staff of the Contracting Officer as well as potential contractors. Specific technical SOPs were developed and are referenced by a summary of work SOP that describes the scope of work to be completed at a specific building or facility. The technical SOPs are more comprehensive than may be required for any particular use or application. The intent is not to adjust the technical SOPs for each building. Where decontamination and closure work includes more than one building or facility, then summaries of work are prepared for each building. This approach provides reasonably accurate descriptions of work and cost estimates (see Chapter 4) for individual buildings and facilities. Economies of scale can easily be realized during implementation for projects involving more than one building.

3.2 SUMMARY OF WORK

A summary of work SOP is intended to provide a brief background of the building or facility and to describe the work to be performed, referencing specific technical SOPs for detailed instructions to the Contractor. The summary of work SOP includes the following components:

Part 1 General

1.01 Summary - a brief description of the building/facility with a focus on information pertinent to decontamination and closure, including location, overall dimensions, type of construction, prior and most current use/status, summary of work already completed, and work that is planned to be completed under the Summary of Work or under other planned activities.

1.02 Description of Work

A. Plans required to be submitted prior to undertaking substantial fieldwork
B. Procedures/Activities to be undertaken, (referencing specific technical SOPs and addressing proper sequencing of activities)
C. Labor and materials requirements
D. Permit requirements
E. Prevention of environmental impacts

1.03 Personnel Training and Qualifications

1.04 Access and Use of Premises

1.05 Working Hours

1.06 Measurement and Payment - The method and basis of payment for preparation of plans and completion of other activities cited in 1.02 above.

Part 2 Products - not usually applicable - see technical SOPs

Part 3 Execution - not usually applicable - see technical SOPs

Contractual aspects of the project, such as insurance, and other terms and conditions, are not addressed in the summary of work SOP or technical SOPs. These important aspects of contracting will be dealt with separately by Southern Division, Naval Facilities Engineering Command.

A summary of work is prepared for each building or facility included in a project. It is expected that certain portions of work required for multiple building/facility projects could be addressed as a group. For example, only one health and safety plan would be needed from a contractor, as long as the plan addresses all the concerns at all buildings.

3.3 TECHNICAL DESCRIPTION

Specific decontamination and closure activities are described in technical SOPs. Activities were grouped based on past experience on other decontamination and closure projects, including demolition projects. SOPs developed, though not necessarily used at each facility to be decontaminated and closed, include:

1. Regulatory Compliance
2. Special Project Plans and Procedures
3. Project Schedules
4. Shop Drawings, Project Data, and Samples

5. Existing Utilities and Underground Structures
6. Equipment Decontamination Procedures
7. Water Collection and Treatment
8. UST and AST System Removal
9. Piping Removal
10. Beryllium Abatement
11. Removal of PCB Transformers, Equipment, and Liquid
12. Removal and Disposal of Debris and Contaminated Material
13. Drum Handling and Removal
14. Free Liquids Removal
15. Mercury Handling and Disposal
16. Fugitive Emission Control
17. Waste Processing
18. Excavation, Backfill, and Compaction
19. Pavement, Portland Cement Concrete (Minor)

Each of these SOPs is generally organized in a similar format as follows:

PART 1 - GENERAL

1.01 Related Requirements

1.02 Related Standard Operating Procedures

1.03 Description of Work

1.04 Definitions

1.05 Safety and Quality Assurance

1.06 Equipment

PART 2 - PRODUCTS

PART 3 - EXECUTION

3.01 Protection

3.02 Work Procedure

3.03 Equipment Removal

3.04 Liquid Removal

3.05 Spill Cleanup Requirements

3.06 Storage for Disposal

3.07 Cleanup

3.08 Disposal

Specific topics to be addressed under each Part of the SOP vary depending on the level of detail required to control and describe the work requested. Complete SOPs for each activity listed above can be found in Appendix B.

4.0 COSTING APPROACH

4.1 ESTIMATING SOFTWARE

The cost estimates for this work were developed using the Remedial Action Cost Engineering and Requirements (RACER) Version 3.2. RACER was developed by the U.S. Air Force. It is a pc-based environmental cost estimating system that estimates costs for all phases of remediation including:

Studies (RI/FS and RFI/CMS),
Remedial Design,
Remedial Action (including Operations and Maintenance), and
Site Work and Utilities.

RACER uses a patented methodology for estimating costs. RACER cost models are based on generic engineering solutions for environmental projects, technologies, and processes. The engineering solutions were derived from historical project information, government laboratories, construction management agencies, vendors, contractors, and engineering analysis. The generic engineering solutions are tailored by the estimator to reflect specific project conditions and requirements. The tailored design is translated into specific quantities of work. The quantities of work are priced using current cost data.

RACER is different from other cost estimating systems because:

- RACER estimates costs for all phases of remediation.
- RACER cost estimates are location-specific and include contractor general conditions, overhead and profit, and escalation.
- The RACER cost estimating process provides the detail of traditional quantity take-off (QTO) estimates but is much faster, less prone to errors, and less labor intensive.
- RACER uses pricing data that are current and that are researched and updated periodically to ensure accuracy.
- RACER cost estimates reflect the engineering design of the process in question. Other cost estimating systems rely on historic cost data or "dollars per foot." The assembly cost database was developed from the Corps of Engineers' Unit Price Book and supplemented by vendor and contractor quotes.

4.2 ESTIMATES AND REPORTS

For this work the Remedial Action and Site Work and Utilities portions of RACER were used. For each Building requiring decontamination an individual cost estimate was developed. For each cost estimate three reports were generated to give the user three different levels of detail. The reports are:

total cost summary,
direct cost summary, and
direct cost detail.

The total cost summary rolls up all costs into a one-page summary. The direct cost summary provides direct cost details in a one-page summary. The direct cost detail breaks down the field execution tasks into labor, materials, and equipment.

4.3 ASSUMPTIONS

For all estimates the following assumptions were made.

- The start date for project execution is June 1999.
- Project management is 10 percent of direct and indirect costs.
- A 10 percent contingency was added to each estimate.
- General condition costs are for field related tasks required to execute a contract but are not specific to a technology or restoration task. These items can include, but are not limited to, supervision, job trailers, storage trailers, portable toilets, temporary plants, personal protective equipment, travel, per diem, permits, taxes, insurance costs, and bonds. For this work the cost of preparing a Work Plan and Health and Safety Plan is included in general conditions costs.

5.0 FACILITIES SUMMARY

Project summaries and cost estimates were prepared for decontamination of a variety of buildings at NAS Cecil Field.

5.1 DESCRIPTION

Using the procedures described in Chapters 2 through 4 a Summary of Work and a cost estimate for each building were prepared. Appendix A contains each Summary of Work. Only those technical SOPs that are applicable were referenced in each of the summaries of work. Typical activities included in these summaries of work included concrete cleaning , collection and disposal of contaminated liquids, piping cleanout, hazardous material removal and disposal, and equipment decontamination. SOPs for these activities can be found in Appendix B. Cost estimates prepared for each building are presented in Appendix C. If a building contains asbestos or lead-based paint it was identified in the Summary of Work however, cost estimates do not address remediation of asbestos or lead-based paint.

5.2 SUMMARY MATRIX

For the purposes of budgeting and scheduling contractor procurement, a summary matrix of the decontamination and closure activities planned are presented in Table 5-1. This table presents a listing of the individual building/facility and indicates which decontamination and closure activity applies to the building. This summary is expected to be useful in combining similar work activity to be undertaken at NAS Cecil Field. For example, it clearly identifies those facilities that require removal of miscellaneous waste petroleum, oil, and lubricants (POL) so a contractor can be brought in to address all POL removal. Alternatively, the table clearly identifies the scope and estimated cost of activities required for a specific facility to be decontaminated, information useful in assessing effort and costs and setting priorities for property transfer.

TABLE 5-1
PRIORITY 1 MATRIX
NAS CECIL FIELD
DECONTAMINATION AND CLOSURE
APRIL 1999

	Building No.	Name	No Action Required	Remove POL/Haz Waste	Concrete Cleaning	Decon AST	Decon O/W Separator	Decon/ Close Hydraulic Lifts	Removal/ Recycle Mercury Lamps	Piping Cleanout	Decon UST	Remove PCB Dielectric Fluid	Decon Beryllium Dust
1	7	Flammable and Hazardous Materials Storage		x									
2	9	Main Fire Station		x	x								
3	11	Steam Generating Plant		x	x		x						
4	13	Hangar 13		x									
5	14	Hangar 14	x										
6	48	Maintenance Aircraft Spare Storage (check)	x										
7	67	Hangar 67		x	x								
8	72	Flightline Fire Station		x									
9	80	Automotive Maintenance and Repair Shop		x				x					
10	81	Maintenance Building		x	x						x		
11	91	Mess Hall		x			x						
12	101	Former Pesticide Building							x				
13	216	Fire Pump/Air Compressor Building		x	x		x						
14	247	Public Works Maintenance Storage Shed	x										
15	279	Wading Pool	x										
16	280	Bathhouse		x									
17	281	Swimming Pool	x										
18	282	Pool Pavilion	x										
19	293	DT1 High Speed Refueling Office	x										
20	329	Parachute Loft	x										
21	338	Training Building		x			x			x			
22	345	Main Pool	x										
23	346	Wading Pool	x										
24	347	Patio Area	x										
25	397	Pesticide Storage Building		x							x		
26	398	Golf Course Storage Facility	x										
27	814	400 Hertz Generator Building for Hangar 815							x				
28	815	Hangar 815		x									
29	816	Motor Generator Building for Hangar 815	x										
30	817	Motor Generator Building for Hangar 825							x				
31	825	Hangar 825		x			x					x	x
32	832	Flight Simulator Training Building (PCB transformer)		x								x	
33	835	Line Shack	x										
34	836	Line Shack	x										
35	843	Building 832 Storage Facility	x										
36	863	Hangar 13 Electrical Distribution Building	x										
37	882	Chiller Building		x									
		TOTALS	17	17	5	0	5	1	3	1	2	2	1

PRIORIT . MATRIX
NAS CECIL FIELD
DECONTAMINATION AND CLOSURE
APRIL 1999

	Building No.	Name	No Action Required	Remove POL/Haz Waste	Concrete Cleaning	Decon AST	Decon O/W Separator	Decon/ Close Hydraulic Lifts	Removal/ Recycle Mercury Lamps	Piping Cleanout	Decon UST	Remove PCB Dielectric Fluid	Decon Beryllium Dust
1	16	Water Treatment Plant Number 1		x									
2	49	Transportation and Fuel Management Office	x										
5	71	Former Fuel Truck Unloading		x									
3	75	Aircraft Truck Fueling		x						x			
4	76	North Fuel Farm Tanks								x	x		
6	178	Refuel Vehicle Maintenance Shelter		x	x		x						
7	180	Old and New Filling Stations			x		x						
8	238	Golf Course Maintenance		x									
9	285	North Fuel Farm Office Building	x										
10	312	Corrosion Control Hangar		x	x		x	x					
11	313	Jet Engine Maintenance Building		x	x	x							
12	323	Battery Locker		x			x						
13	330	Liquid Oxygen Farm		x									
14	334	Jet Engine Test Cell			x		x						
15	339	Jet Engine Test Cell		x	x		x				x		
16	361	Water Treatment Plant Number 2		x									
17	370	Maintenance Shop		x									
18	371	Storage Shed		x									
19	384	Automotive Shop Building	x										
20	808	Dispensary/Dental Clinic		x					x				
21	809	Public Toilet	x										
22	810	Water Treatment Facilities Building	x										
23	824	Avionics and Aircraft Ground Support Shop		x	x								
24	860	Maintenance Hangar		x			x						
25	869	Hazardous and Flammable Storage Building	x										
26	870	Hazardous Flammable Storehouse		x									
27	928	Automotive Vehicle Shop		x									
28	1820	Aircraft Hangar		x	x								
29	1824	Radiographics Shop		x									
30	1848	Ground Support Issue and Receipt		x									
31	1850	Avionics Repair Shop		x									
32	HSR	High Speed Refuelers					x			x			
33	ST	Septic Tanks									x		
		TOTALS	6	22	8	1	7	1	1	2	2	0	0

PRIORITY MATRIX
NAS CECIL FIELD
DECONTAMINATION AND CLOSURE
APRIL 1999

	Building No.	Name	No Action Required	Remove POL/Haz Waste	Concrete Cleaning	Decon AST	Decon O/W Separator	Decon/ Close Hydraulic Lifts	Removal/ Recycle Mercury Lamps	Piping Cleanout	Decon UST	Remove PCB Dielectric Fluid	Decon Beryllium Dust
1	15	Wastewater Treatment Control Building		x							x		
2	78	FD Main Service		x									
3	80C	Battery Shop		x	x		x						
4	100	FD Services Storage Building		x					x				
5	103	Self Help Warehouse		x									
6	105	Shop		x									
7	108	Grounds Maintenance Equipment Shed	x										
8	110	Lake Fretwell Boathouse	x										
9	120	Self Help Administration Building	x										
10	177	Arresting Gear Building		x									
11	179	DRMO Storage Area	x										
12	185	Aviation Ordnance Nitrogen Facility	x										
13	201	Hazmat Shed		x									
14	241	Air Compressor Building		x	x								
15	314	Flightline Ordnance Building	x										
16	316	Flammable Materials Storage		x									
17	325	Hazardous Material Warehouse/Storage Area		x									
18	369	Hazardous Materials Storage		x									
19	560	Golf Cart Storage Building	x										
20	597	General Storage Shed		x									
21	608	Sewage Pump Station	x										
22	609	Yellow Water Weapons Water Plant		x									
23	632	Flammable Storage	x										
24	646	Hazardous Waste Storage Building		x									
25	810	Water Treatment Facilities Building	x										
26	818	Aircraft Acoustical Enclosure			x		x						
27	852	Flammable Materials Warehouse		x									
28	853	Hazardous/Flammable Materials Warehouse		x									
29	862	Miscellaneous Utilities Plant		x	x								
30	1822	F/A-18 Simulator		x	x								
31	1846	F18 Simulator		x									
32	1847	Fire Pump House		x									
33	3043	Yellow Water Housing Water Treatment Plant		x					x				
34	ASTs	Aboveground Storage Tanks				x							
35	PCBs	PCB Containing Equipment										x	
		TOTALS	10	22	5	1	2	0	2	0	1	1	0

PRIORITY 1

TAB. 1
PRIORITY 1 MATRIX
NAS CECIL FIELD
DECONTAMINATION AND CLOSURE
APRIL 1999

	Building No.	Name	No Action Required	Remove POL/Haz Waste	Concrete Cleaning	Decon AST	Decon O/W Separator	Decon/ Close Hydraulic Lifts	Removal/ Recycle Mercury Lamps	Piping Cleanout	Decon UST	Remove PCB Dielectric Fluid	Decon Beryllium Dust
1	7	Flammable and Hazardous Materials Storage		x									
2	9	Main Fire Station		x	x								
3	11	Steam Generating Plant		x	x		x						
4	13	Hangar 13		x									
5	14	Hangar 14	x										
6	48	Maintenance Aircraft Spare Storage (check)	x										
7	67	Hangar 67		x	x								
8	72	Flightline Fire Station		x									
9	80	Automotive Maintenance and Repair Shop		x				x					
10	81	Maintenance Building		x	x						x		
11	91	Mess Hall		x			x						
12	101	Former Pesticide Building							x				
13	216	Fire Pump/Air Compressor Building		x	x		x						
14	247	Public Works Maintenance Storage Shed	x										
15	279	Wading Pool	x										
16	280	Bathhouse		x									
17	281	Swimming Pool	x										
18	282	Pool Pavilion	x										
19	293	DT1 High Speed Refueling Office	x										
20	329	Parachute Loft	x										
21	338	Training Building		x			x			x			
22	345	Main Pool	x										
23	346	Wading Pool	x										
24	347	Patio Area	x										
25	397	Pesticide Storage Building		x							x		
26	398	Golf Course Storage Facility	x										
27	814	400 Hertz Generator Building for Hangar 815							x				
28	815	Hangar 815		x									
29	816	Motor Generator Building for Hangar 815	x										
30	817	Motor Generator Building for Hangar 825							x				
31	825	Hangar 825		x			x					x	x
32	832	Flight Simulator Training Building (PCB transformer)		x								x	
33	835	Line Shack	x										
34	836	Line Shack	x										
35	843	Building 832 Storage Facility	x										
36	863	Hangar 13 Electrical Distribution Building	x										
37	882	Chiller Building		x									
		TOTALS	17	17	5	0	5	1	3	1	2	2	1

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 7 – FLAMMABLE AND HAZARDOUS MATERIALS STORAGE SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination Building 7, the flammable and hazardous materials storage building for the steam generating plant (Building 11). Building 7 has served in this capacity since its construction in 1989. The building, which has an area of 1,566 square feet, has concrete block walls and a concrete slab foundation. The building is divided into two large rooms and two small rooms. The two large rooms were for wet chemical and dry chemical storage, respectively. One of the small rooms was used for the temporary storage of waste chemicals awaiting transfer to Building 610, the hazardous waste storage facility. The other small room was the power supply room for the building.

The building contains miscellaneous petroleum, oils, and lubricants (POL) that must be removed. It also contains boiler chemicals such as liquid sodium bisulfate and dry caustic soda. The sodium bisulfate is considered hazardous and must be removed.

No radon testing or asbestos surveys have been performed at this building. Based on interviews with facility representatives, no radioactive materials have been stored at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of waste POL and hazardous chemicals

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of waste POL and hazardous chemicals will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 9 – MAIN FIRE STATION
SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 9, the main fire station. The building is located at the corner of B Avenue and 3rd Street. It was constructed in 1942 using cinderblock and concrete. Approximate building dimensions are 145 feet long by 60 feet wide. Prior to 1953 the building was used as the Public Works Center, a transportation garage, and as an automotive hobby shop. Since 1953, Building 9 has been used as a fire station.

Chemicals stored at the facility that must be removed include halon, miscellaneous lubricating oils, hydraulic fluid, starting fluid, cleaning solutions, solvents, acid, and paint. Chemicals are stored inside the building and in sheds and flammable storage cabinets located outside the building. The concrete floor in the welding shop requires steam cleaning to remove oil, grease, and solvents.

Aqueous film forming foam (AFFF) is stored in bulk at the facility. AFFF is non-hazardous but should be removed. There was approximately 1,000 gallons stored on site during a September 1998 visual inspection. There is one AST that contains diesel fuel to supply an emergency generator. The AST is in compliance with current regulations.

Other potential environmental concerns at this facility are asbestos and lead-based paint. According to an asbestos survey report, friable asbestos was reported to be present at this facility. However, according to the facility contact, there were asbestos removal activities several years ago. The paint on both the exterior and interior generally was in good condition. There were areas, however, where the paint was worn and peeling.

1.02 DESCRIPTION OF WORK

A. The decontamination work at this facility consists of the following items:

- removal and disposal of halon, miscellaneous lubricating oils, hydraulic fluid, starting fluid, cleaning solutions, solvents, acid, and paint, and
- steam clean approximately 500 square feet of concrete flooring in the welding shop area to remove oil, grease, and solvents.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060

2. Equipment Decontamination Procedures – Section 02021
3. Removal and Disposal of Debris and Contaminated Material – Section 02076

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. The Contractor shall utilize all measures necessary to ensure all potential for environmental impacts from these decontamination activities are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

C. Timeframes for Utility Cutovers and Interruptions

Interruption to electric service shall be considered utility cutover. Make utility cutovers and interruptions during normal working hours but not on Saturdays, Sundays, and Government holidays. Conform to the public or private utility agency that sources the utility. Provide the Contracting Officer, the Engineer, and the affected public or private utility agencies at least fifteen (15) days notice prior to making the utility cutover. Coordinate activities relative to the cutover with the affected public or private utility agency to ensure that the cutover occurs without undue delay, difficulty, or damage to public or private equipment, materials, or property.

1. Ensure that new utility lines are complete, except for the connection, before interrupting existing service.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.

B. Steam cleaning the welding shop floor will be lump sum.

C. Petroleum and hazardous material removal and disposal will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 11 - STEAM GENERATING PLANT SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination and closure of Building 11, the steam generating plant. The plant was constructed in 1941, sits on a concrete slab foundation, and has a metal roof and metal frame walls covered with metal siding. The main part of the building is a large open area that houses three boilers. Anti-corrosive chemicals, such as sodium bisulfate, were used in the boilers. These chemicals are considered hazardous therefore, the boilers must be decontaminated. Other chemicals used include caustic soda, phosphate, and sulfite. The building is approximately square, covers an area of 8,436 square feet, and is 2.5 stories high. Single story add-ons to the building (offices, workshops, restrooms, etc.) have cinder block walls. In support of the steam generation process, there are air compressors, condensate collection drums, a small machine shop, analytical laboratory, head and lockers, pumps, lubrication oils, and boiler water treatment capability. In addition to steam generation, there is a standby diesel generator, air compressor, two oil switches and a transformer. There are several utility trenches formed in the concrete floor that require cleaning to remove oil, grease, and solvents.

A three tank (each 15,000 gal of diesel fuel) AST area with secondary containment and a below grade oil/water separator (500 gal) is located east of the plant. The ASTs and the oil/water separator must be purged and cleaned.

There are two metal sheds located north of the steam plant. One is used for storage of miscellaneous paint materials and fluorescent light tubes, the other for storage of office furniture. The paint materials and fluorescent light bulbs must be removed.

Due to the age of the building lead-based paint may be present. An asbestos survey indicated the presence of friable asbestos.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items

- removal and disposal of hazardous materials, chemicals, paint, laboratory supplies, fluorescent light tubes, oil, grease, and lubricants,
- steam cleaning of approximately 300 linear feet of trench drains to remove oil, grease, and solvents,
- decontamination of three boilers to remove residual hazardous chemicals,
- decontamination of three 15,000 gallon diesel ASTs, and
- decontamination of one 500 gallon oil/water separator.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Equipment Decontamination Procedures – Section 02021
3. Removal and Disposal of Debris and Contaminated Material – Section 02076
4. Underground and Aboveground Storage Tank System Removal – Section 02051
5. Piping Removal – Section 02065
6. Free Liquids Removal – Section 02078
7. Excavation, Backfill, and Compaction – Section 02221
8. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

C. Timeframes for Utility Cutovers and Interruptions

Interruption to electric service shall be considered utility cutover. Make utility cutovers and interruptions during normal working hours but not on Saturdays, Sundays, and Government holidays. Conform to the public or private utility agency that sources the utility. Provide the Contracting Officer, the Engineer, and the affected public or private utility agency at least fifteen (15) days notice prior to making the utility cutover. Coordinate activities relative to the cutover with the affected public or private utility agency to ensure that the cutover occurs without undue delay, difficulty, or damage to public or private equipment, materials, or property.

1. Ensure that new utility lines are complete, except for the connection, before interrupting existing service.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Steam cleaning of the trench drains will be lump sum.
C. Decontamination of three boilers, three 15,000 gallon ASTs, and one oil/water separator will be lump sum.
D. Removal and disposal of miscellaneous paints, oils, and laboratory chemicals will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 13 - HANGER 13
SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 13, an aircraft maintenance hanger. Building 13 is a concrete block, steel frame, metal-sided structure. The building is located between Buildings 14 and 860 on the western aircraft parking ramp. Dimensions are 200 feet long by 200 feet wide by 40 feet high. The building was constructed in 1941, and has always been used as an aircraft maintenance hangar.

A visual inspection conducted in September 1998 indicated the presence of two drums (one 5-gal and one 30-gal) of waste petroleum, oil, and lubricants (POL) located in the mechanical room on the roof of Hanger 13. These drums require removal and disposal.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the presence of friable asbestos and possibly lead-based paint. There is some peeling paint inside the hangar. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination work at this facility consists of the following:

- removal and disposal of waste POL.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. The Contractor shall utilize all measures necessary to ensure all potential for environmental impacts from these decontamination activities are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.

B. POL material removal and disposal will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 14 – HANGAR 14
SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 14 is a concrete block, steel-frame, metal-sided structure. The building is located east of Building 13 on the western aircraft-parking ramp. Dimensions are 200 feet long by 253 feet wide by 40 high. The building was constructed in 1941 and has always been used as an aircraft maintenance hangar. At the time of the September 1998 visual inspection the hangar was unoccupied.

Based on observation and inquiry there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the presence of friable asbestos and possibly lead-based paint. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 14 is in compliance with current regulations

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 48 – MAINTENANCE AIRCRAFT SPARE STORAGE SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 48 is a single-story concrete block structure, 30 feet by 15 feet, used for maintenance materials storage associated with Building 13. Building 48 is located south of Building 13 on the western aircraft-parking apron. The building was constructed in 1942 and has always been used for storage of materials associated with flightline maintenance. Hazardous materials, paints and paint thinners, oils, and lubricants have been stored in this building. The building has two rooms. During the September 1998 visual inspection only the south room was accessible.

Based on observation and inquiry there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility. The facility was surveyed for friable asbestos in 1993 and none was found.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 48 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 67 - HANGER 67
SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 67, an aircraft maintenance hanger. It is located west of the north-south runway near the intersection of 4th Street and Jet Road. The hanger was constructed in 1955. The building is approximately square with an area of 72,725 square feet. The hanger is currently used for the repair and maintenance of aircraft and as a school for training aircraft mechanics. Prior use was for similar maintenance, administration, and training.

The building consists of two large hanger areas with administrative and maintenance shops located in the middle and along both ends of the building. There are 36 concrete air/electric vaults (3 ft wide x 6 ft long x 2 ft deep) located on the hanger floors. Concrete trench drains (2 ft wide x 2 ft deep) are located along the northern and southern hanger doorways. The roof was noted to be leaking during a September 1998 site visit. Miscellaneous lubricants, fluids, solvents, and halon fire extinguishers are present and require removal and disposal. A concrete maintenance tunnel runs east-west the length of the building. The tunnel is large enough to walk through and contains water, steam, and electrical piping. Confined space entry procedures must be followed when entering the tunnel. Maintenance personnel report the presence of an orange slime on the floor of the tunnel. It is suspected to be iron deposits and is considered to be a safety concern (from slipping) rather than a health concern.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the presence of friable asbestos and significant peeling paint (possibly lead-based considering the age of the facility). There was no indication of past or current use of radioactive materials. A radon survey was not conducted at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of miscellaneous lubrication oils, solvents, and greases.
- steam clean 36 air/electric vaults to remove oil, grease, and solvents.
- steam clean approximately 600 linear feet of trench drains to remove oil, grease, and solvents, and
- steam clean approximately 3000 square feet of tunnel floor to remove the orange slime and oil, grease, and solvents. Use confined space entry procedures.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060

2. Equipment Decontamination Procedures – Section 02021
3. Removal and Disposal of Debris and Contaminated Material – Section 02076

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125). The HASP must contain the Contractor's confined space entry procedures.

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. The Contractor shall utilize all measures necessary to ensure all potential for environmental impacts from these decontamination activities are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

C. Timeframes for Utility Cutovers and Interruptions

Interruption to electric service shall be considered utility cutover. Make utility cutovers and interruptions during normal working hours but not on Saturdays, Sundays, and Government holidays. Conform to the public or private utility agency that sources the utility. Provide the Contracting Officer, the Engineer, and the affected public or private utility agencies at least fifteen (15) days notice prior to making the utility cutover. Coordinate activities relative to the cutover with the affected public or private utility agency to ensure that the cutover occurs without undue delay, difficulty, or damage to public or private equipment, materials, or property.

1. Ensure that new utility lines are complete, except for the connection, before interrupting existing service.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.

B. A lump sum cost for the steam cleaning the trench drains and the air/electric vaults shall be provided. A separate lump sum cost for the steam cleaning of the tunnel shall be provided.

C. Petroleum and hazardous material removal and disposal will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 72 – FLIGHTLINE FIRE STATION SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 72, the flightline fire station. Building 72, known as the crash fire station, is located on the flightline. This building was constructed in 1951 of cinderblock and concrete. Rough dimensions of this one-story building are 130 feet long by 70 feet wide.

Chemicals stored at the facility that must be removed include halon, miscellaneous lubricating oils, hydraulic fluid, gasoline, cleaning solutions, solvents, acid, and paint. Chemicals are stored inside the building and in sheds and flammable storage cabinets located outside the building.

There are three items stored in bulk at this facility, none of which are hazardous, but should be removed. AFFF is a concentrate that, when diluted, is used to fight fires. During a September 1998 visual inspection there were approximately 1,000 gallons of AFFF concentrate stored at the facility. HTH, a chemical used to condition water in swimming pools, is used to neutralize hydrazine spills on the flightline. At the time of this survey there were approximately 400 pounds stored at the facility. Granular 'floor dry' material is used to adsorb fuel spills; approximately 900 pounds of this material was stored at the facility.

According to an asbestos survey report dated 1990, asbestos has been found at this facility. Reportedly, asbestos from some of the steam pipes and ceiling materials was removed and/or sealed several years ago. Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. There was no indication of past or current use of radioactive materials. A radon survey was not conducted at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination work at this facility consists of the following items:

- removal and disposal of halon, miscellaneous lubricating oils, hydraulic fluid, starting fluid, cleaning solutions, solvents, acid, and paint.

  The following Standard Operating Procedures (SOPs) apply:
  1. Regulatory Compliance – Section 01060
  2. Removal and Disposal of Debris and Contaminated Material – Section 02076

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. The Contractor shall utilize all measures necessary to ensure all potential for environmental impacts from these decontamination activities are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.

B. Removal and disposal of halon, miscellaneous lubricating oils, hydraulic fluid, starting fluid, cleaning solutions, solvents, acid, and paint will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 80 - AUTOMOTIVE MAINTENANCE AND REPAIR SHOP SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 80, the Automotive Maintenance and Repair Shop, located at the northeastern corner of D Avenue and Ninth Street. Building 80 was constructed in 1952 of concrete block walls on a concrete slab with steel bay doors and a wooden shingled roof. The building is approximately 185 feet long by 87 feet wide by 21 feet high.

Petroleum products and other hazardous material requiring removal and disposal include motor oil, white lithium grease, antifreeze, brake and transmission fluids, various lubricants, solvents and parts cleaners, batteries, and freon 12. The repair area in the southern section of the building contains loading racks for raising vehicles. These racks are below grade concrete pits approximately 15 feet long by 2 feet wide by 7 feet deep and contain piping and a hydraulic fluid tank (approximately 25-gallon capacity). The integrity of the floors of these rack pits is suspect, as they contained 3 to 4 feet of an opaque, oily fluid. From each rack the fluid, piping, and tanks must be removed, the integrity of the pit documented with photographs and the pit filled with clean sand and at least 2 feet of concrete to grade. Any migration pathway shall be located and reported to the Contracting Officer and Engineer prior to backfilling the rack pits.

Because the building was constructed before 1978 it likely is coated with lead-based paint. The interior and exterior paint is worn, but not peeling. A 1990 asbestos survey indicated the presence of friable asbestos.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items

- removal and disposal of miscellaneous lubrication oils, solvents, and greases, and
- clean-out and closure of nine below grade hydraulic lifts.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Equipment Decontamination Procedures – Section 02021
3. Removal and Disposal of Debris and Contaminated Material – Section 02076
4. Free Liquids Removal – Section 02078
5. Piping Removal – Section 02065

6. Underground and Aboveground Storage Tank System Removal – Section 02051
7. Excavation, Backfill, and Compaction – Section 02221
8. Pavement, Portland Cement Concrete (Minor) – Section 02563

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from these decontamination activities are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

C. Timeframes for Utility Cutovers and Interruptions

Interruption to electric service shall be considered utility cutover. Make utility cutovers and interruptions during normal working hours but not on Saturdays, Sundays, and Government holidays. Conform to the public or private utility agency that sources the utility. Provide the Contracting Officer, the Engineer, and the affected public or private utility agency at least fifteen (15) days notice prior to making the utility cutover. Coordinate activities relative to the cutover with the affected public or private utility agency to ensure that the cutover occurs without undue delay, difficulty, or damage to public or private equipment, materials, or property.

1. Ensure that new utility lines are complete, except for the connection, before interrupting existing service.

1.05 MEASUREMENT AND PAYMENT

A. Petroleum and hazardous material removal and disposal will be lump sum.
B. The clean out and closure of nine hydraulic lifts will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 81 –MAINTENANCE BUILDING SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The work required for this project consists of the decontamination of Building 81, the maintenance building. Building 81 is a maintenance facility occupied by a contractor providing maintenance services to the base. The building houses a carpentry shop, machine shop, plumbing shop, paint shop, and a welding shop. Building 81 is located north of 9th Street and east of Building 80. Building 81 is a concrete structure with a flat roof. The one-story building was constructed in 1953 and occupies 25,120 square feet. The building has always been used for maintenance activities.

The facility operates a dust collection system for the sawdust generated by the wood shop. There is a spray paint booth at this facility; this paint booth does not require an air emissions permit. A visual inspection conducted in September 1998 indicated the presence of miscellaneous waste petroleum, oil, and lubricants (POL) and gas cylinders used in the welding shop. The waste POL and gas cylinders require removal and disposal. A bermed floor drain, approximately 3 feet square, was coated with a black oil-like substance. The floor drain must be cleaned and the oil-like substance removed.

An asbestos survey found friable asbestos. Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination work at this facility consists of the following items:

- removal and disposal of miscellaneous waste POL and gas cylinders, and
- cleaning and removing the black oil-like substance from the bermed floor drain.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Equipment Decontamination Procedures – Section 02021
3. Removal and Disposal of Debris and Contaminated Material – Section 02076

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)

b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. The Contractor shall utilize all measures necessary to ensure all potential for environmental impacts from these decontamination activities are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.

B. Removal and disposal of miscellaneous waste POL and gas cylinders will be lump sum.

C. Cleaning one floor drain will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 91 – MESS HALL
SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The work required for this project consists of the decontamination of Building 91, the mess hall. Building 91 is a food service galley consisting of several dinning areas, kitchen, butcher shop, preparation rooms, several walk-in refrigerators and freezers, and a chemical storage room. The chemical storage room contains small quantities of hazardous materials such as cleaning agents, corrosives (pipe cleaners), and detergents. These chemicals must be removed and disposed. Building 91 is located on B Circle between 4th and 6th Streets. The two-story building was constructed in 1954 of cinderblock and measures approximately 250 feet long by 100 feet wide. The building has been used as a galley since its construction.

Kitchen drains are routed to a 500-gallon oil/water separator located south of the building. Because corrosives have been used in the past the oil/water separator must be emptied and cleaned.

An asbestos survey found friable asbestos. Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination work at this facility consists of the following items:

- removal and disposal of miscellaneous hazardous materials including cleaning agents, corrosives (pipe cleaners), and detergents, and
- purging and cleaning one 500-gallon oil/water separator.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Equipment Decontamination Procedures – Section 02021
3. Removal and Disposal of Debris and Contaminated Material – Section 02076
4. Free Liquids Removal - 02078

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. The Contractor shall utilize all measures necessary to ensure all potential for environmental impacts from these decontamination activities are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of miscellaneous cleaning agents, corrosives, and detergents will be lump sum.
C. Purging and cleaning one 500-gallon oil/water separator will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 101 – FORMER PESTICIDE BUILDING SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 101, the former office and storage area for the pest control contractor. The metal siding and concrete masonry building was constructed in 1975. The building is 612 square feet. It is located north of Building 81 off 9th Street. Building 101 is currently used for the storage of spent mercury containing fluorescent lamps staged for recycling. All mercury containing lamps must be removed and recycled or disposed. A fenced area behind the building is used to store miscellaneous electrical equipment including two transformers labeled "No PCBs".

According to a 1993 asbestos survey, no friable asbestos was found in the building. Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence lead-based paint. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and recycling or disposal of spent mercury containing fluorescent lamps.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Mercury Handling and Disposal - Section 02079

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and recycling or disposal of spent mercury containing fluorescent lamps will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 216 – FIRE PUMP/AIR COMPRESSOR BUILDING SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The work required for this project consists of the decontamination of Building 216, the fire pump/air compressor building. Building 216 houses three fire pumps and two air compressors used as support equipment for aircraft hangar (Building 67). The 180 horsepower engines for the pumps are fueled from a 1,000-gallon diesel AST located along the eastern side of the building. The AST is in compliance. The building, constructed in 1953, is a brick structure with a concrete floor and a flat built-up tar-and-gravel roof. Building dimensions are 112 feet long by 25 feet wide by 15 feet high. Building 216 is located east of Avenue A and west of Jet Road. The property includes two compressed air storage tanks and two elevated oil/water separators on the eastern side of the building. On the western side of Building 216 there is a transformer located on a concrete pad within a fenced area.

The building contains 5-gallon drums of miscellaneous waste petroleum, oil, and lubricants (POL). The waste POL must be removed and disposed of. The elevated oil/water separators must be cleaned to remove any residual oil products. The concrete floors inside the building as well as the concrete under the oil/water separators outside the building contain waste POL stains. The concrete must be cleaned and the stains removed.

An asbestos survey found friable asbestos in the building. Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. The paint is peeling in some areas of the interior. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination work at this facility consists of the following items:

- removal and disposal of five 5-gallon drums of miscellaneous waste POL,
- cleaning and removing the POL stains from approximately 1,000 square feet of concrete, and
- clean out of two 250-gallon elevated oil/water separators.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Equipment Decontamination Procedures – Section 02021

3. Removal and Disposal of Debris and Contaminated Material – Section 02076
4. Free Liquids Removal – Section 02078
5. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. The Contractor shall utilize all measures necessary to ensure all potential for environmental impacts from these decontamination activities are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.

B. Removal and disposal of miscellaneous waste POL will be lump sum.

C. Concrete floor cleaning will be lump sum.

D. Clean out of two elevated oil/water separators will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 247 – PUBLIC WORKS MAINTENANCE STORAGE SHED SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

Building 247, the Public Works Maintenance Storage Shed is located off 9th Street to the north of Building 81. Based on a September 1998 visual inspection and interviews conducted with maintenance personnel the shed is no longer in use. The shed covers 108 square feet, has a concrete slab floor, single story corrugated metal sides, and a wood and asphalt shingle roof. One section of the roof has fallen in.

The metal shed was constructed in 1956 and had been used at various times in the past to store new and used fluorescent bulbs and pesticides. The overhanging roof on the northern end of the shed covers a small storage area. Miscellaneous electrical equipment, primarily insulators, is currently stored in the storage area.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint this building is in compliance with current regulations.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

--- End of Section ---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDINGS 279, 281 AND 282
WADING POOL, SWIMMING POOL, AND POOL PAVILION
SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Buildings 279 and 281, located north of 6th Street behind Building 280, are the wading pool and swimming pool. Both pools were constructed in 1957 and operate as recreational pool facilities. Both pools are serviced by equipment located in Building 280. Building 282, located north of 6th Street and behind Building 280, serves as a covered area for the pools. The pavilion was constructed in 1977 as a 1,210-square-foot addition to the pool facilities. Constructed of brick, it provides protection to patrons and pool furniture from the sun and rain.

Based on observation and inquiry there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint these three buildings are in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 280 – BATHHOUSE
SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 280, located north of 6th Street behind Ace's Place, serves as the bathhouse and mechanical room for pool facilities 279 and 281. Constructed in 1957, the building is a concrete masonry structure with a flat roof covering 2,692 square-foot. Small quantities of hazardous chemicals (chlorine gas and calcium hypochlorite) required for pool maintenance are stored here.

Building 280 is divided into three sections. Two restrooms and changing facilities are provided for pool patrons. The third section functions as the mechanical room. The room houses a chlorine injection system, an aluminum sulfate dispensing tank, and tanks to determine water quality and pH level. Non hazardous chemicals used in building 280 include aluminum sulfate, soda ash, and stabilizing compound. These chemicals are not hazardous but should be removed. Hazardous chemicals present in Building 280 that must be removed are calcium hypochlorite and chlorine gas.

An asbestos survey conducted in 1993 found no friable asbestos in Building 280. The building's age suggest that lead-based paints may have been used. Base records indicate that no tests have been conducted on this building to determine if lead-based paint is present. Based on observation and inquiry there were no indications of spills or releases of chlorine or other hazardous materials either inside or outside the mechanical room. In addition, there was no evidence of storage, release, or disposal of petroleum products at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination work at this facility consists of the following items:

- removal and disposal of chlorine gas cylinders and calcium hypochlorite.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. The Contractor shall utilize all measures necessary to ensure all potential for environmental impacts from these decontamination activities are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

C. Timeframes for Utility Cutovers and Interruptions

Interruption to electric service shall be considered utility cutover. Make utility cutovers and interruptions during normal working hours but not on Saturdays, Sundays, and Government holidays. Conform to the public or private utility agency that sources the utility. Provide the Contracting Officer, the Engineer, and the affected public or private utility agencies at least fifteen (15) days notice prior to making the utility cutover. Coordinate activities relative to the cutover with the

affected public or private utility agency to ensure that the cutover occurs without undue delay, difficulty, or damage to public or private equipment, materials, or property.

1. Ensure that new utility lines are complete, except for the connection, before interrupting existing service.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.

B. Removal and disposal of chlorine gas cylinders and calcium hypochlorite will be lump sum.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

--- End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 293 – DT1 HIGH SPEED REFUELING OFFICE SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 293 is the Day Tank 1 high speed refueling office. Building 293 is a 288-square-foot structure used as an administrative office. It was constructed in 1955. It is located east of Jet Road between 4th and 5th Street. The building has one shower facility and a tool bench.

Based on observation and inquiry there was no evidence of storage, release, or disposal of hazardous or petroleum products at this building.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of friable asbestos and lead-based paint. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 293 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 329 – PARACHUTE LOFT
SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 329, the parachute loft, is used for the inspection, repair, and packaging of parachutes and life rafts. The building is located at the intersection of Jet Road and 5th Street. The structure was built in 1957 as a one-story cinderblock building with a total area of 7,518 square feet. During a September 1998 visual inspection there was no stains observed inside the building, nor were there any indications of a release to surface water, groundwater, or air. Small quantities of hazardous materials are stored onsite, but are checked in and out of Base Hazmat on a daily basis. There was no evidence of release or disposal of hazardous or petroleum products at this facility.

According to a 1993 asbestos survey, friable asbestos has been found in the building and according to the building contact, asbestos removal was initiated. Some pipes are labeled as "asbestos free." Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 329 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 338 – TRAINING BUILDING SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 338, the Air Maintenance Training Building. Building 338 is located at the southwestern corner of A Avenue and 4th Street. It was constructed in 1959 with annexes added in 1965 and 1969. The concrete masonry building covers 131,097 square feet. The building has served as a training facility since its construction. Building 338 is joined to Building 1821 by a hallway.

The building consist of several classrooms some of which contained component simulators. Some of the simulators required hydraulic fluid for moveable parts. Other simulators were used to imitate aircraft fuel systems. Training for soldering of electronic components also occurs in this building. Based on a September 1998 visual inspection the simulators had been removed. The hydraulic generator has been removed but the hydraulic lines were left in place. To remove any residual hydraulic fluid the hydraulic lines must be purged, cleaned, and capped (i.e., closed in place).

The materials used by the simulators and electronics training are stored in flammable material lockers. These materials include electroplating materials, epoxy resins, lubricating oil, hydraulic fluid, and purging fluid. The purging fluid is required for the fuel system training. All of these materials must be removed and properly disposed of.

Two 500-gallon oil/water separators are located outside Building 338. These oil/water separators must be emptied and cleaned.

A 1993 asbestos survey found friable asbestos and asbestos removal was initiated. Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. There was no indication of past or current use of radioactive materials. A radon survey was not conducted at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination work at this facility consists of the following items:

- removal and disposal of miscellaneous electroplating materials, epoxy resins, lubricating oil, hydraulic fluid, and purging fluid,
- purging, cleaning, and capping, approximately 1,000 linear feet of hydraulic lines (0.5-inch and 0.75-inch diameter galvanized steel pipe), and
- purging and cleaning of two 500-gallon oil/water separators.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Equipment Decontamination Procedures – Section 02021
3. Removal and Disposal of Debris and Contaminated Material – Section 02076
4. Piping Removal – Section 02065
5. Free Liquids Removal - 02078

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. The Contractor shall utilize all measures necessary to ensure all potential for environmental impacts from these decontamination activities are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

C. Timeframes for Utility Cutovers and Interruptions

Interruption to electric service shall be considered utility cutover. Make utility cutovers and interruptions during normal working hours but not on Saturdays, Sundays, and Government holidays. Conform to the public or private utility agency that sources the utility. Provide the Contracting Officer, the Engineer, and the affected public or private utility agencies at least fifteen (15) days notice prior to making the utility cutover. Coordinate activities relative to the cutover with the affected public or private utility agency to ensure that the cutover occurs without undue delay, difficulty, or damage to public or private equipment, materials, or property.

1. Ensure that new utility lines are complete, except for the connection, before interrupting existing service.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.

B. Removal and disposal of miscellaneous electroplating materials, epoxy resins, lubricating oil, hydraulic fluid, and purging fluid will be lump sum.

C. Purging, cleaning, and capping approximately 1,000 linear feet of hydraulic lines will be lump sum.

D. Purging and cleaning of two 500-gallon oil/water separators will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDINGS 345, 346, AND 347 – MAIN POOL, WADING POOL, AND PATIO AREA SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Buildings 345, 346, and 347 are the old main pool, wading pool, and patio area, respectively. These three facilities adjoin each other and are functionally related. This facility is located on J Avenue, adjacent to Building 340 (the old CPO Club), which has been closed for several years.

This outdoor facility was constructed in 1958 entirely of concrete. Chemicals used to condition the pool water were stored in the mechanical room, located beneath the southern corner of the main pool. Chemicals observed onsite during a September 1998 visual inspection include one 110 lbs. container of pool conditioner, two 50-pound bags of aluminum sulfate, and one 50-pound bags of diatomite. These chemicals are not hazardous but should be removed. There were no cylinders of compressed chlorine gas onsite.

Based on observation and inquiry there were no indications of spills or releases of chlorine or other hazardous materials either inside or outside the mechanical room. In addition, there was no evidence of storage, release, or disposal of petroleum products at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint these three buildings are in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 397 – PESTICIDE STORAGE SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 397, the pesticide storage building. Building 397 was constructed in 1981 and is used for storage and mixing of pesticides, herbicides, and fungicides used on the golf course. It is located on the golf course at the end of I Avenue. It is a single-story concrete block structure with a slab floor and a flat roof. The dimensions of this building are 28 feet long by 28 feet wide. There is a bermed containment area on the exterior of the building (northern side) for mixing and filling of pesticide tanks. The building and mixing area are enclosed in a locked fence. There are no permitted operations at this building. Typical pesticides, herbicides, fungicides, and lawn conditioners currently stored inside the building include Turf Tiger, CALpHLEX, Pen-a-trate II, High Drive 25, Retain, Knife, Embark, Illoxan, and Roundup. All pesticides, herbicides, fungicides, and lawn conditioners must be removed and disposed of.

The building is not connected to the base sanitary sewer system. Sanitary waste is routed to a septic system south of the building. The floor drain in the bermed mixing area also drains to the septic system. In the event of overfilling or spilling of pesticides during mixing, spillage can be contained in a tank located underneath the floor drain in the mixing area by manually closing a "T" valve on the eastern side of the building, thus shutting off access to the septic system. To remove any residual pesticides the floor drain tank and septic system tank and associated piping must be purged and cleaned.

According to a 1993 asbestos survey the building contains no friable asbestos. Due to its age, it is unlikely that building 397 has been painted with lead-based paint. According to a 1993 environmental baseline survey (EBS) there has been no storage or use of radioactive material associated with this building. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination work at this facility consists of the following:

- removal and disposal of pesticides, herbicides, fungicides, and lawn conditioners, and
- purging and cleaning of the floor drain tank and the septic system tank and associated piping to remove residual pesticides.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076

3. Equipment Decontamination Procedures – Section 02021
4. Free Liquids Removal – Section 02078
5. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. The Contractor shall utilize all measures necessary to ensure all potential for environmental impacts from these decontamination activities are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.

B. Removal and disposal of pesticides, herbicides, fungicides, and lawn conditioners will be lump sum.

C. Purging and cleaning of the floor drain tank and the septic system tank will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 398 – GOLF COURSE STORAGE FACILITY SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 398 was constructed in 1951 and is used as a storage area for golf course maintenance vehicles such as mowers, blowers, backhoes, and tractors. It is a single-story, unpainted metal Quonset hut with a dirt floor. The dimensions of this building are 100 feet long by 40 feet wide. It is located at the northern end of I Avenue, on the golf course. Bagged fertilizer and soil conditioners such as lime and ammonium nitrate are also stored inside the facility.

Based on a September 1998 visual inspection there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility.

According to a 1993 asbestos survey there was no evidence of friable asbestos found in the facility. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 398 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 814 – 400 HERTZ GENERATOR BUILDING SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 814, a support building for Hangar 815. Building 814, located to the north of Hangar 815, serves as the power conversion facility for the hangar. Constructed in 1970, the brick building covers 288 square feet. The building has served the same purpose of converting 60 hertz (Hz) electricity to 400 Hz since its construction.

Building 814 houses the electrical equipment necessary to step the frequency of electricity entering Hangar 815 from 60 Hz to 400 Hz. The higher frequency is required to test and repair aircraft electrical components. None of the equipment requires dielectric oils.

Based on observation and inquiry there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility. There are five spent fluorescent lamps stored in the building. These must be removed and recycled or disposed because they may contain mercury.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following item:

- removal and recycling or disposal of spent mercury containing fluorescent lamps.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Mercury Handling and Disposal - Section 02079

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.

B. Removal and recycling or disposal of spent mercury containing fluorescent lamps will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 815 – HANGAR 815
SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination Building 815. Building 815 is a concrete aircraft hangar constructed in 1970. It is located along the northeast side of Runway 18L and occupies an area of 55,020 square feet. The western side of the building consists of two stories of administrative offices and the eastern half consists of an aircraft maintenance area. The building has been used as a hangar since its construction.

Two squadrons occupy Building 815. Maintenance shops contain waste petroleum, oils, and lubricants (POL). The waste POL must be removed and disposed of. Building 815 is a satellite accumulation area (storage less than 90 days) for hazardous wastes. Hazardous wastes are generated by each squadron and stored in small storage sheds dedicated to each squadron. Stored hazardous waste must be removed and disposed of.

According to an asbestos survey conducted in 1989, friable asbestos has been found at this facility. Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence lead-based paint. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination work at this facility consists of the following item:

- removal and disposal of stored hazardous waste and waste POL.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.

B. Removal and disposal of hazardous waste and waste POL will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 816 – MOTOR GENERATOR BUILDING SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 816 is a support building for Hangar 815. Building 816 houses a motor generator. The building is located approximately 50 feet south of Hangar 815 on the flightline just off Jet Road. Building 816 was constructed in 1970 of cinderblock and brick walls and a concrete floor. The dimensions of the one-story building are 18 feet long by 16 feet wide. Since its construction in 1970 it has been used to house equipment for the conversion of power to Hangar 815.

Based on observation and inquiry there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility.

According to a 1993 asbestos survey report, there is no friable asbestos at this facility. The facility is not painted; therefore, there is no lead-based paint. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 816 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 817 – MOTOR GENERATOR BUILDING SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 817, a support building for Hangar 825. Building 817 located south of Hangar 825, houses two generators for the conversion of 60 Hz power to 400 Hz power necessary for aircraft maintenance in Hangar 825. None of the equipment requires dielectric oils. The one-story building was constructed in 1971 of concrete block walls with a concrete slab floor and a flat wooden roof, and measures 18 feet long by 13 feet wide by 9 feet high.

Based on observation and inquiry there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility. There are four spent fluorescent lamps stored in the building. These must be removed and recycled or disposed because they may contain mercury.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following item:

- removal and recycling or disposal of spent mercury containing fluorescent lamps.

The following Standard Operating Procedures (SOPs) apply
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Mercury Handling and Disposal - Section 02079

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.

B. Removal and recycling or disposal of spent mercury containing fluorescent lamps will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 825 – HANGAR 825
SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination Building 825, Hangar 825. Building 825 serves as a hangar that houses four separate fighter squadrons. The western part of the facility is two-stories in height and houses administrative offices. The eastern half of the building is the aircraft maintenance and storage area. The building is located on the flightline east of the intersection of 5th Street and Jet Road. The building is a 56,724-square-foot structure constructed primarily of brick and surrounded by tarmac. The building was built in 1966. In 1983 a one-story brick structure with an area of 8,564 square feet was added on to Building 825. The addition, known as Building 825-O, is the frame, tire, and brake repair shop.

Building 825 serves as a hazardous waste satellite accumulation point. Each squadron has two separate hazardous waste accumulation areas. One, located by the line shacks, contains fuel and oil-related wastes. The other contains non-halogenated solvents and paint-related wastes. Hazardous materials present at this facility include polyurethane, epoxy, and polyester coating compounds; cleaning solvents; primers; paints; and lacquers, as well as various oils. All hazardous materials and waste petroleum, oils, and lubricants (POL) must be removed and disposed of.

There is a beryllium booth inside the brake repair shop. The booth must be decontaminated to remove all traces of hazardous beryllium dust.

There are two 1,000 KVA transformers that contains concentrations of PCBs greater than 500 ppm located in two separate electrical rooms. The dielectric fluid containing PCBs in these transformers must be removed and disposed of.

There is a 500-gallon oil/water separator located on the southern end of the building. The oil/water separator must be purged and cleaned to remove all traces of waste POL.

According to a 1989 asbestos survey, this building was found to contain friable asbestos. Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence lead-based paint. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:
- removal and disposal of waste POL and hazardous chemicals.

- removal and disposal of hazardous beryllium dust from one brake repair booth,
- removal and disposal of dielectric fluid containing PCBs greater than 500 ppm from two transformers, and
- purging and cleaning one 500-gallon oil/water separator.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Beryllium Abatement – Section 02073
4. Removal of PCB Transformers, Equipment, and Liquid - Section 02074
5. Equipment Decontamination Procedures – Section 02021
6. Free Liquids Removal – Section 02078
7. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

C. Timeframes for Utility Cutovers and Interruptions

Interruption to electric service shall be considered utility cutover. Make utility cutovers and interruptions during normal working hours but not on Saturdays, Sundays, and Government holidays. Conform to the public or private utility agency that sources the utility. Provide the Contracting Officer, the Engineer, and the affected public or private utility agency at least fifteen (15) days notice prior to making the utility cutover. Coordinate activities relative to the cutover with the affected public or private utility agency to ensure that the cutover occurs without undue delay, difficulty, or damage to public or private equipment, materials, or property.

1. Ensure that new utility lines are complete, except for the connection, before interrupting existing service.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.

B. Removal and disposal of waste POL and hazardous chemicals will be lump sum.

C. Removal and disposal of hazardous beryllium dust from one brake repair booth will be lump sum.

D. Removal and disposal of dielectric fluid containing PCBs greater than 500 ppm will be lump sum.

E. Purging and cleaning of one 500-gallon oil/water separator will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 832 – FLIGHT SIMULATOR TRAINING BUILDING SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination Building 832, the former flight simulator training building. Building 832 is a two-story building measuring 82 feet by 106 feet. It was constructed in 1966 of aluminum walls and roof and a raised concrete floor. A two-story 59-foot by 69 foot addition was added to the northeastern corner of the building in 1975. The building housed three A-7 flight simulators from 1966 until 1989. The simulators were located in large concrete-lined pits within the building and were hydraulically operated. The hydraulic equipment (including pumps, hoses, and waste fluid storage tanks) and associated materials (5606 hydraulic fluid, lubricating oil, and other supplies) were housed in mechanical rooms built along the sides of the building. The hydraulic fluid and waste petroleum, oil, and lubricants (POL) must be removed and disposed.

Since 1989 the building has been used for software development and equipment maintenance. Current operations at Building 832 involve small amounts of hazardous materials such as soldering flux, solvents, adhesive, acrylic plastic, epoxy resin, and lubricating oil. These materials are stored and used within the building and must be removed and disposed.

The concrete-pad-mounted transformer located by the eastern side of the building was tested on April 8, 1986, and found to contain greater than 500 ppm PCBs. Extensive staining was observed around this transformer, and a hard, black, tar-like material was observed beneath the transformer to a depth of 2 to 3 inches. This transformer has reportedly flamed or exploded in the past. The tar-like material must be removed and the dielectric fluid containing PCBs must be removed and replaced with non-PCB dielectric fluid.

According to a March 1990 Westinghouse asbestos report, the building contains friable asbestos. Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence lead-based paint. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of hydraulic fluid, waste POL, and hazardous chemicals,
- removal and disposal of tar-like material from beneath the transformer, and
- removal and disposal of dielectric fluid containing PCBs greater than 500 ppm.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Removal of PCB Transformers, Equipment, and Liquid - Section 02074

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

C. Timeframes for Utility Cutovers and Interruptions

Interruption to electric service shall be considered utility cutover. Make utility cutovers and interruptions during normal working hours but not on Saturdays, Sundays, and Government holidays. Conform to the public or private utility agency that sources the utility. Provide the Contracting Officer, the Engineer, and the affected public or private utility agency at least fifteen (15) days notice prior to making the utility cutover. Coordinate activities relative to the cutover with the affected public or private utility agency to ensure that the cutover occurs without undue delay, difficulty, or damage to public or private equipment, materials, or property.

1. Ensure that new utility lines are complete, except for the connection, before interrupting existing service.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of hydraulic fluid, waste POL, and hazardous chemicals will be lump sum.
C. Removal and disposal of tar-like substance and dielectric fluid containing PCBs greater than 500 ppm will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 835 – LINE SHACK SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 835 is a skid-mounted metal structure providing administrative office space, equipment storage, and a break area for flight maintenance crews. The facility is located south of Building 13 on the western aircraft-parking apron. The single-story building is 24 feet by 20 feet in dimension. The building was erected in 1967 and, because it is skid mounted, may not be in its original location; however, contacts state that it has always been used as a shelter for flightline maintenance crews. No hazardous materials or petroleum products are known to have been stored or generated at this facility.

Based on observation and inquiry there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility. The facility was surveyed for friable asbestos in 1993 and none was found.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility. This building is not supplied with potable water.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 835 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 836 – LINE SHACK SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 836 is a skid-mounted metal structure providing administrative office space, equipment storage, and a break area for flight maintenance crews. The facility is located south of Building 13 on the western aircraft-parking apron. The single-story building is 24 feet by 20 feet in dimension. The building was erected in 1967 and, because it is skid mounted, may not be in its original location; however, contacts state that it has always been used as a shelter for flightline maintenance crews. No hazardous materials or petroleum products are known to have been stored or generated at this facility.

Based on observation and inquiry there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility. The facility was surveyed for friable asbestos in 1993 and none was found.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility. This building is not supplied with potable water.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 836 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 843 – STORAGE FACILITY SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 843 is a storage building located south of Building 832. The building was constructed in 1971 as a one-story structure with metal siding on a concrete slab. It has an area of 132 square feet. The building was originally built to house a low-pressure pump for air tools. Currently it is used for storage of surplus office furniture and other miscellaneous items that do not pose any environmental hazard.

Based on a September 1998 visual inspection there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility. There was no evidence of friable asbestos.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 843 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 863 – HANGAR 13 ELECTRICAL DISTRIBUTION BUILDING SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 863 is a concrete block structure that houses an inverter that supplies 400-cycle electrical power to Building 13. The building is located south of Building 13 on the western aircraft-parking apron. The single-story building is 22 feet by 20 feet in dimension. It was constructed in 1975 and has always been used to house the inverter. No hazardous materials are known to have been stored or generated there. The 400-cycle power from the inverter is supplied to Building 13 via electrical conduit.

Based on observation and inquiry there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility. The facility was surveyed for friable asbestos in 1993 and none was found.

Environmental concerns of a 1993 environmental baseline survey (EBS) include the possible presence of lead-based paint. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 863 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 882 – CHILLER BUILDING SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination Building 882, the chiller building. Building 882 houses the chillers for the air conditioning system for the Bachelor Enlisted Quarters. A cooling tower is located south of the building and a fenced transformer mounted on a concrete pad is located adjacent to the northern side of the building. The building was constructed in 1970 of concrete block walls on a cement foundation, with a flat, built-up, tar-and-gravel roof, and measures 40 feet by 32 feet by 15 feet high. The building contains 10 cylinders of trichloromonoflour methane gas (R-11). The building also contains various chemicals and other substances for equipment maintenance and treatment of the water in the cooling system. Lithium bromide, microbiocides, oxidizers, and different acids and bases for pH balance are stored in 55-gallon drums. Smaller quantities of descaler, sodium nitrate, and corrosion inhibitor are stored in 5-gallon buckets in a locked hazardous substance locker. Approximately 25, 5-gallon buckets of anion acrylamide polymer are also stored in the building.

The gas cylinders and all chemicals are considered hazardous and must be removed and properly disposed. The polymer is non-hazardous and may remain.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. According to a 1993 asbestos assessment report friable asbestos was detected in Building 882. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following items:

- removal and disposal of gas cylinders and miscellaneous hazardous chemicals.

The following Standard Operating Procedures (SOPs) apply:

1 Regulatory Compliance – Section 01060
2 Removal and Disposal of Debris and Contaminated Material – Section 02076

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of gas cylinders and hazardous chemicals will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

PRIORITY 2

PRIORIT ATRIX
NAS CECIL FIELD
DECONTAMINATION AND CLOSURE
APRIL 1999

	Building No.	Name	No Action Required	Remove POL/Haz Waste	Concrete Cleaning	Decon AST	Decon O/W Separator	Decon/ Close Hydraulic Lifts	Removal/ Recycle Mercury Lamps	Piping Cleanout	Decon UST	Remove PCB Dielectric Fluid	Decon Beryllium Dust
1	16	Water Treatment Plant Number 1		x									
2	49	Transportation and Fuel Management Office	x										
5	71	Former Fuel Truck Unloading		x						x			
3	75	Aircraft Truck Fueling		x						x	x		
4	76	North Fuel Farm Tanks											
6	178	Refuel Vehicle Maintenance Shelter		x	x		x						
7	180	Old and New Filling Stations			x		x						
8	238	Golf Course Maintenance		x									
9	285	North Fuel Farm Office Building	x										
10	312	Corrosion Control Hangar		x	x		x	x					
11	313	Jet Engine Maintenance Building		x	x	x							
12	323	Battery Locker		x			x						
13	330	Liquid Oxygen Farm		x									
14	334	Jet Engine Test Cell			x		x						
15	339	Jet Engine Test Cell		x	x		x				x		
16	361	Water Treatment Plant Number 2		x									
17	370	Maintenance Shop		x									
18	371	Storage Shed		x									
19	384	Automotive Shop Building	x										
20	808	Dispensary/Dental Clinic		x					x				
21	809	Public Toilet	x										
22	810	Water Treatment Facilities Building	x										
23	824	Avionics and Aircraft Ground Support Shop		x	x								
24	860	Maintenance Hangar		x			x						
25	869	Hazardous and Flammable Storage Building	x										
26	870	Hazardous Flammable Storehouse		x									
27	928	Automotive Vehicle Shop		x									
28	1820	Aircraft Hangar		x	x								
29	1824	Radiographics Shop		x									
30	1848	Ground Support Issue and Receipt		x									
31	1850	Avionics Repair Shop		x									
32	HSR	High Speed Refuelers					x			x			
33	ST	Septic Tanks									x		
		TOTALS	6	22	8	1	7	1	1	2	2	0	0

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 16 – WATER TREATMENT PLANT NUMBER 1 SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 16, a water treatment plant. Building 16, located north of C Avenue, serves as one of the water treatment plants for the NAS Cecil Field potable water distribution system. This building has served in this capacity since its construction in 1941. The building is a flat-roofed, concrete block structure on a concrete slab. This building is 1,325 square feet. This building is attached to Building 16A, which is a 200,000-gallon aboveground water storage tank. In addition to electric water pumps, this building houses a diesel-powered emergency water pump. Chlorine is stored for water treatment. Because chlorine is a hazardous substance the chlorine gas cylinders (six) must be removed and disposed of. A 1,000-gallon diesel AST located onsite will be decontaminated under the AST Summary of Work.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. According to a 1993 friable asbestos survey report there is no friable asbestos in this facility. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of six chlorine gas cylinders.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of chlorine gas cylinders will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 49 – TRANSPORTATION AND FUEL MANAGEMENT OFFICE SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 49 is located in the Transportation and Fuel Management (TFM) compound at the northeastern corner of D Avenue and 9th Street and houses the TFM Office. The building, constructed in 1942, is made with wooden clapboard and covers an area of 1,476 square feet. The Public Works Department used Building 49 as office space until 1993, when it became office space for the administration of the transportation and fuel management system. No hazardous materials or petroleum products are known to have been stored at this facility.

Based on observation and inquiry there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. A survey conducted in 1993 found no friable asbestos in this building. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 49 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 71 – FUEL TRUCK UNLOADING SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 71, the former fuel truck unloading facility. Building 71 has been demolished, only the concrete foundation remains. During a December 1998 site visit there was one 55-gallon drum being stored within secondary containment on the concrete slab. The contents of the drum are unknown. This drum requires removal and disposal.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of one 55-gallon drum of unknown contents.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B Removal and disposal of one 55-gallon drum of unknown contents will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 75 – AIRCRAFT TRUCK FUELING SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 75, the Aircraft Truck Fueling Facility. Building 75, located east of A Avenue, is an aircraft truck fueling facility. Constructed in 1952, this facility consists of five fueling bays, a retention pond, and paved parking area. The five fueling bays are positioned side by side and share a common roof. The total length of the structure is 150 feet and it is 15 feet in width. The structure is bermed on all sides with a drainage pipe exiting the northeastern corner of the bermed area. The pipe diverts spills within the bermed area to a clay-lined retention pond northeast of Building 75.

There are four fuel filters and several fuel lines located at the facility. The fuel lines and filters must be purged of fuel. There is a flammable locker that contains POL. The POL must be removed and disposed of. There is a 10,000-gallon used oil AST (Tank 136) north of the facility. Decontamination of this tank will be done under the AST Summary of Work.

Building 75 is a concrete containment area and is not painted nor does it have potable water service. No buildings are associated with this facility; therefore, radon and asbestos are not concerns. There have been no radioactive materials used or stored at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination work at this facility consists of the following items:

- purging approximately 1,000 linear feet of fuel lines and four fuel filters, and
- removal and disposal of miscellaneous POL.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Equipment Decontamination Procedures – Section 02021
3. Removal and Disposal of Debris and Contaminated Material – Section 02076
4. Piping Removal – Section 02065
5. Free Liquids Removal – Section 02078

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)

b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. The Contractor shall utilize all measures necessary to ensure all potential for environmental impacts from these decontamination activities are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

C. Timeframes for Utility Cutovers and Interruptions

Interruption to electric service shall be considered utility cutover. Make utility cutovers and interruptions during normal working hours but not on Saturdays, Sundays, and Government holidays. Conform to the public or private utility agency that sources the utility. Provide the Contracting Officer, the Engineer, and the affected public or private utility agencies at least fifteen (15) days notice prior to making the utility cutover. Coordinate activities relative to the cutover with the affected public or private utility agency to ensure that the cutover occurs without

undue delay, difficulty, or damage to public or private equipment, materials, or property.

1. Ensure that new utility lines are complete, except for the connection, before interrupting existing service.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Purging approximately 1,000 linear feet of fuel lines and four fuel filters will be lump sum.
C. Removal and disposal of miscellaneous POL will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

TANKS 76–76E – EARTHMOUNDED TANKS SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Tanks 76 through 76E. The tanks are located in the North Fuel Farm at the northeast corner of "A" Avenue and Loop Road. The fuel farm consists of six 595,000-gallon, interior lined, asphalt coated, steel, earth-mounded tanks that contain JP-5. The tanks are numbered 76 and 76A through 76E.

Tanks 76 and 76A were installed in 1952; the remainder of the tanks were installed in 1954. The associated piping is corrosion-resistant, coated steel. In 1987 each tank was relined and overfill protection (high level alarms) was installed. In addition, Tank 76 is equipped with an automatic shut-off system. A float indicator on a graduated gauge measures the volume in each tank. Tank 76E was taken out of service in July 1991 when it was determined to be leaking.

Each tank must be purged and cleaned to remove any residual JP-5. Approximately 3,000 linear feet of associated piping must be purged and cleaned to remove any residual JP-5.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following items:

- purge and clean six 595,000-gallon tanks, and
- purge and clean approximately 3,000 linear feet of associated piping.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Equipment Decontamination Procedures – Section 02021
4. Piping Removal – Section 02065
5. Free Liquids Removal – Section 02078
6. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)

b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Purging and cleaning six 295,000-gallon tanks will be lump sum.

C. Purging and cleaning approximately 3,000 linear feet of associated piping will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 178 - REFUEL VEHICLE MAINTENANCE SHELTER SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 178, the refuel vehicle maintenance shelter. Building 178 is located in the Transportation and Fuel Management (TFM) compound at the northeastern corner of D Avenue and Ninth Street and is used as a maintenance area for jet fuel tanker trucks. It was constructed in 1961. The building is aluminum walled, concrete-floored, open-ended Quonset hut measuring 80 feet by 40 feet by 20 feet.

The building is used for temporary storage of hazardous waste, used oil, hydraulic fluid, and oil filters. A December 1998 visual inspection indicated staining on the concrete floor and fifteen 55-gallon drums of waste fluids (kerosene, coolant, waste oil, etc.) stored in the building. All of the drums require removal and disposal. The floor must be cleaned to remove petroleum stains. Grated drainage trenches at the eastern and western ends of the building collect spills and stormwater runoff and channel them to an oil-water separator (500-gallon capacity) located approximately 40 feet southwest of the building. The drains must be cleaned and the oil-water separator purged and cleaned to remove any residual petroleum or hazardous waste.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. The building has no potable water supply, and friable asbestos has not been observed in the building. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of hazardous materials and waste POL.
- steam cleaning of approximately 100 linear feet of trench drains to remove oil, grease, and solvents, and
- decontamination of one 500 gallon oil/water separator.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Equipment Decontamination Procedures – Section 02021
3. Removal and Disposal of Debris and Contaminated Material – Section 02076
4. Free Liquids Removal – Section 02078
5. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Steam cleaning of the concrete floors and trench drains will be lump sum.

C. Decontamination of the oil/water separator will be lump sum.
D. Removal and disposal of miscellaneous hazardous waste and waste POL will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 180 – OLD AND NEW FILLING STATION SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 180, the old and new filling station. Building 180 is located within the TFM compound at the northeastern corner of D Avenue and Ninth Street and includes a former gasoline filling station constructed in 1952 and a new filling station. Usage of the former filling station was discontinued in 1992 when the new station was opened. The old filling station has been demolished and no longer exists. No buildings are associated with either the old or new gasoline filling stations.

The new filling station consists of three double-walled 10,000-gallon ASTs, an oil-water separator (500-gallon capacity), and a 40-foot by 7-foot concrete pump island with three fuel pumps, a motor oil rack, and an air compressor. One AST contains diesel fuel and two ASTs contain unleaded gasoline. The ASTs are located approximately 75 feet northwest of the island, on a concrete slab with a 4-inch concrete berm, and are surrounded on three sides by a 6-foot concrete block wall. Spills from the new pump island are channeled into trench drains and then into the oil-water separator 100 feet west of the island. The oil-water separator, and the trench drains leading to it, must be purged and cleaned to remove any residual petroleum waste.

According to the 1993 environmental baseline survey (EBS) lead-based paint is not an environmental concern because none of the structures associated with the fueling station are painted. No buildings are associated with either the old or the new station; therefore, asbestos and radon are not potential concerns.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- decontamination of one 500 gallon oil/water separator, and
- steam cleaning of approximately 20 linear feet of trench drain.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Equipment Decontamination Procedures – Section 02021
3. Removal and Disposal of Debris and Contaminated Material – Section 02076
4. Free Liquids Removal – Section 02078
5. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Steam cleaning of the trench drains will be lump sum.

C. Decontamination of the oil/water separator will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 238 – GOLF COURSE MAINTENANCE BUILDING SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 238, the golf course maintenance building. Building 238 was constructed in 1955 and is located on the golf course at the end of I Avenue. It is a single-story cinderblock structure with a cement slab floor, aluminum roof, and wood and metal siding. The dimensions of this building are 50 feet long by 18 feet wide. It contains an office for the golf course supervisor, a small repair shop for maintenance vehicles, a carport, and a caged storage area. The building is currently used to store miscellaneous paints, POL, and parts. The paints and POL, estimated to be less than 200 gallons, must be removed and disposed of. A 250-gallon diesel AST located north of Building 238 will be decontaminated under the AST Summary of Work.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence lead-based paint. According to a 1993 friable asbestos survey report there is no friable asbestos in this facility. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following items:

- removal and disposal of miscellaneous paints and POL.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B Removal and disposal of miscellaneous paints and POL will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 285 – NORTH FUEL FARM OFFICE BUILDING SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 285 is an administrative building at the North Fuel Farm that monitors the storage and transfer of fuel at the fuel farm. This facility is located at the corner of A Avenue and Loop Road. It was constructed in 1953 of cinderblock and measures 25 feet long by 30 feet wide. A 5,500-gallon waste oil UST associated with this building is being addressed as part of the NFF RAP.

Based on observation and inquiry there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility.

Environmental concerns of the 1993 EBS included the possible presence of lead-based paint. No friable asbestos or radioactive materials were found in this building. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 285 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 312 – CORROSION CONTROL HANGAR SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 312, a corrosion control hangar. Building 312, constructed in 1957, is a cinderblock and metal hangar. The building is located off Jet Road and 4th Street. This building was constructed for use as a sanding, priming, and corrosion control facility for jet aircraft. Building 312 is designated as a satellite accumulation area for hazardous wastes. Hazardous wastes are stored in a small building approximately 20 feet northeast of Building 312. This satellite accumulation area has secondary containment. Paints, paint thinners, paint strippers, and miscellaneous POL stored onsite must be removed and disposed of. Two large air filters approximately 6 feet by 6 feet remove paint and airborne residue from sandblasting and priming. These filters are considered hazardous and must be removed and disposed of. A concrete floor trench runs the length of the east side of the hangar. This floor trench must be cleaned to remove any residual paint or petroleum products.

There is a 900-gallon oil/water separator located in the grassy area north of the hangar. The oil/water separator must be purged and cleaned to remove any residual petroleum contamination. The area south of the hangar contains a loading rack for raising vehicles. The rack is a below grade concrete pit approximately 15 feet long by 2 feet wide by 7 feet deep and contain piping and a hydraulic fluid tank (approximately 25-gallon capacity). The integrity of the floor of this rack pit is suspect. From the rack pit the fluid, piping, and tanks must be removed, the integrity of the pit documented with photographs and the pit filled with clean sand and at least 2 feet of concrete to grade. Any migration pathway shall be located and reported to the Contracting Officer and Engineer prior to backfilling the rack pits.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence lead-based paint. An asbestos survey was performed in 1993 and friable asbestos was identified in this building. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of miscellaneous hazardous waste and POL,
- purging and cleaning one 900-gallon oil/water separator,
- steam cleaning approximately 100 linear feet of concrete trench drain, and
- clean-out and closure of one below grade hydraulic lift.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Equipment Decontamination Procedures – Section 02021
4. Free Liquids Removal - 02078
5. Waste Processing – Section 02095
6. Piping Removal – Section 02065
7. Underground and Aboveground Storage Tank System Removal – Section 02051
8. Excavation, Backfill, and Compaction – Section 02221
9. Pavement, Portland Cement Concrete (Minor) – Section 02563

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

C. Timeframes for Utility Cutovers and Interruptions

Interruption to electric service shall be considered utility cutover. Make utility cutovers and interruptions during normal working hours but not on Saturdays, Sundays, and Government holidays. Conform to the public or private utility agency that sources the utility. Provide the Contracting Officer, the Engineer, and the affected public or private utility agencies at least fifteen (15) days notice prior to making the utility cutover. Coordinate activities relative to the cutover with the affected public or private utility agency to ensure that the cutover occurs without undue delay, difficulty, or damage to public or private equipment, materials, or property.

1. Ensure that new utility lines are complete, except for the connection, before interrupting existing service.

1.05 MEASUREMENT AND PAYMENT

A Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B Removal and disposal of miscellaneous hazardous waste and POL will be lump sum.
C Purging and cleaning one 900-gallon oil/water separator will be lump sum.
D Steam cleaning 100 linear feet of concrete trench drain will be lump sum.
E Clean out and closure of one below grade hydraulic lift will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 313 – JET ENGINE MAINTENANCE BUILDING SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 313, the jet engine maintenance building. Building 313, constructed in 1960, is a one-story cinderblock building with a cement slab floor. The building is located on Jet Road at the intersection with 6th Street. Division 400, Avionics Intermediate Maintenance Department (AIMD), occupies the southern end of the building and Division 500, Non-Destructive Inspection (NDI) laboratory, occupies the northern end. The facility is used for jet engine maintenance and inspection. The mechanical rooms contain POL that must be removed and disposed of.

The NDI laboratory contains cleaning solvents (PD-680, paint strippers, etc.) in five dedicated 400-gallon treatment tanks and two water rinse tanks. There is secondary containment in the form of a concrete vault below each of the tanks. Because they are hazardous materials all solvents must be removed and disposed of. The tanks and concrete vaults must be cleaned to remove any residual hazardous materials.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence lead-based paint. A survey for asbestos was conducted in March 1990. Friable asbestos was found in this building. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of hazardous materials and miscellaneous POL, and
- purging and cleaning seven 400-gallon tanks and seven concrete containment vaults.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Equipment Decontamination Procedures – Section 02021
4. Free Liquids Removal - 02078
5. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.

B. Removal and disposal of hazardous materials and miscellaneous POL will be lump sum.

C. Purging and cleaning seven 400-gallon tanks and seven concrete containment vaults will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 323 – BATTERY LOCKER
SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 323, the former battery locker. Building 323, constructed in 1991, is a one-story cinderblock building with a pitched roof on a concrete slab. The building is located on the southeastern corner of A Avenue and 9th Street. Building 323 was constructed for use as a battery shop. Lead acid and nickel-cadmium (Ni-Cad) batteries were charged and serviced in this facility. During a December 1998 site walkover the building was being used for storage of miscellaneous equipment. Paint and miscellaneous POL are stored in the building. The paint and POL, estimated at less than 55 gallons, must be removed and disposed of.

Two 20-gallon above ground tanks used for spill and overflow containment are located outside the facility and discharge to the sanitary sewer. One tank is located directly outside the Ni-Cad room and the other tank is located directly outside the lead acid battery room. In the event of an acid spill, the liquid will collect in the tanks and be neutralized. These tanks must be purged and cleaned to remove any residual acid.

Due to its age it is unlikely that this facility has been painted with lead-based paint. No asbestos or electrical transformers were noted in this building. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following items:

- removal and disposal of paint and miscellaneous POL, and
- purging and cleaning two 20-gallon acid tanks.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Equipment Decontamination Procedures – Section 02021
4. Free Liquids Removal – Section 02078
5. Waste Processing – Section 02095
6. Underground and Aboveground Storage Tank System Removal - Section 02051

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of paint and miscellaneous POL will be lump sum.
C. Purging and cleaning two 20-gallon acid tanks will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 330 – LIQUID OXYGEN FARM SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 330, the liquid oxygen (LOX) farm. Building 330 is located on the eastern side of A Avenue and is accessible from Jet Road. This building was constructed in 1967 of concrete and cinderblock. Dimensions of this building are 38 feet long by 28 feet wide. This facility stores and transports liquid nitrogen and liquid oxygen to the flightline for use in aircraft.

A flammable storage cabinet is located approximately 20 feet from the southwestern corner of the building. This locker contains miscellaneous paints, POL, and cleaners. Gas cylinders are stored onsite. All of these materials, estimated at less than 55 gallons, must be removed and disposed of.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. A 1993 asbestos survey indicated no friable asbestos is in the building. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following items:

- removal and disposal of miscellaneous paints, POL, cleaners, and gas cylinders.

  The following Standard Operating Procedures (SOPs) apply:
  1. Regulatory Compliance – Section 01060
  2. Removal and Disposal of Debris and Contaminated Material – Section 02076
  3. Waste Processing – Section 02095

  Preparation and submittal of the following plans for approval prior to commencement of the work is required

  a. Work Plan (see Special Project Plans and Procedures – Section 01125)
  b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125)

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of miscellaneous paints, POL, cleaners, and gas cylinders will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 334 – JET ENGINE TEST CELL SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 334, the jet engine test cell. Building 334 (Test Cell 3), constructed in 1959, is located west of the taxiway near Jet Road and 9th Street. The building was constructed for use as a jet engine test facility. Fuel supply for the test cells is located north of Building 339 in a fenced area. The fenced area contains pumps and two USTs (320 and 321) that are 20,000-gallon jet fuel storage tanks. Decontamination of these USTs will be done under the Building 339 Summary of Work. There is a 1,000-gallon AST that contains 1010 oil. This tank will be decontaminated under the AST Summary of Work.

Inside the building are floor drains that drain to a 500-gallon oil-water separator located southeast of Building 334. The floor drains (approximately 1,000 square feet) must be cleaned to remove any residual petroleum waste. The oil-water separator and associated piping must be purged and decontaminated to remove any residual petroleum waste.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. The building has no potable water supply, and a 1993 asbestos survey indicated no friable asbestos is in the building. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following items:

- steam cleaning of approximately 1000 square feet of concrete flooring and floor drains to remove oil, grease, and solvents, and
- decontamination of one 500 gallon oil/water separator.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Equipment Decontamination Procedures – Section 02021
3. Removal and Disposal of Debris and Contaminated Material – Section 02076
4. Free Liquids Removal – Section 02078
5. Waste Processing – Section 02095
6. Underground and Aboveground Storage Tank System Removal - Section 02051

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Steam cleaning of the concrete floor and floor drains will be lump sum.
C. Decontamination of the oil/water separator will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 339 – JET ENGINE TEST CELL SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 339, the jet engine test cell. Building 339 (Test Cell 4) was constructed in 1959 and is located west of the taxiway near Jet Road and 9th Street. This building is used as a jet engine test facility. Fuel supply for the test cells is located north of Building 339 in a fenced area. The fenced area contains pumps and two USTs (320 and 321) that are 20,000-gallon jet fuel storage tanks. Fuel in the USTs and associated piping must be removed and the USTs and associated piping decontaminated. There is a 1,000-gallon AST that contains 1010 oil. This tank will be decontaminated under the AST Summary of Work.

Inside the building is a trench floor drain (approximately 100 linear feet) that drains to a 1,000-gallon oil-water separator. The floor drain must be cleaned to remove any residual petroleum waste. The oil-water separator and associated piping must be purged and decontaminated to remove any residual petroleum waste.

There is a fenced drum storage area north of Building 339. During a December 1998 visual inspection there were five 55-gallon drums of waste lube oil and waste turbine engine oil. These drums require removal and disposal.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. The building has no potable water supply, and an asbestos survey indicated no friable asbestos is in the building. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- decontamination of two 20,000-gallon USTs and associated piping that contains jet fuel.
- steam cleaning of approximately 100 linear feet of trench drains to remove oil, grease, and solvents.
- decontamination of one 1,000 gallon oil/water separator, and
- removal and disposal of waste POL.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060

2. Equipment Decontamination Procedures – Section 02021
3. Removal and Disposal of Debris and Contaminated Material – Section 02076
4. Free Liquids Removal – Section 02078
5. Waste Processing – Section 02095
6. Underground and Aboveground Storage Tank System Removal - Section 02051

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

C. Timeframes for Utility Cutovers and Interruptions

Interruption to electric service shall be considered utility cutover. Make utility cutovers and interruptions during normal working hours but not on Saturdays, Sundays, and Government holidays. Conform to the public or private utility agency that sources the utility. Provide the Contracting Officer, the Engineer, and the affected public or private utility agency at least fifteen (15) days notice prior to making the utility cutover. Coordinate activities relative to the cutover with the affected public or private utility agency to ensure that the cutover occurs without undue delay, difficulty, or damage to public or private equipment, materials, or property.

1. Ensure that new utility lines are complete, except for the connection, before interrupting existing service.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Decontamination of two 20,000-gallon USTs and associated piping will be lump sum.
C. Steam cleaning of the trench drains will be lump sum.
D. Decontamination of the oil/water separator will be lump sum.
E. Removal and disposal of miscellaneous waste POL will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 361 – WATER TREATMENT PLANT NUMBER 2
SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 361, a water treatment plant. Building 361 is a pump station located on C Avenue between 4th and 6th Streets. The 1,130-square-foot building was constructed in 1957 of concrete block with a metal roof. The building is 40 feet long by 25 feet wide by 10 feet high. The building is used to pump water from onsite wells to a 200,000-gallon aboveground tank (Building 363) where aeration occurs. Chlorine is stored for water treatment. Because chlorine is a hazardous substance the chlorine gas cylinders (six) must be removed and disposed of.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. According to a 1993 friable asbestos survey report there is no friable asbestos in this facility. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of six chlorine gas cylinders.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B Removal and disposal of chlorine gas cylinders will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 370 – MAINTENANCE SHOP SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 370, a golf course maintenance shop. Building 370 is located near I Avenue on the Base golf course. The building is constructed of metal with a metal roof and a wood plank floor. It measures 8 feet long by 4 feet wide. The building is currently used to store new and used paint. All paint, estimated at less that 55 gallons, must be removed and disposed of.

According to a 1993 friable asbestos survey report there is no friable asbestos in this facility. This building is not painted; therefore, lead-based paint is not a concern. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of paint.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B Removal and disposal of paint will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 371 – STORAGE SHED SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 371, a golf course storage shed. Building 371 is located near I Avenue on the Base golf course. The building is constructed of metal with a metal roof and a wood plank floor. It measures 18 feet long by 6 feet wide by 8 feet high. The building is currently used to store POL and parts. The POL must be removed and disposed of.

According to a 1993 friable asbestos survey report there is no friable asbestos in this facility. This building is not painted; therefore, lead-based paint is not a concern. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of miscellaneous POL.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125)

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B Removal and disposal of POL will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 384 – AUTOMOTIVE SHOP BUILDING SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 384 is located in the Transportation and Fuel Management (TFM) compound at the northeastern corner of D Avenue and Ninth Street and was formerly used as a hazardous materials storage building. The building was empty at the time of the 1993 environmental baseline survey (EBS) and during a December 1998 visual inspection. The one-story building measures 33 feet by 18 feet by 10 feet and was constructed in 1961 of concrete block walls, concrete floor, and a flat, built-up tar-and-gravel roof.

Based on observation and inquiry there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility.

Environmental concerns of the 1993 EBS included the possible presence of lead-based paint. An asbestos survey has not been conducted at this building. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 384 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 808 – DISPENSARY/DENTAL CLINIC SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 808, the dispensary/dental clinic. Building 808 is a clinic located on D Avenue between 4th and 6th Street. It was constructed in 1976 of concrete block on a concrete slab with a metal roof. The building is approximately 329 feet long by 179 feet wide by 18 feet high. The building houses dental offices and equipment, a pharmacy, and other medically related functions.

The building contains five X-ray machines. Wastewater from the photographic development is treated through silver recovery units prior to discharging to the Base sanitary sewer system. Because silver is a hazardous waste constituent the silver in the recovery units must be removed and disposed of. Several flammable lockers and storage rooms inside the building store items such as developers, fixers, and cleaners that contain miscellaneous hazardous materials. These hazardous materials must be removed and disposed of. Mercury containing fluorescent lamps are stored in one of the storerooms. All mercury containing fluorescent lamps must be removed and recycled or disposed of.

Biohazardous waste is stored in two drums in a fenced area outside the building. All biohazardous waste must be removed and disposed of. The mechanical rooms contain drums of miscellaneous POL. All miscellaneous POL must be removed and disposed of. Compressed gas cylinders are stored outside the building. All gas cylinders must be removed and disposed of. There is a 2,000-gallon diesel AST and a 50-gallon propane AST located outside the building. The decontamination of these ASTs will be addressed in the AST Summary of Work.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. According to a 1990 asbestos survey, friable asbestos was found within the building. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of hazardous materials, biohazardous waste, compressed gas cylinders, and miscellaneous POL, and
- removal and recycling or disposal of mercury containing fluorescent lamps.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Equipment Decontamination Procedures – Section 02021
4. Mercury Handling and Disposal – Section 02079
5. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure those Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of hazardous materials, biohazardous waste, compressed gas cylinders, and miscellaneous POL will be lump sum.
C. Removal and recycling or disposal of mercury containing fluorescent lamps will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 809 – PUBLIC TOILET SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 809 is a toilet located approximately 200 feet east of the north-south runway. The structure was built in 1977 as a one-story cinderblock building with a total area of 96 square feet. The toilet is now abandoned. The building has a septic tank and is not connected to the Base sewer system.

Based on observation and inquiry there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility.

Environmental concerns of the 1993 EBS included the possible presence of lead-based paint. No friable asbestos was found in this building. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 809 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 810 – WATER TREATMENT FACILITIES BUILDING SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 810 is a pump house, located approximately 200 feet east of the north-south runway. The structure was built in 1980 as a concrete structure with a total area of 25 square feet. The pump is now abandoned, but when it was in use it supplied nonpotable water to Building 809, a toilet. As far as can be identified, there have been no other uses of the building.

Based on observation and inquiry there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility.

Environmental concerns of the 1993 EBS included the possible presence of lead-based paint. No friable asbestos was found in this building. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 810 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 824/824A – AVIONICS AND AIRCRAFT GROUND SUPPORT SHOP SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 824/824A, the avionics shop and aircraft ground support shop. Building 824, constructed in 1957, is a one-story cinderblock building with a flat roof on a concrete slab. Building 824A is a two-story building constructed in 1988 that was built as an annex to Building 824. Building 824/824A is located west of the taxiway on AIMD Boulevard and A Street. The building occupies 81,292 square feet. Building 824 was constructed for use as an electronics maintenance and support facility (testing and repairing of electronic equipment) for jet aircraft. Building 824A was annexed for hybrid avionics, hydraulics repair, and corrosion control. Miscellaneous POL is stored and used onsite. Hazardous waste is generated from sandblasting activities (lead waste), painting activities (air filters) and parts washing. The hazardous waste and miscellaneous POL (estimated at less than 150 gallons) must be removed and disposed of.

Concrete trench floor drains (approximately 500 linear feet) are located throughout the facility. These floor drains must be cleaned to remove any residual petroleum products.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. An asbestos survey was performed in 1993 and the building was found to contain friable asbestos. A radon survey has not been conducted at this facility. During the EBS weapon pods were observed in the Instrument Repair Room in Building 824 with warning signs for radioactive materials marked "Radiation Hazard within 48 inches;" however, quantities and types of radioactive material are unknown.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following items:

- removal and disposal of hazardous waste and miscellaneous POL, and
- steam cleaning approximately 500 linear feet of concrete trench floor drains to remove residual petroleum products.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Equipment Decontamination Procedures – Section 02021
4. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of hazardous waste and miscellaneous POL will be lump sum.
C. Steam cleaning approximately 500 linear feet of concrete trench floor drains will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 860 – MAINTENANCE HANGAR SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 860, an aircraft maintenance hangar. Building 860, located on the west aircraft parking apron, is a concrete block, metal roof, open space hangar supported with cantilevered steel beams and constructed on a concrete slab. The building provides enclosed maintenance space for operational aircraft assigned to NAS Cecil Field. The building is between Building 13, a maintenance hangar, on the east and Building 861, a water storage tank on the west. Its dimensions are 576 feet long by 150 feet wide by 43 feet high. The building was constructed in 1976 and has always been used as an aircraft maintenance hangar.

Special power requirements are provided by an inverter located in mechanical rooms on the roof of the structure. A fire protection deluge system is installed above the hangar floor, with water from the storage tank on the west side of the structure. Three fire pumps to support the system are located in a mechanical room on the west end of the structure. The mechanical rooms contain POL that must be removed and disposed of. Three 250-gallon diesel ASTs supply fuel to the emergency generators that power the fire pumps. A 1,000-gallon AST contains AFFF that is used for fire control. The ASTs will be decontaminated under the AST Summary of Work. There is a 500-gallon oil/water separator located in the grassy area west of the hangar. The oil/water separator must be purged and cleaned to remove any residual petroleum contamination.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. The facility has not been surveyed for asbestos. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of miscellaneous POL, and
- purging and cleaning one 500-gallon oil/water separator.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Equipment Decontamination Procedures – Section 02021

4. Free Liquids Removal – Section 02078
5. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of miscellaneous POL will be lump sum.
C. Purging and cleaning one 500-gallon oil/water separator will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 869 – HAZARDOUS AND FLAMMABLE STORAGE BUILDING SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 869 is a hazardous and flammable storage facility used by flight crews as a paint locker. It is located on the flightline-parking apron near the northeastern corner of Building (Hangar) 860. The building is a 30-foot by 20-foot, one-story, concrete block structure sitting directly on the concrete parking apron. It is divided into four bays and has a common outside entrance for use by the flightline maintenance personnel of the four squadrons occupying Building 860. It has been used for this purpose since it was constructed in 1978.

The building was empty during a December 1998 walk over. Based on observation and inquiry there was no evidence of release or disposal of hazardous or petroleum products at this facility.

Due to the age of this building, it is not likely that it has been painted with lead-based paint. An asbestos survey has not been conducted in this building. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 869 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 870– HAZARDOUS MATERIALS STOREHOUSE SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 870, a hazardous materials storehouse. Building 870 is a flammable storage locker located immediately north of Building 824, adjacent to Jet Road. The structure was built in 1980 as a one-story concrete building with a total area of 209 square feet. Personnel in Building 824 use the building principally for paint storage. Besides paint, other materials stored in the locker include floor adhesive, epoxy resin, polyamide epoxy, aliphatic naphtha, paint thinner, polyurethane coating, hydraulic fluid, and insulating oil. Because these are hazardous materials they must be removed and disposed of (estimated at less than 200 gallons).

There is no potable water supplied to the building, nor is it connected to the Base sewage disposal system. The locker is vented, but not otherwise heated or cooled. No friable asbestos was found during the asbestos survey conducted for this building. There was no lead paint survey for this building, but its age suggests that lead-based paint is not likely. There has been no radon testing for the building.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of miscellaneous hazardous materials.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of miscellaneous hazardous materials will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 928 - AUTOMOTIVE VEHICLE SHOP SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 928, the automotive vehicle shop. Building 928 has been used for automotive vehicle maintenance since its construction in 1974. It is located on the northern side of the Transportation and Fuel Management Complex. The dimensions of the building are 150 feet by 30 feet. It is constructed of cinderblock with a flat roof made of tar-covered asphalt. Building 928 was used to perform wheel alignments, bodywork, welding, and painting for all NAS Cecil Field vehicles. Based on a December 1998 visual inspection the building is no longer being used.

In the welding shop there are three gas cylinders of compressed oxygen and acetylene that require removal. There is one 55-gallon drum of propylene glycol that must be removed and disposed of. The filters in the paint booth must be removed and disposed of as hazardous waste.

According to a 1993 friable asbestos survey report there is no friable asbestos in this facility. This building is not painted; therefore, lead-based paint is not a concern. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following items:

- removal and disposal of hazardous materials, waste POL, and gas cylinders.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of miscellaneous hazardous waste, waste POL, and gas cylinders will be lump sum

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 1820 – AIRCRAFT HANGAR SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 1820, an aircraft hangar. Building 1820, constructed in 1983, is a two-story cinderblock building, with steel beams on a cement slab floor. The building is located west of the taxiway in a secured area north of Building 67 (hangar) and south of Building 880. This facility was constructed for use as pilot training, aircraft maintenance, and administrative offices. The building is 126,000 square feet in area. Miscellaneous hazardous materials and POL are stored and used onsite. The hazardous materials and miscellaneous POL must be removed and disposed of (estimated to be less than 100 gallons).

Concrete trench floor drains are located throughout the facility. These floor drains (approximately 600 linear feet) must be cleaned to remove any residual petroleum products.

A 1993 environmental baseline survey (EBS) indicated that a lead-based paint survey has not been conducted however, it is unlikely that this facility has been painted with lead-based paint due to its age. An asbestos survey has not been conducted however, no friable asbestos is believed to be in this building. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of hazardous materials and miscellaneous POL, and
- steam cleaning approximately 600 linear feet of concrete trench floor drains to remove residual petroleum products.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Equipment Decontamination Procedures – Section 02021
4. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)

b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of hazardous materials and miscellaneous POL will be lump sum.

C. Steam cleaning approximately 600 linear feet of concrete trench floor drains will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 1824 – RADIOGRAPHICS SHOP SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 1824, the radiographics shop. Building 1824, constructed in 1983, is a one-story cinderblock building built on a concrete slab, with a flat wood roof. The building is located approximately 5 feet directly northeast of Building 313 (Jet Engine Maintenance Shop) on Jet Road and 6th Street. The facility is used by the Jet Engine Maintenance Shop's Non-Destructive Inspection (NDI) laboratory for X-raying aircraft components, parachutes, and aircraft stabilizers. A lead-lined vault is located in the northern section of the building and a photographic development room with a silver recovery unit is located in the southwestern part of the building. Wastewater from the photographic development is treated through a silver recovery unit prior to discharging to the Base sanitary sewer system. Because unwanted silver can be a hazardous waste constituent the silver in the recovery unit (estimated quantity less than 55 gallons) must be removed and disposed of..

According to the 1993 environmental baseline survey (EBS) a lead-based paint survey has not been conducted however, it is unlikely that this facility has been painted with lead-based paint due to its age. A survey was conducted for asbestos in this building in 1993 and no friable asbestos was found. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility. X-rays are generated from a non-radioactive source.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following item:

- removal and disposal of hazardous waste (silver).

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Equipment Decontamination Procedures – Section 02021
4. Free Liquids Removal – Section 02078
5. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of hazardous waste (silver) will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 1848 – GROUND SUPPORT ISSUE AND RECEIPT SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 1848, the ground support issue and receipt building. Building 1848, constructed in 1985, is a one-story aluminum-sided building with a cement slab floor. The building is located west of the taxiway in a secured area north of Building 824. Ground support equipment is issued from this building for use on the runway. There is a flammable locker located outside the building that contains miscellaneous POL. The miscellaneous POL (estimated to be less than 55 gallons in small user containers) must be removed and disposed of.

A 1993 environmental baseline survey (EBS) indicated that a lead-based paint survey has not been conducted; however, it is unlikely that this facility has been painted with lead-based paint due to its age. The facility has not been surveyed for asbestos but because of its age is believed to be asbestos free. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following item:

- removal and disposal of miscellaneous POL.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required.

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of miscellaneous POL will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 1850 – AVIONICS REPAIR SHOP SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 1850, an avionics repair shop. Building 1850 is the avionics repair facility operated by Boeing under contract to NAS Cecil Field. The building is used for the repair and design of electronic aviation components. The building was constructed in 1985 with a raised concrete floor with a 5-foot crawlspace below, prefabricated walls, and a flat, built-up, tar-and-gravel roof. Building 1850 measures approximately 100 feet by 150 feet and is located in the southeastern part of the Base, south of 2nd Street and east of A Avenue.

Small quantities of hazardous materials are used on a regular basis in Building 1850. These materials include soldering supplies (SP-30 soldering flux, tin-antimony-lead solder, aluminum oxide, and solvent flux remover), solvents and cleaners (Freon TF15, toluene, 1,1,1-trichloroethane, and methyl ethyl ketone), adhesives and sealants, enamel and epoxy paints and resins, and etching and engraving supplies. When not in use, these materials are stored in a hazardous materials locker. These hazardous materials, estimated to be less than 110 gallons, must be removed and disposed of.

An addition to the western side of the building houses the A/C equipment and 500 KVA transformer. An addition to the southern side of the building serves as the mechanical room, housing two generators, three transformers and switches, and an air-handling unit. Small amounts of transformer fluid, HCFC cooling fluid, and POL are stored in these rooms. Fluids and POL must be removed and disposed of.

Due to the age of the building, it is not likely that it has been painted with lead-based paint. According to a 1993 friable asbestos survey report there is no friable asbestos in this facility. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of miscellaneous hazardous materials and POL.

  The following Standard Operating Procedures (SOPs) apply:
  1. Regulatory Compliance – Section 01060
  2. Removal and Disposal of Debris and Contaminated Material – Section 02076
  3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of miscellaneous hazardous materials and POL will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

HSRs – HIGH SPEED REFUELERS SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of the high-speed refuelers (HSRs). There are two HSRs, one located on the north-south runway and one located on the east-west runway. The HSRs are used to refuel aircraft at the edge of the runway, which allows for a faster turn around time. There are fuel filters and several fuel lines located at each HSR. The fuel lines and filters must be purged of fuel. There are two concrete sumps at the north south HSR and one concrete sump at the east west HSR. The sumps act as settling basins and oil/water separators in the event of a fuel spill. These sumps must be cleaned in order to remove any residual petroleum products.

1.02 DESCRIPTION OF WORK

A. The decontamination work at this facility consists of the following items:

- purging approximately 1,000 linear feet of fuel lines and four fuel filters, and
- cleaning three concrete sumps to remove residual petroleum products.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Equipment Decontamination Procedures – Section 02021
3. Removal and Disposal of Debris and Contaminated Material – Section 02076
4. Piping Removal – Section 02065
5. Free Liquids Removal – Section 02078

Preparation and submittal of the following plans for approval prior to commencement of the work is required

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. The Contractor shall utilize all measures necessary to ensure all potential for environmental impacts from these decontamination activities are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

C. Timeframes for Utility Cutovers and Interruptions

Interruption to electric service shall be considered utility cutover. Make utility cutovers and interruptions during normal working hours but not on Saturdays, Sundays, and Government holidays. Conform to the public or private utility agency that sources the utility. Provide the Contracting Officer, the Engineer, and the affected public or private utility agencies at least fifteen (15) days notice prior to making the utility cutover. Coordinate activities relative to the cutover with the affected public or private utility agency to ensure that the cutover occurs without undue delay, difficulty, or damage to public or private equipment, materials, or property.

1. Ensure that new utility lines are complete, except for the connection, before interrupting existing service.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Purging approximately 1,000 linear feet of fuel lines and four fuel filters will be lump sum.
C. Cleaning three concrete sumps will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

STs – SEPTIC TANKS SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of septic tanks. There are 26 septic systems on NAS Cecil Field. A typical system has a 500-gallon concrete tank and a drainage field. Most of the septic systems treat wastewater from toilet facilities however; it is possible that other materials may have been disposed of in the septic systems. In order to insure that no hazardous or petroleum waste remains, all septic tanks must be pumped out and the waste properly disposed of at a permitted wastewater treatment facility. At 17 of the septic systems a monitoring well was installed downgradient of the drainage field. Fourteen of the monitoring wells have been sampled and analyzed for VOCs, SVOCs, pesticides, PCBs, and inorganics. At the septic systems sampled results indicated an occasional exceedence of inorganic parameters (aluminum, iron, manganese, thallium, and antimony) however; this was attributable to sediment in the sample. At facility 290B naphthalene was found at 51 ug/l which is above its groundwater standard of 20 ug/l. At facility 502 bis(2-ethylhexyl)phthalate was found at 7 ug/l which is above its groundwater standard of 4 ug/l. The following table lists the septic systems at NAS Cecil Field that require cleanout.

NO.	FACILITY NO.	DESCRIPTION	LOCATION	STATUS	MONITORING WELL
1	173	Historic Aircraft Exhibit	East side of "D" Ave. Heritage Row	In service	No
2	217A	Historic Aircraft Exhibit	East side of "D" Ave. Heritage Row	In service	No
3	288	Radar Facility/ Storage Building	Northwest corner of station	In service	Yes
4	289	Air Radar Receiver Station	SE of runway intersection	In service	Yes
5	290B	Transmitter Building	SE of runway intersection	In service	Yes
6	352	Hot Cargo Loading Area	South of runway 9R	Bad drain field	No
7	361	Water Treatment Plant No. 2	East side of "C" Ave. North of 4th Street	In service	No

NO.	FACILITY NO.	DESCRIPTION	LOCATION	STATUS	MONITORING WELL
8	397	Golf Course Pesticide Storage Building	Golf Course maintenance area, end of "I" Ave.	In service	Yes Not sampled
9	500	Old Police Building	On Perimeter Rd. east of "A" Ave. gate	Abandoned 1996	Yes
10	502	AVORD Admin. Building	AVORD Area Entrance Rd.	In service	Yes
11	504	AVORD Inert Storage Facility	AVORD Area Entrance Road	In service	Yes
12	510	Destroyed Structure	North side of 1st St., east of "D" Ave.	Abandoned	No
13	540	Radar Station	East of runway 18L	In service	Yes
14	550	Golf Course Restroom	North end of golf course, near Perimeter Rd.	Unknown	No
15	573	High Explosive Magazine	Aviation Ordnance Area	Unknown	No
16	595	Guided Missile Facility	Aviation Ordnance Area	In service	Yes
17	809	High Speed Turn-up Facility	High speed turn-up apron next to runway 18L	Abandoned 1997	Yes Not sampled
18	829	Radar Building	At SW intersection of runways 9R and 36L	In service	Yes
19	866	High Speed Turn-up Facility	High speed turn-up apron next to runway 9R	In service	No
20	874	Golf Course Restroom	Golf course maintenance area, end of "I" Ave.	Bad drain field	Yes Not sampled

NO.	FACILITY NO.	DESCRIPTION	LOCATION	STATUS	MONITORING WELL
21	929	1st Lieutenant Building	End of 10th Street, near Recycling	In service	No
22	NAGS 1	Naval Air Gunnery School	Yellow Water Weapons Area	Abandoned	Yes CFNAGS1S
23	NAGS 2	Naval Air Gunnery School	Yellow Water Weapons Area	Abandoned	Yes CFNAGS2S
24	NAGS 3	Naval Air Gunnery School	Yellow Water Weapons Area	Abandoned	Yes 98G00301
25	NAGS 4	Naval Air Gunnery School	Yellow Water Weapons Area	Abandoned	Yes 98G00401
26	NAGS 8	Naval Air Gunnery School	Yellow Water Weapons Area	Abandoned	Yes CFNAGS8S

1.02 DESCRIPTION OF WORK

A. The decontamination work at these facilities consists of the following item:

- purge 26 septic tanks and dispose of waste to remove any residual hazardous or petroleum products.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Equipment Decontamination Procedures – Section 02021
3. Removal and Disposal of Debris and Contaminated Material – Section 02076
4. Free Liquids Removal – Section 02078
5. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125)

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. The Contractor shall utilize all measures necessary to ensure all potential for environmental impacts from these decontamination activities are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.05 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Purging 26 septic tanks and disposal of waste will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

PRIORITY 3

PRIORITY MATRIX
NAS CECIL FIELD
DECONTAMINATION AND CLOSURE
APRIL 1999

	Building No.	Name	No Action Required	Remove POL/Haz Waste	Concrete Cleaning	Decon AST	Decon O/W Separator	Decon/ Close Hydraulic Lifts	Removal/ Recycle Mercury Lamps	Piping Cleanout	Decon UST	Remove PCB Dielectric Fluid	Decon Beryllium Dust
1	15	Wastewater Treatment Control Building		x							x		
2	78	FD Main Service		x									
3	80C	Battery Shop		x	x		x						
4	100	FD Services Storage Building		x					x				
5	103	Self Help Warehouse		x									
6	105	Shop		x									
7	108	Grounds Maintenance Equipment Shed	x										
8	110	Lake Fretwell Boathouse	x										
9	120	Self Help Administration Building	x										
10	177	Arresting Gear Building		x									
11	179	DRMO Storage Area	x										
12	185	Aviation Ordnance Nitrogen Facility	x										
13	201	Hazmat Shed		x									
14	241	Air Compressor Building		x	x								
15	314	Flightline Ordnance Building	x										
16	316	Flammable Materials Storage		x									
17	325	Hazardous Material Warehouse/Storage Area		x									
18	369	Hazardous Materials Storage		x									
19	560	Golf Cart Storage Building	x										
20	597	General Storage Shed		x									
21	608	Sewage Pump Station	x										
22	609	Yellow Water Weapons Water Plant		x									
23	632	Flammable Storage	x										
24	646	Hazardous Waste Storage Building		x									
25	810	Water Treatment Facilities Building	x										
26	818	Aircraft Acoustical Enclosure			x		x						
27	852	Flammable Materials Warehouse		x									
28	853	Hazardous/Flammable Materials Warehouse		x									
29	862	Miscellaneous Utilities Plant		x	x								
30	1822	F/A-18 Simulator		x	x								
31	1846	F18 Simulator		x									
32	1847	Fire Pump House		x									
33	3043	Yellow Water Housing Water Treatment Plant		x					x				
34	ASTs	Aboveground Storage Tanks				x							
35	PCBs	PCB Containing Equipment										x	
		TOTALS	10	22	5	1	2	0	2	0	1	1	0

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 15 – WASTEWATER TREATMENT CONTROL BUILDING SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 15, the wastewater treatment plant control building. Building 15 located off 4th Street before it intersects with H Avenue, houses the laboratory, storage, and office for the Base wastewater treatment plant. Constructed in 1942, the building is a one-story, concrete masonry structure situated on a concrete foundation. The building covers approximately 1,300 square feet. The surrounding tanks and buildings that make up the treatment plant were included in the survey for this building. All tanks are cast-in-place concrete structures, and all buildings are concrete masonry. The plant began operating in 1942 with Building 15, two digesters, an aeration tank, two chlorine contact chambers, and two sludge drying beds. Additional clarifiers, sludge fields, and a digester were added in 1957. The surge tank, package unit, generator building (Building 15A), and sludge drying beds were added in 1983. The permitted operation includes wastewater treatment, effluent discharge, and sludge disposal. Treated effluent is discharged into Rowell Creek with ultimate dispersal occurring in Yellow Water Creek. Dried sludge is disposed in a 5-acre open field approximately ½ mile southwest of the treatment plant.

Chlorine is stored for effluent treatment. Chlorine gas is dispersed to the effluent in contact chambers prior to being discharged. Because chlorine is a hazardous substance the chlorine gas cylinders must be removed and disposed of. The laboratory and outside storage sheds contain acids and other miscellaneous chemicals (such as sulfur dioxide) and POL that must be removed and disposed of.

Two USTs for diesel fuel are located on the property. One is for the back-up generator the other is not used. The new 2,000-gallon tank was installed in 1983 for the new generator building. The previous tank is now abandoned and believed empty. Both USTs must be purged and cleaned to remove any residual petroleum products.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence lead-based paint. An asbestos survey indicated that there is no friable asbestos present in the building. There was no evidence of radioactive material usage. No radon survey has been performed at this building.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of two chlorine gas cylinders,
- removal and disposal of miscellaneous hazardous materials and POL, and
- purging and cleaning two 2,000-gallon diesel USTs.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Equipment Decontamination Procedures – Section 02021
4. Free Liquids Removal – Section 02078
5. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

C. Timeframes for Utility Cutovers and Interruptions

Interruption to electric service shall be considered utility cutover. Make utility cutovers and interruptions during normal working hours but not on Saturdays, Sundays, and Government holidays. Conform to the public or private utility agency that sources the utility. Provide the Contracting Officer, the Engineer, and the affected public or private utility agencies at least fifteen (15) days notice prior to making the utility cutover. Coordinate activities relative to the cutover with the affected public or private utility agency to ensure that the cutover occurs without undue delay, difficulty, or damage to public or private equipment, materials, or property.

1. Ensure that new utility lines are complete, except for the connection, before interrupting existing service.

1.06 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of chlorine gas cylinders will be lump sum.
C. Removal and disposal of miscellaneous hazardous materials and POL will be lump sum.
D. Purging and cleaning two 2,000-gallon diesel USTs will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 78 – FD MAIN SERVICE SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 78, a storage building. Building 78 is located off 9th Street. The 1,540 square-foot building was constructed in 1944 of wood with an aluminum pitched roof. The building is 70 feet long by 22 feet wide by 10 feet high. The building is used to store generators, air conditioners, and general maintenance equipment. It appears that the building has been used for storage since its construction.

POL and other hazardous substances (such as corrosion inhibitors and Freon containers) are stored at this building (approximately 250 gallons). These items must be removed and disposed of.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. A 1993 asbestos survey indicated no friable asbestos in the building. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following items:

- removal and disposal of waste POL and miscellaneous hazardous substances.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance - Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing - Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of waste POL and miscellaneous hazardous substances will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 80C – BATTERY SHOP SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 80C, the battery shop. Building 80C is located in the TFM compound at the northeastern corner of D Avenue and Ninth Street and is a tire repair, vehicle steam cleaning, and battery storage facility. The one-story building was constructed in 1953 of concrete block walls, concrete floor and a flat wooden roof, and measures 39 feet long by 23 feet wide by 10 feet high. The building is divided into four compartments of different sizes for tire repair, storage and operation of the steam cleaner, battery storage and recharging, and lawn-care equipment storage. Old tires are stored by the western side of Building 80C, and a bermed, concrete pad that previously held a 500-gallon waste oil AST is located by the eastern side of the building. A stormwater drain is located southwest of the building and connects with an oil-water separator in the northeastern area of the compound. The oil-water separator must be purged and cleaned to remove any residual petroleum waste. A December 1998 visual inspection indicated the presence of 4 55-gallon drums of waste oil stored near the oil-water separator. These drums must be removed and recycled or disposed of. Two other oil-water separators associated with the TFM compound must be purged and cleaned. One is located east of Building 80C and the other is located east of the concrete containment area.

Petroleum products and other hazardous substances (such as lead-acid batteries) are used and stored at this building. These items must be removed and disposed of. Oil stains were observed in the concrete-bermed area where the waste oil AST was formerly located and inside the tire shop. The concrete must be steam cleaned to remove stains.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. An asbestos survey indicated no friable asbestos in the building. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of waste POL and lead-acid batteries,

- steam cleaning of approximately 500 square feet of concrete to remove oil, grease, and solvents, and
- decontamination of three 500 gallon oil/water separators.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Equipment Decontamination Procedures – Section 02021
3. Removal and Disposal of Debris and Contaminated Material – Section 02076
4. Free Liquids Removal – Section 02078
5. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

C. Timeframes for Utility Cutovers and Interruptions

Interruption to electric service shall be considered utility cutover. Make utility cutovers and interruptions during normal working hours but not on Saturdays, Sundays, and Government holidays. Conform to the public or private utility agency that sources the utility. Provide the Contracting Officer, the Engineer, and the affected public or private utility agencies at least fifteen (15) days notice prior to making the utility cutover. Coordinate activities relative to the cutover with the affected public or private utility agency to ensure that the cutover occurs without undue delay, difficulty, or damage to public or private equipment, materials, or property.

1. Ensure that new utility lines are complete, except for the connection, before interrupting existing service.

1.06 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Steam cleaning of the concrete floors will be lump sum.
C. Decontamination of the oil/water separators will be lump sum.
D. Removal and disposal of miscellaneous hazardous waste and waste POL will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 100 – FD SERVICES STORAGE BUILDING SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 100, a quonset hut storage building. Building 100 is located on 10th Street. The 6,848-square-foot building was constructed in 1961 of metal with a protective insulation coating. It is 100 feet long by 40 feet wide by 23 feet high. The building is used to store electrical and plumbing supplies, as well as oil spill containment materials such as absorbent pads. There is a limited volume of miscellaneous POL (less than 55 gallons) stored in the building that must be removed and disposed of. Mercury containing fluorescent lamps (less than six) are stored in the building. All mercury containing fluorescent lamps must be removed and recycled or disposed of.

A 1993 environmental baseline survey (EBS) documented that there are no environmental issues related to friable asbestos, lead-based paint, or radioactive materials usage or presence. Radon was not tested for at this facility. The facility is not connected to the Base water system.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following items:

- removal and disposal of miscellaneous POL, and
- removal and recycling or disposal of mercury containing fluorescent lamps.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Mercury Handling and Disposal - Section 02079
4. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B Removal and disposal of miscellaneous POL will be lump sum.
C. Removal and recycling or disposal of mercury containing fluorescent lamps will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 103 – SELF HELP WAREHOUSE SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 103, the self help warehouse. Building 103 is used as a warehouse for construction materials. The Building is located on 10th Street near the intersection with C Avenue. The building is a one-story, 1,440-square-foot storage shed constructed of aluminum siding, with no floor drains. The building was constructed in 1981.

Paints, solvents, and POL are stored in and around this building. Because they contain hazardous materials these items must be removed and disposed of. The estimated volume of these materials is 1,000 gallons.

A 1993 environmental baseline survey (EBS) documented that there are no environmental issues related to friable asbestos, lead-based paint, the presence of lead in the potable water supply, or radioactive materials usage or presence. Radon was not tested for at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following item:

- removal and disposal of paints, solvents, and POL.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of paints, solvents, and POL will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 105 – SHOP
SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 105, a shop. The area surveyed includes Building 105 and all structures and property within 15 feet of the building's perimeter. Building 105 is located north of 10th Street, northeast of Building 805. The one-story aluminum-sided structure was constructed in 1983 and occupies 2,400 square feet. There were no floor drains noted during the survey. Since its construction, Building 105 has been used as a shop and storage facility for the Construction Battalion (CB) Department. A covered concrete pad with open sides, used for storage, is located on the northern part of the facility; a lumber storage area is located on the eastern part of the property.

Paints, solvents, and POL are used and stored at this building. Because they contain hazardous materials these items must be removed and disposed of. The estimated volume of these materials is less than 150 gallons.

A 1993 environmental baseline survey (EBS) documented that there are no environmental issues related to friable asbestos, lead-based paint, the presence of lead in the potable water supply, or radioactive materials usage or presence. Radon was not tested for at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following item:

- removal and disposal of paints, solvents, and POL.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of paints, solvents, and POL will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 108 – GROUNDS MAINTENANCE EQUIPMENT SHED SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 108 is a storage shed located at 7th Street and E Avenue. The 1,500-square-foot building was constructed in 1945 of concrete block with a pitched roof. The building is 100 feet long by 15 feet wide by 10 feet high. The building has been used for storage and maintenance of various grounds keeping equipment since 1978. According to facility personnel, the shed was vacant for a short time prior to its current use.

Based on observation during a January 1999 site visit the building was vacant and there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility.

A 1993 environmental baseline survey (EBS) indicated that due to the age of the building, it is possible that it has been painted with lead-based paint. According to a 1993 asbestos survey no friable asbestos was found within the building. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 108 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 110 – LAKE FRETWELL BOATHOUSE SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 110, the Lake Fretwell boathouse, is located in the Lake Fretwell Recreation Area off H Avenue. The building is an 820-square-foot, metal structure built in 1979. It has served as the boathouse for the lake since its construction. General maintenance and repair of the rental boats occur in this building.

The boathouse originated as a maintenance facility. Around 1985 the boathouse was renovated to include an office space in the western part of the building, with the maintenance area remaining in the eastern part. Canoe and boat frames are mended in the eastern half of the building. The engine for the safety boat is also repaired here. The safety boat is the only vessel that uses a gasoline engine. All other boats use battery-powered engines.

Based on observation during a January 1999 site visit there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility.

A 1993 environmental baseline survey (EBS) indicated that due to the age of the building, it is unlikely that it has been painted with lead-based paint. According to a 1993 asbestos survey no friable asbestos was found within the building. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 110 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 120 – SELF HELP ADMINISTRATION BUILDING SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 120 is an administrative building located on 10th Street east of D Avenue. The building was constructed in 1991 of a wooden frame and aluminum siding with a gabled roof. The dimensions of the building are 20 feet long by 48 feet wide by 14 feet high. The facility is used as an administrative and tool storage building and has served in this function since construction.

Based on a January 1999 visual observation there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility.

A 1993 environmental baseline survey (EBS) indicated that lead-based paint was probably not applied to the building and no friable asbestos was observed in this building. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 120 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 177 – ARRESTING GEAR BUILDING SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 177, the arresting gear building. Building 177 is located off 1st Street, southeast of Building 72. Building 177 is a quonset hut constructed in 1943 of steel and plaster with a concrete floor. Approximate dimensions of this one-story building are 100 feet long by 40 feet wide. This facility stores arresting gear equipment and maintenance supplies for the equipment.

The maintenance of the arresting gear equipment requires the use and storage of approximately 1,000 gallons of oil, lubricants, solvents, and antifreeze. Because they contain hazardous materials these items must be removed and disposed of.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence lead-based paint. According to an asbestos survey report there was no friable asbestos at this facility. There has been no testing for radon at this facility. There have been no radioactive materials used or stored at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following item:

- removal and disposal of solvents and POL.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance - Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing - Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B Removal and disposal of solvents and POL will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 179 – DRMO STORAGE AREA SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 179 is the former Defense Reutilization and Marketing Office (DRMO) Storage Area. The building is a quonset hut that stores property to be resold by the U.S. Navy. Items that are processed through this building are non-hazardous, such as furniture, office equipment, clothing, and aircraft parts. These materials are then issued or sold to the Department of Defense, Federal Agencies, State governments, and the public.

Based on observation during a January 1999 site visit there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 179 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 185 – AVIATION ORDNANCE NITROGEN FACILITY SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 185 is a nitrogen gas storage facility, located at the northern end of Jet Road, adjacent to and southwest of Building 330, the liquid oxygen (LOX) plant. The facility consists of two aluminum-sided trailers mounted on wooden planks. The facility was built in 1983 and each trailer is approximately 160 square feet in area. Only one of the trailers is currently in use. Nitrogen is transferred from adjacent Building 330 via a partially underground transport line to Building 185 for storage and then supplied as needed to other AIMD facilities.

Based on observation and inquiry there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility.

A 1993 environmental baseline survey (EBS) indicated that lead-based paint was probably not applied to the building and no friable asbestos was observed in this building. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 185 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 201 – HAZMAT SHED SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 201, a hazardous materials shed. Building 201 is located east of Building 81. Building 201 is divided into three sections and has a covered area to park vehicles. The three sections are used for masonry work, storage for the Public Works Department, and for contractor storage. The southern bay of the parking structure was converted into storage for hazardous materials. Drums of hazardous materials stored in this area must be removed and disposed of. Miscellaneous POL is stored in the masonry shop and storage areas. Because it contains hazardous materials the miscellaneous POL must be removed and disposed of.

Based on a January 1999 visual inspection no friable asbestos was observed in the building. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following item:

- removal and disposal of approximately 15 drums of hazardous materials and miscellaneous POL.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.

B Removal and disposal of approximately 15 drums of hazardous materials and miscellaneous POL will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 241 – AIR COMPRESSOR BUILDING SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 241, the air compressor building. Building 241 contains a storage area measuring approximately 40 feet long by 60 feet wide that is generally unused, and an air compressor room, measuring 40 feet long by 40 feet wide, that houses two air compressors. The compressed air is stored in 10 aboveground metal tanks located on 2 concrete pads separated by a grassy area south of the building. A cooling tower is also located on the concrete pad southeast of the building. The building was constructed in 1957 of concrete block walls with a concrete floor and a flat, built-up, tar-and-gravel roof. Building 241 is located east of Jet Road and south of 5th Street.

The maintenance of the air compressors requires the use and storage of large amounts (approximately 1,000 gallons) of lubricating oil, hydraulic oil, compressor fluid, antifreeze, and algaecide. Because they contain hazardous materials these items must be removed and disposed of.

The concrete pad beneath each air compressor, and the surrounding concrete floor, are heavily stained with oil. The concrete pads and floor must be cleaned to remove any residual petroleum products.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence lead-based paint. According to an asbestos survey report there was no friable asbestos at this facility. There has been no testing for radon at this facility. There have been no radioactive materials used or stored at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of miscellaneous POL, and
- steam cleaning approximately 4,000 square feet of oil stained concrete.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060

2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Equipment Decontamination Procedures – Section 02021
4. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A Ensure those Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of miscellaneous POL will be lump sum.
C. Steam cleaning approximately 4,000 square feet of oil stained concrete will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 314 – FLIGHTLINE ORDNANCE BUILDING SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 314 is located approximately 20 feet south of Building 884 on the flightline off 1st Street. Building 314 was constructed in 1959 of sheet metal. Dimensions of this one-story building are 12 feet long by 16 feet wide. This facility is a storage shed for the adjacent transient line building.

Based on observation during a January 1999 site visit the building was empty and there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility.

A 1993 environmental baseline survey (EBS) indicated that lead-based paint was probably not applied to the building and no friable asbestos was observed in this building. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 314 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 316 – FLAMMABLE MATERIALS STORAGE SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 316, a flammable materials storage locker. Building 316 is located north of Building 310 and east of Hangar 67, on the north to south trending taxiway. The structure was built in 1991, as a one-story cinderblock building with a total area of approximately 36 square feet. The locker is vented, but otherwise not heated or cooled. Since its construction the building has been used for storage of volatile items such as paint, sealants, thinners, and cleaning compounds. Because they contain hazardous materials these items, estimated at less than 55 gallons, must be removed and disposed of.

A 1993 environmental baseline survey (EBS) documented that there are no environmental issues related to friable asbestos, lead-based paint, or radioactive materials usage or presence. Radon was not tested for at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following item:

- removal and disposal of paints, sealants, thinners, and cleaning compounds.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.

B Removal and disposal of paints, sealants, thinners, and cleaning compounds will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 325 – HAZARDOUS MATERIAL WAREHOUSE/STORAGE AREA SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 325, the hazardous material warehouse/storage area. Building 325 is located on the northern side of 2nd Street, west of D Avenue. This facility is composed of Building 325 and an open asphalt storage area adjacent to the building. Building 325 is 120 feet by 20 feet and is enclosed on three sides. The open asphalt storage area is approximately 1 acre in size and fenced along the perimeter. Half of Building 325 is used for the initial storage and warehousing of unused hazardous materials such as lubricating oil, hydraulic fluid, and PD-680 as they arrive at the Base. The other half of the building is used to stage hazardous waste generated on the Base. The open asphalt storage area is used to stage non-hazardous waste. All hazardous materials and hazardous waste must be removed and disposed of.

Based on a January 1999 visual inspection the use of lead-based paint on the building is not suspected. Based on observation no friable asbestos is in this building. There was no indication of past or current use of radioactive materials. Because it is open radon is not an issue at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following item:

- removal and disposal of approximately 60 drums of hazardous waste.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B Removal and disposal of approximately 60 drums of hazardous waste will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 369– HAZARDOUS MATERIALS STORAGE SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 369, a hazardous materials storage locker. Building 369 is a small, all metal, portable building used to store spray paints, diesel, and gasoline in cans for mowers and trimmers. Because they contain hazardous materials, estimated to be less than 55 gallons, these items must be removed and disposed of. This facility was constructed in 1956. Its dimensions are 8 feet long by 4 feet wide by 8 feet high. Building 369 is located south of Building 504 (inert storage building) in a large open field on the eastern side of the entrance road to the Aviation Ordnance Area. Access to the entrance road is via Perimeter Road.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. Based on observation no friable asbestos is in this building. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following item:

- removal and disposal of paints and POL.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B Removal and disposal of paints and POL will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 560 – GOLF CART STORAGE BUILDING SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 560 is a storage building located near the intersection of 6th Street and I Avenue. It was constructed in 1989 of metal walls and roof on a concrete slab. The building is approximately 116 feet long by 50 feet wide by 12 feet high. The building has been used for the storage and maintenance of electric golf carts since its construction.

Based on observation during a January 1999 site visit there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility.

A 1993 environmental baseline survey (EBS) indicated that due to the age of the building, it is unlikely that it has been painted with lead-based paint. According to a 1993 asbestos survey no friable asbestos was found within the building. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 560 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 597 – GENERAL STORAGE SHED SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 597, a storage shed. Building 597 is located in the Guided Missile Compound within the Aviation Ordnance Area, which is located north and east of the runway complex. The building is an open-sided vehicle storage shed 144 feet long by 20 feet wide by 9 feet high. Building 597 has a metal frame structure built on a concrete slab with a built-up roof. The structure was built in 1986 and has no supporting utilities.

Two moveable, flammable materials storage lockers are located on the concrete pad beneath the storage shed. The lockers contain paints, lacquers, epoxy, hydraulic fluid, oils, and lubricating fluids to support the equipment maintenance responsibilities of ordnance personnel. Because they contain hazardous materials, estimated at less than 55 gallons, these items must be removed and disposed of.

A 1993 environmental baseline survey (EBS) indicated that based on the age of the facility, it is not likely that lead-based paint was used. Based on observation and the age of the facility, it is unlikely that asbestos is present. Because the structure is an open shed, radon testing is not required There have been no radioactive materials used or stored at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following item:

- removal and disposal of solvents and POL:

  The following Standard Operating Procedures (SOPs) apply:
  1. Regulatory Compliance – Section 01060
  2. Removal and Disposal of Debris and Contaminated Material – Section 02076
  3. Waste Processing – Section 02095

  Preparation and submittal of the following plans for approval prior to commencement of the work is required:

  a. Work Plan (see Special Project Plans and Procedures – Section 01125)

b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of solvents and POL will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 608 – SEWAGE PUMP STATION SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

This facility services the Yellow Water Weapons Complex and is used to pump sanitary sewage through a force main pipeline. The building is a 265-square-foot structure built in 1959. It has concrete block walls, a flat roof, and a concrete floor, which serves as the top of the below ground wet well. The facility is bounded on the north by South Perimeter Road and by wooded areas on the remaining three sides. Farther to the west of this pump station is Building 609 (the water treatment plant).

Based on observation and inquiry there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. A survey conducted in 1993 found no friable asbestos in this building. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 608 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 609 – YELLOW WATER WEAPONS WATER PLANT SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 609, a water treatment plant. Building 609 is located within the Yellow Water Weapons Complex and is used as a potable water treatment plant for the Yellow Water Weapons Complex. The building is due south of South Perimeter Road, just southeast of where it intersects East Perimeter Road. The facility is a concrete structure built in 1959, having an area of 640 square feet. The station pumps water from two groundwater wells to an aboveground reservoir for aeration. Water is then pumped through a chlorine treatment system to a storage tank, and subsequently dispatched to the potable water system. Chlorine is stored for water treatment. Because chlorine is a hazardous substance the chlorine gas cylinders must be removed and disposed of.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. A sign inside the building indicates that asbestos containing material is present in the building. No radon survey has been performed at this building. No radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following item:

- removal and disposal of two chlorine gas cylinders.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of chlorine gas cylinders will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 632 – FLAMMABLE STORAGE SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 632, located to the north of Building 617 on Warehouse Road in the Yellow Water Weapons Compound, serves as a flammable materials storage building. This is a 100-square-foot, concrete masonry building constructed in 1992 for the storage of flammable materials. The facility has secondary containment.

Based on a January 1999 visual observation the building was empty and there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility.

A 1993 environmental baseline survey (EBS) indicated that lead-based paint was probably not applied to the building and no friable asbestos was observed in this building. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 632 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 646 – HAZARDOUS WASTE STORAGE BUILDING SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 646, a hazardous waste storage building. Building 646 is located on C Street in the Yellow Water Weapons Area. This building was constructed in 1942 of reinforced concrete. Dimensions of this one-story building are 50 feet long by 25 feet wide. This building was originally constructed and used as a weapons magazine. Weapons storage was discontinued prior to 1971 after which the facility was out of service for an unknown number of years.

The Natural Resources Department is currently using this facility for storage of inert equipment and supplies. Reportedly the building has never been used specifically for the storage of hazardous waste. A January 1999 visual inspection indicated the presence of paints and solvents (less than 55 gallons). Because they contain hazardous materials the paints and solvents must be removed and disposed of.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. An asbestos survey indicated no friable asbestos in the building. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following item:

- removal and disposal of miscellaneous paints and solvents.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work

1.06 MEASUREMENT AND PAYMENT

A Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B Removal and disposal of miscellaneous paints and solvents will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 810 – WATER TREATMENT FACILITIES BUILDING SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

Building 810 is a pump house, located approximately 200 feet east of the north-south runway. The structure was built in 1980 as a concrete structure with a total area of 25 square feet. The pump is now abandoned, but when it was in use it supplied nonpotable water to Building 809, a toilet. As far as can be identified, there have been no other uses of the building.

Based on observation and inquiry there was no evidence of storage, release, or disposal of hazardous or petroleum products at this facility.

Environmental concerns of the 1993 EBS included the possible presence of lead-based paint. No friable asbestos was found in this building. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

No action required. From an environmental standpoint Building 810 is in compliance with current regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 818 – AIRCRAFT ACOUSTICAL ENCLOSURE SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 818, a jet engine test cell. Building 818, constructed in 1989, is a one-story cinderblock structure with a flat roof. The building is 4,966 square feet in area and is located directly west of the taxiway at the east end of 10th Street. The building was constructed for use as a jet engine test facility.

Floor drains are located in the main room of the test cell. Wastewater from washing engines, waste oil, and waste fuel are discharged, via the floor drains, to a holding tank located in the southeastern corner of the building. An oil-water separator is part of the holding tank. In order to remove any residual waste oil and waste fuel the floor drains must be cleaned and the holding tank and oil/water separator must be purged and cleaned.

A 1993 environmental baseline survey (EBS) indicated that a lead-based paint survey has not been conducted. However, it is unlikely that this facility has been painted with lead-based paint due to its age. An asbestos survey has not been conducted however; no friable asbestos is believed to be in the building. A radon survey has not been conducted at this facility, and no radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following items:

- steam cleaning of approximately 50 square feet of concrete floor drains to remove waste oil and fuel,
- decontamination of one 500 gallon holding tank, and
- decontamination of one 500 gallon oil/water separator.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Equipment Decontamination Procedures – Section 02021
3. Removal and Disposal of Debris and Contaminated Material – Section 02076
4. Free Liquids Removal – Section 02078
5. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

C. Timeframes for Utility Cutovers and Interruptions

Interruption to electric service shall be considered utility cutover. Make utility cutovers and interruptions during normal working hours but not on Saturdays, Sundays, and Government holidays. Conform to the public or private utility agency

that sources the utility. Provide the Contracting Officer, the Engineer, and the affected public or private utility agencies at least fifteen (15) days notice prior to making the utility cutover. Coordinate activities relative to the cutover with the affected public or private utility agency to ensure that the cutover occurs without undue delay, difficulty, or damage to public or private equipment, materials, or property.

1. Ensure that new utility lines are complete, except for the connection, before interrupting existing service.

1.06 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Steam cleaning of the concrete floor drains will be lump sum.
C. Decontamination of the holding tank will be lump sum.
D. Decontamination of the oil/water separator will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 852 – FLAMMABLE MATERIALS WAREHOUSE SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 852, a flammable materials storage locker. Building 852, constructed in 1988, is a one-story cinderblock building occupying 242 square feet. The building is located off Jet Road east of the taxiway, and is used for hazardous materials storage.

Since its construction the building has been used for storage of volatile items such as paint, sealants, thinners, and cleaning compounds. Because they contain hazardous materials these items (estimated at less than 150 gallons) must be removed and disposed of.

A 1993 environmental baseline survey (EBS) documented that there are no environmental issues related to friable asbestos, lead-based paint, or radioactive materials usage or presence. Radon was not tested for at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following item:

- removal and disposal of paints, sealants, thinners, and cleaning compounds.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.

B Removal and disposal of paints, sealants, thinners, and cleaning compounds will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 853 – HAZARDOUS/FLAMMABLE MATERIALS WAREHOUSE SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 853, a flammable materials storage locker. Building 853, constructed in 1988, is a one-story cinderblock building occupying 352 square feet. The building is located off of Jet Road east of the taxiway. Two squadrons use this facility for hazardous materials storage.

Since its construction the building has been used for storage of volatile items such as paint, sealants, thinners, and cleaning compounds. Because they contain hazardous materials these items (estimated to be less than 200 gallons) must be removed and disposed of.

A 1993 environmental baseline survey (EBS) documented that there are no environmental issues related to friable asbestos, lead-based paint, or radioactive materials usage or presence. Radon was not tested for at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following item:

- removal and disposal of paints, sealants, thinners, and cleaning compounds.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.

B Removal and disposal of paints, sealants, thinners, and cleaning compounds will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 862 – MISCELLANEOUS UTILITIES PLANT SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 862, a utilities plant. Building 862 is a utility plant that furnishes compressed air to Building 860. It is located on the concrete parking apron immediately east of the southeastern corner of the Building 860. The building is a 19-foot by 20-foot, one-story, concrete block structure sitting directly on the concrete parking apron. It has been used to house the air compressor equipment since it was constructed in 1976.

Petroleum based lubricants are used and stored at this building. These items (estimated to be less than 55 gallons) must be removed and disposed of. Oil stains were observed on the concrete floor. The concrete (approximately 400 square feet) must be steam cleaned to remove stains.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence of lead-based paint. No radon testing or asbestos surveys have been performed at this building. No radioactive materials have been used or stored at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following items:

- removal and disposal of waste POL, and
- steam cleaning of approximately 400 square feet of concrete to remove oil, grease, and solvents.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Equipment Decontamination Procedures – Section 02021
3. Removal and Disposal of Debris and Contaminated Material – Section 02076
4. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Steam cleaning of the concrete floors will be lump sum.
C. Removal and disposal of waste POL will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 1822 – F/A–18 SIMULATOR SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 1822, the flight simulator building. Building 1822 located at the northwestern corner of A Avenue and 2nd Street, houses two F/A-18 flight simulators and the computer equipment necessary to operate the simulators. The building, constructed in 1979, is a concrete masonry structure covering 38,997 square feet.

The maintenance of the flight simulators requires the use and storage of lubricating oils, grease, and hydraulic oil. Because they contain hazardous materials these items must be removed and disposed of. The estimated volume of these materials is less than 250 gallons.

The concrete floors in several of the mechanical rooms are heavily stained with oil. The concrete floors must be cleaned to remove any residual petroleum products.

According to a 1993 environmental baseline survey (EBS) it is unlikely that the building has been painted with lead-based paint. No asbestos survey has been conducted at this facility. There has been no testing for radon at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following items:

- removal and disposal of miscellaneous POL, and
- steam cleaning approximately 5,000 square feet of oil stained concrete.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Equipment Decontamination Procedures – Section 02021
4. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)

b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure those Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of miscellaneous POL will be lump sum.
C. Steam cleaning approximately 5,000 square feet of oil stained concrete will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 1846 – F–18 SIMULATOR SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 1846, the flight simulator building. Building 1846 located on the northeastern corner of A Avenue and 2nd Street, houses two F18 flight simulators and the computer equipment necessary to operate the simulators. The two-story building, constructed in 1985, is a concrete masonry structure covering 37,188 square feet.

The maintenance of the flight simulators requires the use and storage of lubricating oils, grease, and hydraulic oil. Because they contain hazardous materials these items must be removed and disposed of. The estimated volume of these materials is less than 150 gallons.

According to a 1993 environmental baseline survey (EBS) it is unlikely that the building has been painted with lead-based paint. No asbestos survey has been conducted at this facility. There has been no testing for radon at this facility.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following item:

- removal and disposal of miscellaneous POL.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure those Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of miscellaneous POL will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 1847 – FIRE PUMP HOUSE SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 1847, a fire pump house. This facility is used to pump water from the Building 361 reservoir to fire-fighting equipment on the flightline. Building 1847 is bounded by A Avenue to the south, 10th Street to the east, and Jet Road to the north. The facility is a concrete structure with a flat steel roof and concrete floor, encompassing 840 square feet. Building 1847 was constructed in 1985 and has always been used as a fire pump house. Petroleum products and other hazardous substances (such as lead-acid batteries) are used and stored (less than 55 gallons) at this building. These items must be removed and disposed of.

The building has three ASTs used for storing diesel fuel. The tanks are 240-gallon capacity steel tanks surrounded by a berm. These ASTs will be decontaminated under the AST Summary of Work.

A 1993 environmental baseline survey (EBS) indicated that based on the age of the facility, lead-based paint is not suspected. Based on observation no friable asbestos is in this building. There was no indication of past or current use of radioactive materials. A radon survey has not been conducted at this facility.

1.02 DESCRIPTION OF WORK

A. The decontamination and closure work at this facility consists of the following item:

- removal and disposal of POL and lead-acid batteries.

The following Standard Operating Procedures (SOPs) apply:
1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of POL and lead-acid batteries will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

BUILDING 3043 – YELLOW WATER HOUSING WATER TREATMENT PLANT SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of Building 3043, a water treatment plant. Building 3043 is located in the Yellow Water Area on the northeastern corner of the intersection of Bicentennial Drive and Bicentennial Drive North. The facility is an aluminum-sided structure with a low-pitched roof and occupies approximately 200 square feet. The facility was constructed in 1977 and is surrounded by a 5-foot fence. Two water tanks are on the property, one potable and one non-potable. An emergency generator shed on the property is natural gas fired. The treatment plant services the Yellow Water Housing area. The station pumps water from two groundwater wells to a water storage tank. Water is pumped from this water storage tank through a chlorine treatment system, and stored in a 50,000-gallon holding tank for supply to the Yellow Water Housing Complex. Chlorine is stored for water treatment. Because chlorine is a hazardous substance the chlorine gas cylinders must be removed and disposed of. Mercury containing fluorescent lamps are stored in the building. All mercury containing fluorescent lamps must be removed and recycled or disposed of.

Environmental concerns of a 1993 environmental baseline survey (EBS) included the possible presence lead-based paint. There was no evidence of either asbestos or radioactive material usage. No radon survey has been performed at this building.

1.02 DESCRIPTION OF WORK

A The decontamination and closure work at this facility consists of the following items:

- removal and disposal of two chlorine gas cylinders, and
- removal and recycling or disposal of mercury containing fluorescent lamps.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal and Disposal of Debris and Contaminated Material – Section 02076
3. Mercury Handling and Disposal - Section 02079
4. Waste Processing – Section 02095

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer Provide written request at least seven (7) calendar days prior to such work.

1.06 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of chlorine gas cylinders will be lump sum.
C. Removal and recycling or disposal of mercury containing fluorescent lamps will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

ASTs – ABOVEGROUND STORAGE TANKS SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of all aboveground storage tanks (ASTs) located on NAS Cecil Field. The ASTs contain diesel fuel, gasoline, heating oil, boiler water, aqueous film forming foam (AFFF), or waste oil. ASTs shall be decontaminated in accordance with the SOPs listed in Section 1.02, API Recommended Practice 1604, and 40 CFR Part 280 Section 280.70 through 280.74.

The following is an inventory of ASTs requiring decontamination.

TANK NO.	BUILDING	DESCRIPTION	SIZE (gal)	CONTENT
1 G9-A	9	Convault AST	250	diesel
2 11-B	11	AST	15,000	No. 2 fuel oil
3 11-C	11	AST	15,000	No. 2 fuel oil
4 11-D	11	AST	15,000	No. 2 fuel oil
5 11-E	11	Boiler	10,000	Boiler water
6 11-F	11	Boiler	10,000	Boiler water
7 11-G	11	Boiler	10,000	Boiler water
8 G16-A	16	Convault AST	1,000	diesel
9 G-30	30	AST	50	diesel
10 G59A-1	59	AST	250	diesel
11 G59A-2	59	AST	250	diesel
12 136	75	AST	10,000	off spec JP-5
13 80-132	80	AST	10,000	waste oil
14 80-133	80	AST	10,000	waste oil
15 80-134	80	AST	10,000	waste oil
16 80-135	80	AST	10,000	waste oil
17 80-P-1	80	Portable Tanker	10,000	diesel
18 80-P-2	80	Portable Tanker	10,000	unleaded gasoline
19 80-OW1	80	Portable O/W Separator	2,000	waste oil
20 G82-A	82	AST	250	diesel
21 G83-A	83	AST	1,000	diesel
22 180-A	180	AST	10,000	diesel
23 180-B	180	AST	10,000	unleaded gasoline
24 180-C	180	AST	10,000	unleaded gasoline
25 G190A	190	AST	1,000	diesel
26 G193-A	193	Convault AST	250	diesel
27 G216-A	216	Convault AST	2,000	diesel
28 G222	222	AST	150	diesel
29 370D	238	AST	250	diesel
30 G289-A	289	AST	250	diesel

31	G327-A	327	AST	200	diesel
32	334P	334	AST	1,000	1010 oil
33	339-P	339	AST	1,000	1010 oil
34	G360PS	360	AST	250	unleaded gasoline
35	370G	371	Convault AST	250	unleaded gasoline
36	G541-A	541	Convault AST	250	diesel
37	G543-A	543	AST	250	diesel
38	595-A	595	Convault AST	250	heating oil
39	800A	800	AST	250	heating oil
40	808-A	808	Convault AST	2,000	diesel
41	G859A	859	Convault AST	250	diesel
42	860-D	860	AST	1,000	AFFF
43	860-A	860	AST	250	diesel
44	860-B	860	AST	250	diesel
45	860-C	860	AST	250	diesel
46	G880-A-2	880	Convault AST	1,000	diesel
47	1820-A	1820	AST	1,000	AFFF
48	1820-B	1820	AST	1,000	AFFF
49	1820-C	1820	AST	1,000	AFFF
50	1820-D	1820	AST	1,000	AFFF
51	G1826A	1826	AST	275	diesel
52	G1826B	1826	AST	275	diesel
53	G1826C	1826	AST	275	diesel
54	G1847A	1847	AST	275	diesel
55	G1847B	1847	AST	275	diesel
56	G1847C	1847	AST	275	diesel
57	G824-A	Midfield	AST	275	diesel
58	G829A	Radar	Convault AST	250	diesel
59	G290-A	Transmitter	AST	250	diesel

1.02 DESCRIPTION OF WORK

A The decontamination work at this facility consists of the following item:

- decontamination of the ASTs listed above.

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Underground and Aboveground Storage Tank System Removal – Section 02051
3. Equipment Decontamination Procedures – Section 02021
4. Removal and Disposal of Debris and Contaminated Material – Section 02076
5. Free Liquids Removal – Section 02078
6. Waste Processing – Section 02095
7. Piping Removal – Section 02065

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays.

B Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer Provide written request at least seven (7) calendar days prior to such work

C Timeframes for Utility Cutovers and Interruptions

Interruption to electric service shall be considered utility cutover. Make utility cutovers and interruptions during normal working hours but not on Saturdays, Sundays, and Government holidays Conform to the public or private utility agency that sources the utility Provide the Contracting Officer, the Engineer, and the affected public or private utility agency at least fifteen (15) days notice prior to making the utility cutover. Coordinate activities relative to the cutover with the affected public or private utility agency to ensure that the cutover occurs without undue delay, difficulty, or damage to public or private equipment, materials, or property.

1. Ensure that new utility lines are complete, except for the connection, before interrupting existing service.

1.06 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Decontamination of the ASTs will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

PCBs – EQUIPMENT CONTAINING PCBs SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

The Work required for this project consists of the decontamination of equipment that contains PCBs. In March 1999 Priority 1, 2, and 3 buildings were surveyed for equipment that potentially contained PCBs. Twenty-five pieces of equipment were identified as possibly containing PCBs. The oil from each piece of equipment was sampled and analyzed in the field using a Dexsil Chlor-N-Oil 20 PCB Screening Kit. Of the 25 samples collected and analyzed, four were positive (>20 ppm PCBs). The PCB containing oil from each piece of equipment must be removed and disposed of (estimated at less than 110 gallons). The oil in each piece of equipment shall be replaced with compatible non-PCB containing oil.

The following is an inventory of equipment containing PCB oil that requires decontamination.

Building No.	Building Name	PCB Containing Equipment	Sample ID	Results of PCB Screening Kit
80	Automotive Maintenance and Repair Shop	Hydraulic Lifts, 6 ea	80-L1	> 20 ppm
815	Hangar 815	Air Compressor	815-AC	> 20 ppm
882	Chiller Building	Chiller Crankcase	882-CR	Pure PCB
808	Dispensary/Dental Clinic	Chiller	808-C	> 20 ppm

1.02 DESCRIPTION OF WORK

A The decontamination work at this facility consists of the following item:

- removal and disposal of PCB-containing oil from the equipment listed in Section 1.01 and replacement with non-PCB oil

The following Standard Operating Procedures (SOPs) apply:

1. Regulatory Compliance – Section 01060
2. Removal of PCB Transformers, Equipment, and Liquid – Section 02074
3. Equipment Decontamination Procedures – Section 02021
4. Removal and Disposal of Debris and Contaminated Material – Section 02076
5. Free Liquids Removal – Section 02078
6. Waste Processing – Section 02095
7. Piping Removal – Section 02065

Preparation and submittal of the following plans for approval prior to commencement of the work is required:

a. Work Plan (see Special Project Plans and Procedures – Section 01125)
b. Health and Safety Plan (HASP) (see Special Project Plans and Procedures – Section 01125).

B. The Contractor shall provide and pay for all labor, materials, equipment, tools, water, light, power, transportation, supervision, and all other services and facilities necessary to complete the Work within the specified schedule.

C. The Contractor shall provide all necessary station/facility and State permits and licenses to conduct the Work.

D. Utilize all measures necessary to ensure all potential for environmental impacts from undertaking this work are mitigated.

1.03 CONTRACTOR PERSONNEL REQUIREMENTS

Furnish a list of contact personnel of the Contractor and lower tier subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.04 CONTRACTOR ACCESS AND USE OF PREMISES

A. Ensure that Contractor personnel employed on site become familiar with all rules and restrictions of local, state, and Federal agencies having jurisdiction. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.

1.05 WORKING HOURS

A. Regular Hours

Regular working hours shall consist of a period between 8 a.m. and 5 p.m., Monday through Friday, excluding holidays

B. Work Outside Regular Hours

Work outside regular working hours requires prior approval by the Contracting Officer and the Engineer. Provide written request at least seven (7) calendar days prior to such work.

C. Timeframes for Utility Cutovers and Interruptions

Interruption to electric service shall be considered utility cutover. Make utility cutovers and interruptions during normal working hours but not on Saturdays, Sundays, and Government holidays. Conform to the public or private utility agency

that sources the utility. Provide the Contracting Officer, the Engineer, and the affected public or private utility agency at least fifteen (15) days notice prior to making the utility cutover. Coordinate activities relative to the cutover with the affected public or private utility agency to ensure that the cutover occurs without undue delay, difficulty, or damage to public or private equipment, materials, or property.

1. Ensure that new utility lines are complete, except for the connection, before interrupting existing service.

1.06 MEASUREMENT AND PAYMENT

A. Preparation, submittal, and approval of the Work Plan and HASP will be lump sum.
B. Removal and disposal of PCB-containing oil from the equipment listed in Section 1.01 and replacement with non-PCB oil will be lump sum.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

---End of Section---

SOP	SECTION
1 REGULATORY REQUIREMENTS	1060
2 SPECIAL PROJECT PLANS AND PROCEDURES	1125
3 PROJECT SCHEDULES	1310
4 SHOP DRAWINGS, PROJECT DATA, AND SAMPLES	1340
5 EXISTING UTILITIES AND UNDERGROUND STRUCTURES	2016
6 EQUIPMENT DECONTAMINATION PROCEDURES	2021
7 WATER COLLECTION AND TREATMENT	2023
8 UNDERGROUND AND ABOVEGROUND STORAGE TANK SYSTEM REMOVAL	2051
9 PIPING REMOVAL	2065
10 BERYLLIUM ABATEMENT	2073
11 REMOVAL OF PCB TRANSFORMERS, EQUIPMENT, AND LIQUID	2074
12 REMOVAL AND DISPOSAL OF DEBRIS AND CONTAMINATED MATERIAL	2076
13 DRUM HANDLING AND REMOVAL	2077
14 FREE LIQUIDS REMOVAL	2078
15 MERCURY HANDLING/DISPOSAL	2079
16 FUGITIVE EMISSION CONTROL	2080
17 WASTE PROCESSING	2095
18 EXCAVATION, BACKFILL, AND COMPACTION	2221
19 PAVEMENT, PORTLAND CEMENT CONCRETE (MINOR)	2563

Southern Division
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Decontamination and Closure

Standard Operating Procedure

REGULATORY COMPLIANCE
SECTION 01060

PART 1 GENERAL

1.01 APPLICABLE CODES

The Contractor shall comply with all State rules, ordinances, and regulations rela[illegible] o buildings, employment, the preservation of public health and safety, and so fort[illegible] [illegible]l necessary permits or certificates of inspection shall be paid for and obtained b[illegible] Contractor.

1.02 APPLICABLE REGULATIONS

All applicable federal, state and local laws, ordinances, rules and regulations [illegible]eemed to be included herein the same as though written in full. The Contractor shal[illegible] [illegible]ply with all authorities having jurisdiction over the work. The following list of r[illegible] [illegible]ion does not necessarily include all regulations which may be applicable to site a[illegible] [illegible]ties off-site transportation and disposal. All regulations listed shall be as amende[illegible]

A. Federal Regulations
   1. Asbestos abatement in accordance with:
      a. Title II of Toxic Substances Control Act of 1979 (TSCA)
      b. Asbestos Hazard Emergency Response Act (AHERA)
      c. Asbestos School Hazard Abatement Reauthorization Act (ASHARA)
      d. National Emission Standards for Asbestos (40 CFR 61, Subpart M)
      e. Asbestos Abatement Regulations (40 CFR 763)
      f. Asbestos OSHA Regulations (29CFR 1926.58)
   2. Disposal of hazardous wastes including land disposal restricted wastes at treatment and disposal facilities that are appropriately permitted in accordance with:
      a. Resource Conservation and Recovery Act of 1976 (RCRA)
         (1) Identification and Listing of Hazardous Wastes (40 CFR 261)
         (2) Generator Standards (40 CFR 262)
         (3) Transporter Standards (40 CFR 263)
         (4) TSDF Standards (40 CFR 264)
         (5) RCRA Land Disposal Restrictions (40 CFR 268)
         (6) Hazardous Waste Permit Program (40 CFR 270)

b. Toxic Substances Control Act (TSCA)
   (1) PCB Manufacturing, Processing, Distribution, and Use Prohibitions (40 CFR 761)

c. Compliance with the United States Environmental Protection Agency's (USEPA's) off-site disposal policy. Prior to shipment of wastes to any facility, provide evidence to the Owner that the facility has been inspected in accordance with the requirements of RCRA within the prior six-month period and found to be in compliance as required by USEPA's off-site disposal policy.

3. Transport wastes in accordance with:
   a. All applicable U.S. Dept. of Transportation rules and regulations
   b. USEPA rules and regulations including:
      (1) Hazardous Waste Management Systems (40 CFR 260)
      (2) Standards Applicable to Generators (40 CFR 262)
      (3) Standards Applicable to Transporters of Hazardous Waste (40 CFR 263)
   c. Polychlorinated Biphenyl (PCB) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions (40 CFR 761)
   d. United States Department of Labor (USDOL) Occupational Safety and Health Standards (29 CFR 1910)
   e. U.S. DOT Hazardous Material Regulations (49 CFR Subchapter C, Parts 171-177)
   f. U.S. DOT Container Specifications (49 CFR 178-179)

4. Conduct all site work in accordance with the site-specific Health and Safety Plan and applicable federal regulations including:
   a. USDOL Occupational Safety and Health Standards (29 CFR 1910, 1926)
   b. USEPA Hazardous Waste Management Systems (40 CFR 260)
   c. Standards Applicable to Generators of Hazardous Waste (40 CFR 262)
   d. Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities (40 CFR 264) and National Emission Standards for Asbestos (subpart M of 40 CFR 61).

B. <u>State of Florida Regulations</u>

1. Chapter 62-4 Permits
2. Chapter 62-7 Resource Recovery and Management
3. Chapter 62-63 Local Tank Regulation Programs
4. Chapter 62-107 Short-term Emergency Response
5. Chapter 62-150 Hazardous Substance Release Notification
6. Chapter 62-160 Quality Assurance
7. Chapter 62-2 Air Pollution
8. Chapter 62-701 Solid Waste Facilities
9. Chapter 62-707 Degradable Materials
10. Chapter 62-710 Used Oil
11. Chapter 62-711 Waste Tires
12. Chapter 62-712 Biohazardous and Biological Waste Management Rule
13. Chapter 62-730 Hazardous Waste
14. Chapter 62-740 Petroleum Contact Water

15. Chapter 62-761 Underground Storage Tank Systems
16. Chapter 62-762 Aboveground Storage Tank Systems

C. Local Requirements

1. Ascertain and comply with all applicable facility, county, and municipal ordinances, codes, rules, and regulations and obtain all required permits including seasonal load limits that may be imposed to cover transportation on certain roads.

D. Other Codes, Standards, and Guidance Documents

1. In addition to regulatory requirements, the Contractor shall follow the codes, standards, and guidance documents cited in other sections of these specifications such as, but not limited to API Recommended Practices, USEPA Guidance Documents, and ASTM Standards.
2. Other national codes and which the Contractor shall comply with for all site work that are not specifically cited in other sections include:
   a. BOCA - Building Officials and Code Administrators - "Basic Building Code".
   b. AGC - Associated General Contractors of America - "Manual of Accident Prevention in Construction".
   c. NEC - National Electrical Code.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

Standard Operating Procedure

SPECIAL PROJECT PLANS AND PROCEDURES
SECTION 01125

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

A. Regulatory Requirements - Section 01060
B. Project Schedules - Section 01310
C. Shop Drawings, Project Data, and Samples - Section 01340
D. Equipment Decontamination Procedures - Section 02021
E. Underground and Aboveground Storage Tank System Removal - Section 02051
F. Removal and Disposal of Debris and Contaminated Material - Section 02076
G. Excavation, Backfill, and Compaction - Section 02221

1.02 DESCRIPTION

A. Special project procedures are required of the Contractor due to the potentially hazardous conditions present at the site. These include the following procedures:
   1. Decontamination
   2. Underground Storage Tank Removal
   3. Health and Safety
   4. Personnel and Personal Equipment Decontamination
   5. Spill Control
   6. Dust Control
   7. Stormwater and Erosion Control
   8. Hazardous Material and Debris Handling
   9. Quality Control
   10. Disposal of Waste and Debris
   11. Sampling and Analysis

B. Provide controls and measures for the prevention of water and air pollution and the protection of natural resources during the execution of work included in this Contract. Environmental protection shall include, but not be limited to, measures for preventing contaminated storm water runoff from entering storm drains, erosion and sediment control, spill prevention and control, dust control, and odor control.

C. Control operations to provide environmental protection in conformance with local, state, and federal laws, permits, licenses, and regulations.

D. Contractor is required to certify that Contractor's employees are properly trained to perform the work required by this Contract.

1.03 REFERENCES

A. Federal References
   1. Occupational Safety and Health Administration (OSHA) Standards. Title 29, Code of Federal Regulations, Parts 1910 and 1926 (29 CFR 1910 and 1926).
   2. United States Environmental Protection Agency, "Standard Operating Safety Guides", November, 1984.
   3. United States Environmental Protection Agency, EPA 540/2-85/003, "Dust Control at Hazardous Waste Sites", November, 1985.

B. State References
   1. Chapter 62-160 Quality Assurance
   2. Chapter 62-2 Air Pollution
   3. Chapter 62-730 Hazardous Waste

C. The most stringent requirement among these references shall apply.

1.04 SUBMITTALS

Submit the following in accordance with Section 01340, "Shop Drawings, Project Data, and Samples".

A. Submit three (3) copies of plans specified in this section to the Contracting Officer and the Engineer within twenty (20) calendar days after the Preconstruction Meeting. No work on-site will be permitted until the comments received from the Contracting Officer and the Engineer are adequately addressed by the Contractor. Comments from the Contracting Officer and the Engineer will be submitted back to the Contractor within 14 calendar days of receiving the plans. The Contractor shall adequately respond to comments to the satisfaction of the Contracting Officer and the Engineer within 14 calendar days of receiving any comments from the Contracting Officer and the Engineer.

B. The Contractor shall submit the following plans as part of this Contract. The contents of the plans must contain at a minimum, the items referenced below:
   1. Work Plan:
      a. Schedule and sequence of work.
      b. Hazardous material and debris removal and handling.
      c. Decontamination procedures.
      d. Sampling and analysis.
      e. Off-site disposal.
      f. Quality control.
      g. Submittals.
      h. Other requirements outlined in Paragraph: Work Plan Requirements.

2. Environmental Protection and Contingency Plan.
   a. Spill prevention and control.
   b. Stormwater control.
   c. Erosion and sediment control.
   d. Fire protection and control.
   e. Dust control.
   f. Noise control.
   g. Other requirements outlined in Paragraph: Environmental Protection Plan and Contingency Plan Requirements.

3. Health and Safety Plan.
   a. Health and safety personnel and assignments.
   b. Site-specific health and safety procedures.
   c. Health and safety monitoring requirements.
   d. Decontamination procedures.
   e. Other requirements outlined in Paragraph: Health and Safety Plan Requirements.

C. The Environmental Protection and Contingency Plan may be a separate chapter in the Work Plan or an appendix to the Work Plan.

D. The approved plans, complete with all comments addressed, shall be made a part of the Contract Documents. The Contractor shall implement and maintain these procedures at the appropriate time prior to and during performance of the work.

E. Submit a copy of the applicable USEPA and state permits or licenses granted to all Transporters, treatment, storage, and disposal facilities to be utilized. Provide evidence of RCRA acceptability for hazardous waste disposal as defined in Section 02076, "Removal and Disposal of Debris and Contaminated Material".

1.05 WORK PLAN REQUIREMENTS

A. The Contractor shall prepare a detailed Work Plan describing the procedures the Contractor will follow to implement the decontamination activities of this Contract. The Work Plan shall be developed to be consistent with and in strict adherence with other Contractor-generated plans (Health and Safety Plan and Environmental Protection and Contingency Plan) and with all relevant and appropriate Federal, state, and local laws and regulations associated with hazardous materials handling and disposal. The Work Plan shall include, but not be limited to, the following:
   1. Use drawings and diagrams of the work site with a layout showing existing site conditions and the location of anticipated hauling routes, staging areas, office trailers, drainage controls, and access to the site. The diagram shall also show any decontamination areas, Exclusion Zones, and Contamination Reduction Zones required to do the work.
   2. Identification and acquisition of all permits required to conduct work.
   3. Methods proposed for removing all hazardous materials and debris.
   4. Procedures for handling hazardous waste, solid waste, and debris.
   5. General procedures and equipment for building decontamination.
   6. Identification of the size and locations of the staging areas, and all required maintenance activities.

7. Identification of building materials, equipment and other materials which will be salvaged or recycled and the methods to be used. Include the destination and/or reuse of all salvaged materials.
8. Procedures for mechanical demolition of process equipment including product piping, ventilation ductwork, and other equipment. Provide a description of the procedures for the handling of grease, oil, hydraulic fluids, or other liquids encountered.
9. Procedures for bulking, containing, and staging wastes on-site for shipment off-site.
10. Procedures for the pumping and handling of liquid wastes encountered in equipment, machinery and in structural voids such as pits, sumps, or manholes. The use of on-site sewers for waste disposal can only be conducted after written approval by the utility owner, the Contracting Officer, and the Engineer.
11. Procedure for handling, cleaning, and disposing of transformers and drums contaminated with PCBs.
12. Underground storage tank closure procedures including purging, removal, cleaning, demolition and disposal of the tanks, and the possible excavation and staging of contaminated soils encountered.
13. Procedures for excavation and stockpiling contaminated soils.
14. Procedures for backfilling of subsurface voids and excavations.
15. Description of security operations.
16. List and condition of equipment to be used on-site.
17. List of all submittals and schedule for their submission.
18. Waste identification methods (e.g., labeling, marking containers).
19. Location, names, hauling routes, copies of permits, and USEPA identification numbers of off-site hazardous waste TSDFs, and permitted solid waste and demolition debris landfills proposed for use under this Contract by the Contractor.
20. Manifesting procedures.
21. Identification of key personnel and all subcontractors and their qualifications.

B. The Contractor shall include with the Work Plan a detailed schedule and sequence of work. Refer to Section 01310, "Project Schedules" for requirements.

C. The Contractor shall include in the Work Plan sampling and analysis procedures for profiling for disposal in accordance with regulatory disposal requirements all wastes and materials generated during the execution of this Contract. The procedures shall address compositing of materials and debris, where applicable, to minimize analytical costs but still provide adequate and appropriate specific profiles of wastes. The Contractor shall provide all required sample and shipping containers, collect representative samples under chain of custody, ship all samples for analysis to the laboratory (also provided by the Contractor), and provide complete analytical reports to the Contracting Officer and the Engineer. The sampling and analysis plan shall specifically address:

1. Sampling and analysis of the following:
   a. Building debris, including materials to be salvaged.
   b. Liquids generated from decontamination activities.
   c. Tank and other vessel/container contents.
   d. Transformers.
   e. Soil removed.

2. Sampling and sample custody procedures with references used as a source for the procedure.
3. Description of equipment.
4. Sampling team and qualifications.

D. Contractor quality control procedures shall be included as part of the Work Plan and shall include a description of the quality control procedures, personnel, and inspection procedures to be implemented for the work specified. The quality of work shall be the responsibility of the Contractor. The Contractor shall maintain an effective quality control program that complies with the Contract Documents and which is included as part of the Work Plan. The Contractor shall furnish qualified personnel, appropriate facilities, instruments and testing devices necessary for the performance of the quality control system; these shall be adequate to cover all operations. Sufficient inspections and tests shall be performed on a continuous basis of all items of work, including work performed by subcontractors to the Contractor. The general requirements of the quality control procedures are as follows:

1. The Contractor shall identify an individual within the Contractor's organization, the Quality Control Manager, who will be responsible for quality control during the work. The responsible individual shall be qualified and have a minimum of 5 years of experience with the type of work tasks specified herein, and shall demonstrate the ability to perform correctly the duties required to the satisfaction of the Contracting Officer or the Engineer.
2. The Quality Control Manager shall be on site whenever work is in progress.
3. Quality Control Procedures shall assure that the work complies with the requirements of these specifications.
4. At the completion of any increment of work, the Quality Control Manager and the Contracting Officer or the Engineer shall inspect the work and develop a list of any deficient items that do not conform to the specifications. A second inspection shall be conducted to ascertain that all deficiencies have been corrected.
5. The inspection and any deficiency corrections shall be accomplished within the time stated for completion of the work. If the Contractor fails to comply, the Contracting Officer or the Engineer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such stop orders shall be made the subject of claim for extension of time or for cost claims by the Contractor
6. The Contracting Officer or the Engineer shall notify the Contractor of any non-compliance with the foregoing requirements. The Contractor shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the Contractor at the site, shall be deemed sufficient for the purpose of notification.
7. The laboratory chosen by the Contractor shall be approved by Contracting Officer for solid and hazardous waste testing and capable of producing CLP deliverables and be acceptable to the hazardous waste TSDFs and demolition debris disposal facilities. The Contractor shall submit the laboratory's Quality Assurance Plan or similar documentation that outlines the following protocols:
   a. complete analytical capabilities.
   b. data reduction, validation and reporting.
   c. quality control checks.
   d. performance and system audits.
   e. preventive maintenance.

f. corrective actions.
g. principal personnel resumes.

8. All analytical reports (hard copy) shall be provided by the laboratory in duplicate no later than 30 days of receipt of the sample by the laboratory. All samples shall be delivered to the laboratory within 24 hours from the time of collection in a container and preserved as required by the applicable state or federal sampling and analysis protocols.
9. The Quality Control Procedures must state that prior to any deviations from the approved plan, the Contracting Officer and the Engineer will be notified and the deviation approved. Such acceptance does not limit the full responsibility of the Contractor to meet all requirements of the Contract Documents.
10. Designate a qualified Quality Assurance Officer for sampling and analysis. Include a copy of the QA Officer's resume. The plan and all revisions shall be signed by the QA Officer prior to submission to the Contracting Officer and the Engineer. The QA Officer must be proficient in analytical methodology, data quality and interpretation, sampling plan development, quality control procedures and auditing techniques, and be independent of the analytical laboratory. The QA Officer will be responsible for the following:
    a. Assist in the development of the sampling and analysis procedures, perform field and laboratory audits and sampling audits, interface with the analytical laboratory, interface with the data validator and develop a project specific data report.
    b. Attend all site-specific meetings between the Contractor, the Contracting Officer, and the Engineer.
11. Describe the Quality Assurance/Quality Control procedures for analytical samples. The QA/QC procedures shall state the following:
    a. Data quality objectives for the site and identify data uses.
    b. Number of samples to be collected, matrices, holding times, sample handling measures (including preservatives) and anticipated QA/QC samples to be collected and analyzed.
    c. Site-specific sample collection techniques.
    d. Analytical protocols that will be followed. The Contractor shall designate by method number what protocol shall be used.

1.06 ENVIRONMENTAL PROTECTION AND CONTINGENCY PLAN REQUIREMENTS

A. Prepare an Environmental Protection and Contingency Plan which includes provisions for the prevention of water and air pollution, protection of natural resources and contingency measures during the execution of work included in this Contract. The plan shall include, but is not limited to, the following:
    1. The availability, location, and quantity of spill control equipment and absorbent materials the Contractor will provide.
    2. Contingency plan for spills within Exclusion Zones.
    3. Contingency plan for spills outside Exclusion Zones.
    4. At a minimum, the Spill Control Procedures shall include:
        a. Immediate notification of the Contracting Officer or the Engineer.
        b. Taking immediate measures to control and contain the spill within the site boundaries. This shall include the following actions:
            (1) Keep unnecessary people away, isolate hazardous areas, and deny entry.

(2) Do not allow anyone to touch spilled material.
(3) Stay upwind.
(4) Other actions, as needed.

5. Names and telephone numbers of local and State officials to be contacted in the event of a spill.
6. Provisions for the control of fugitive emissions to the air including dust control, control of volatile organics, and mercury vapors.
7. Identify and describe protective measures for bulk liquids.
8. Procedures for use of subcontractors by the Contractor for dealing with off-site spills. For each subcontractor the plan shall include the same information required for the Contractor's own personnel.
9. Procedures for controlling storm water and erosion and siltation. Include provisions for controlling and preventing surface water from entering contaminated work sites and hazardous waste and debris stockpiles. Provide measures to maintain a separation of potentially contaminated water from uncontaminated water during each phase of the work.
10. Fire prevention and fire fighting measures shall include, as a minimum, procedures and equipment to be employed for responses to fires on the site that may occur in equipment, in the debris, or elsewhere on the site.
11. Services available from the local fire department and coordination with services of the Contractor's onsite personnel.

1.07 HEALTH AND SAFETY PLAN REQUIREMENTS

A. The Health and Safety Plan shall conform to the requirements of 29 CFR 1910 and 1926 which include but are not limited to the following:

1. The name of a site health and safety officer and the names of key personnel and alternates responsible for site safety and health.
2. A health and safety risk analysis for existing site conditions, and for each site task and operation.
3. Employee training assignments.
4. A description of personal protective equipment to be used by employees for each of the site tasks and operations being conducted.
5. Methods proposed for decontamination of equipment, personnel, and vehicles.
6. Location and construction of decontamination facilities.
7. Medical surveillance requirements.
8. A description of the frequency and types of air monitoring, personnel monitoring, and environmental sampling techniques and instrumentation to be used.
9. Site control measures.
10. Standard operating procedures for the site.
11. Entry procedures for confined spaces.
12. Include copies of current health and safety training certificates for every employee the Contractor has or will have at the site.

B. A continuous monitoring program shall be required to track conformance to the approved Health and Safety Plan.

C. The Contractor shall determine the level of personal protection (Level B, C, and D) necessary for all work under this Contract.

D. Contractor's Certification

1. Certify in writing that all employees working pursuant to this Contract are properly trained for this type of work.
2. This certification shall be notarized and shall state that:
   a. All employees are currently trained for that level required by their job function and responsibility, as required by Superfund Amendments and Reauthorization Act (SARA) section 126(b)(2), and 29 CFR part 1910.
   b. Employees involved with the removal and handling of debris which is considered solid waste must contain the same Health and Safety training required for hazardous waste removal and handling.
   c. Provide certification for any crane operators. Document the training and experience of the operator.
   d. The individual who signs the certification of training on behalf of the Contractor has the Contractor's authority to certify that this training information is accurate and complete.
   e. The Contractor agrees to abide by all applicable federal, state, and local laws and regulations.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

3.01 HEALTH AND SAFETY

A. Implementation

1. Enforce the HASP during all phases of work. All site personnel shall be briefed on safety and hygiene procedures and provisions of the HASP, and provide signed statements that they have read and understood the HASP. Meetings shall be held, as necessary, to inform personnel of changes in the HASP and related site conditions.

B. Air Monitoring

1. The Contractor's Safety Officer shall develop Air Monitoring Procedures in accordance with applicable local, State and Federal requirements, and shall include at a minimum the ability to detect and quantify organic contaminants (using a photoionization detector), flammable and explosive conditions, minimum oxygen concentrations, as well as dust levels in the work area.
2. The Air Monitoring Procedures shall specify action levels for organic concentrations, flammable and explosive conditions, oxygen levels, and dust levels at which work procedures will be modified or cease when the action levels are exceeded.
3. Submit work area air monitoring procedures as part of the HASP.
4. Information gathered during air monitoring shall be used to determine appropriate safety and personnel protective measures to be used during the on-site operations.

C. Personal Equipment Decontamination

1. General
   a. All personnel entering or leaving the work area Exclusion Zone shall pass through the designated personnel decontamination area to don, doff, or decontaminate their protective equipment.
   b. Boots and rubber gloves shall be free of soil and/or liquid from the Exclusion Zone prior to entering other areas.
   c. Procedures shall be submitted as part of the HASP.
2. Washing
   a. Before eating, employees shall be required to thoroughly wash faces and hands, and to remove contaminated clothing.
   b. All sanitary wastes generated by personnel shall be collected and sewered.
3. Clothing
   a. The Contractor shall provide all required work clothes.
   b. Work clothes shall be left in the decontamination area.
   c. No work clothing (including boots) shall be worn off or carried out of the project area unless properly decontaminated.
   d. Soiled work clothes shall be disposed of as appropriate.
4. Emergency Respirators: All required respirators shall be provided and maintained by the Contractor and shall be cleaned after usage.
5. Packaging of Waste Items
   a. All personal protection equipment and other contaminated material shall be placed in sealed containers for storage on site.
   b. The Contractor and his personnel shall make a conscious effort to minimize the volume of contaminated materials.
   c. Legible and understandable precautionary labels shall be affixed prominently to sealed containers of contaminated scrap, waste, and debris.
   d. Containers shall be moved only with the proper equipment and shall be secured to prevent dropping or loss of control during transport.

D. Equipment Decontamination

1. General
   a. Any item taken into the work area Exclusion Zone shall be carefully inspected and decontaminated before the item leaves the Exclusion Zone.
   b. All contaminated vehicles, equipment, tools, and materials shall be decontaminated to the satisfaction of the Engineer before it is taken off site.
   c. Personnel performing decontamination shall be dressed at the appropriate level of protection to avoid personal contamination.
   d. Refer to Section 02021, "Equipment Decontamination Procedures"
2. Equipment Decontamination Station
   a. The Contractor shall provide an equipment decontamination station for removing soil from all equipment leaving the Exclusion Zone or work site. Procedures shall be submitted as part of the HASP.
   b. As a minimum, this shall include a high pressure wash area for equipment and vehicles and/or a steam cleaning system.
   c. Decontamination water shall be collected and disposed of by the Contractor in conformance with all Federal, state, and local laws.
   d. Sediments shall be collected and disposed off-site in accordance with Federal and state regulations.
   e. Contractor's plan for treatment or disposal of sediments and decontamination water shall be included in the Work Plan.

3.02 ENVIRONMENTAL PROTECTION

A. Storm Water and Sediment Control

1. Removal of hazardous wastes and debris is to be performed under dry conditions. Coordinate with the asbestos abatement contractor during the removal of asbestos-containing roofing materials to prevent exposure of asbestos and other contaminants to storm runoff.
2. Keep stored or staged hazardous materials and debris properly packaged or containerized to prevent them from coming in contact with, or collecting, rainwater.
3. Collect all decontamination water and lubricating water used during concrete cutting in hazardous areas and store in approved drums or containers for disposal. Do not discharge the water into storm or sanitary sewers unless specifically permitted by the sewer authority.
4. Protect existing on-site storm sewers that are to remain when decontamination is completed. Prevent debris, dust and sediments from entering the catch basins by installing haybales or other filter materials or procedures. Prior to beginning the decontamination activities, inspect each catch basin to ensure proper operation and clean as required.

B. Spill Prevention and Control

1. The Contractor shall be responsible for any and all spills occurring during the project; the Contractor shall also be responsible for providing contingency measures for all potential spills.
2. Off-site spill control will be governed by the U.S. DOT Hazardous Material Regulations.
3. On-site spill control shall consist of the Contractor providing equipment and personnel to perform required measures to contain and clean up spillage that may adversely affect health or the environment.
4. Provide all necessary equipment for unexpected spills by having, at a minimum, the following equipment on site at all times during site work activities.
   a. Sand, clean fill, or other approved non-combustible absorbent material
   b. Drums (55 gallon, U.S. DOT 17-E or 17-H)
   c. Shovels
   d. High-pressure water or steam for decontamination of tools and equipment.
   e. Pumps or vacuum units shall be readily available for emergencies.
5. Immediately following any decontamination activities collect and containerize the decontamination water and sediments and clean the decontamination pad.
6. Keep an adequate supply of absorbent materials on-site to immediately cleanup any leaks or spills that may occur. Immediately notify the Contracting Officer and Engineer of hazardous material spills.
7. Store all hazardous wastes in approved containers properly labeled to identify the type of waste and the date the container was filled. Handle, transport and dispose of hazardous waste materials in accordance with state and federal regulations.
8. Waste materials generated when cleaning a spill or a release will be collected, containerized, sampled and analyzed, transported and disposed by the Contractor at no additional expense to the Contracting Officer.
9. Implement the following minimum spill control actions:

a. Solid Spills: Remove and place contaminated materials into staging areas. Handle any residual liquid as in C (1) and C (2) following.

b. Liquid and/or Sludge Spills: Absorb with sand, clean fill, or other non-combustible absorbent material acceptable to Contracting Officer or the Engineer. Dispose of the absorbent/spill mixture in the manner specified in the previous subsection, "Solid Spills." If a spill occurs of a potentially dilute liquid solution (e.g., decontamination fluid), the Contractor may, with the Contracting Officer's or the Engineer's approval, sample the affected area to determine a more suitable response measure.

c. Decontamination procedures shall be required after cleanup to eliminate traces of the substance spill or reduce it to an acceptable level as determined by the Contracting Officer or the Engineer. Complete cleanup may require removal of contaminated soils. All contaminated materials including solvents, cloth, soil, and wood that cannot be decontaminated must be properly containerized, labeled, and disposed of as soon as possible.

d. All spills shall be noted in the project log. For spills determined by the Contracting Officer or the Engineer to be significant, a spill report shall be prepared which will include a final disposal location.

C. Dust Control

1. Provisions shall be taken during all construction activities. Keep dust down at all times, including during nonworking periods. Sprinkle or treat with dust suppressants that have been approved by the Contracting Officer and the Engineer, prior to use, if required and conduct the operations at the site to minimize dust and vapors. Dry power brooming will not be permitted. Instead, use vacuuming, wet mopping, wet sweeping, or wet power brooming. Air blowing will be permitted only for cleaning nonparticulate debris such as steel reinforcing bars except as otherwise specified. Only wet cutting will be permitted for cutting concrete blocks, concrete, and bituminous concrete.
2. If potential asbestos-containing materials (ACM) are encountered, immediately notify the Contracting Officer and Engineer and proceed as directed.
3. The Contractor shall conduct fence line air monitoring. The Contractor shall cooperate with the Contracting Officer and the Engineer and take measures as required or when directed to reduce dust emissions from the site.

D. Noise

1. Make the maximum use of low-noise emissions equipment according to USEPA regulations.
2. Comply with local noise ordinances related to construction activities

E. Odor and Other Emissions

1. Provisions shall be taken to control odors and other emissions that may emanate as a result of execution of the work. The Contractor shall apply odor-suppressing foam at the direction of the Contracting Officer or the Engineer, based on results of the Contractor's perimeter air monitoring, and olfactory observations. The Contractor shall also modify or cease operations at the direction of the Contracting Officer or the Engineer, in accordance with these specifications and the Contractor's approved HASP.

-- End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

Standard Operating Procedure

PROJECT SCHEDULES
SECTION 01310

PART 1 GENERAL

1.01 DESCRIPTION

A. Provide projected schedules for all work items. Schedules are to be submitted with the Work Plan and shall encompass all work. The schedule can be revised periodically as required. Phasing of work shall be clearly established.

PART 2 PRODUCTS

Not applicable

PART 3 EXECUTION

3.01 FORMAT

A. Provide dates for beginning and completion of each element of work.

B. Identify critical path items.

C. Submit level of effort by labor-hours for each task identified in the project schedule.

3.02 SCHEDULE UPDATES

A. Show all changes occurring since previous submission of schedule.

B. Report any inability to comply, and provide detailed explanation with suggested remedies.

C. Include:
1. Changes in scope.
2. Activities modified since previous updating.
3. Revised projections due to changes.
4. Project Schedule shall start with the Notice of Contract Execution.

3.03 SUBMITTALS

A. Submit proposed schedule to the Contracting Officer and the Engineer as a part of the Work Plan within twenty (20) calendar days of the Preconstruction Meeting.

3.04 DISTRIBUTION

A. Distribute copies of reviewed schedules to:
   1. Job site file.
   2. Subcontractors.

B. Instruct recipients to report any inability to comply, and provide detailed explanation with suggested remedies.

--End of Section--

Southern Division
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Decontamination and Closure

Standard Operating Procedure

SHOP DRAWINGS, PROJECT DATA, AND SAMPLES
SECTION 01340

PART 1 GENERAL

1.01 DESCRIPTION

A. Submit to Contracting Officer and Engineer:
   1. Shop Drawings.
   2. Manufacturer's Certificates.
   3. Project Data.
   4. Samples required by the Contract Documents.
   5. Plans required by the Contract Documents.

B. Prepare and submit a schedule listing dates for submission of each product.

1.02 SHOP DRAWINGS

A. All costs necessary for compliance with requirements of this Section of Specifications shall be incidental to bid items under which each material and piece of equipment is paid for.

B. Detailed Shop Drawings, data, and literature for fabricated materials or equipment to be incorporated in work shall be submitted to Contracting Officer and Engineer for review for general compliance with Contract Documents before fabrication. Contractor shall obtain and check manufacturer's Shop Drawings, certified prints, and other pertinent data for conformance with all requirements of Contract Documents in ample time to permit satisfactory progress of work. After completion of such checking and verification, Contractor shall sign or stamp such drawings, which stamp shall state as follows:

Checked by _____
(Contractor's Name)

Signed by _____
(Checker's Name)

All data, drawings, and correspondence from subcontractors, manufacturers, or suppliers shall be routed through Contractor. Contracting Officer and Engineer will review only such data and details as are transmitted to them by the Contractor. All correspondence from the Contractor to Contracting Officer and Engineer shall refer to appropriate Section of these Standard Operating Procedures and other Specifications containing subject matter of inquiry.

C. Contractor's attention is specifically directed to fact that Shop Drawings are required for each and every element of work. Each Shop Drawing shall be assigned a sequential number for purposes of easy identification, and shall retain its assigned number, with appropriate subscript, on required resubmissions. Equipment shall be identified by number shown on Drawings, Schedules, Standard Operating Procedure and Specifications.

D. All Shop Drawings shall be in conformity with all requirements of Contract Documents. All Shop Drawings, except diagrams, brochures, schedules, and illustrations shall be to an appropriate scale, no smaller than 1/4 inch = 1 foot 0 inches, and shall give all dimensions necessary for installation and incorporation in work. All Shop Drawings shall be accurate and complete, showing outline and section views, details, materials, accessories, appurtenances, and related items. Shop Drawings showing piping and conduit systems shall incorporate sufficient views to show all fittings and specialties including locations and spacing of hangers and supports. Piping and/or conduit systems 3 inch in diameter and smaller may be shown as single line. Equipment and specialties installed within and/or connected to piping and conduit systems shall be cross-referenced to equipment and specialty Shop Drawings by Shop Drawing identification number, manufacturer name, catalog or model number, and equipment numbers as shown on the Drawings or as specified herein.

E. Contractor shall submit to Contracting Officer and Engineer 6 copies (or more as Contractor may require for his own distribution) of Shop Drawings and approved data. Contracting Officer and Engineer will retain 3 copies of each submittal and return the additional copies to the Contractor. Contracting Officer and Engineer's notations of the action taken will be noted on all of the returned copies. At the time of each submission, the Contractor shall call to Contracting Officer and Engineer's attention, in writing, any deviations that the Shop Drawings may have from the requirements of the Contract Documents.

A maximum of 2 submissions of each Shop Drawing will be reviewed, checked, and commented upon without charge to the Contractor. Any additional submissions which are ordered by Contracting Officer and Engineer to fulfill the stipulations of the Contract Documents, and which are required by virtue of the Contractor's neglect or failure to comply with the requirements of the Contract Documents, will be reviewed and checked as deemed necessary by Contracting Officer and Engineer, and cost of such review and checking, as determined by the Contracting Officer, and based upon a rate of $75 per hour, will be deducted from Contractor's monthly invoices or from any monies retained under the provisions of Contract Documents. It is therefore incumbent upon Contractor to make all modifications and/or corrections as may be required by Contracting Officer and Engineer in an accurate, complete, and timely fashion.

F. Upon review by Contracting Officer and Engineer of above Drawings, lists, samples, and other data, the same shall become a part of the Contract, and the fabrications furnished shall be in conformity with same. Review of above Drawings, lists, specifications, samples, or other data, however, shall in no way release Contractor from his responsibility for proper fulfillment, by any fabrication, of requirements of this Contract.

G. Corrections or comments made on Shop Drawings during Contracting Officer and Engineer's review do not relieve Contractor from compliance with requirements of Contract Documents. This check is only for review of general conformance with design concept of Project and general compliance with information given in Contract Documents. Contractor is responsible for confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; and in performing his work in a safe manner. If Shop Drawings deviate from Contract Documents, Contractor shall advise Contracting Officer and Engineer in writing of deviations accompanying Shop Drawings, including reasons for deviations, and shall request a deviation from Contract Documents.

H. Shop Drawings are intended to be utilized by Contractor for additional fabrication, assembly, and erection data. Shop Drawings do not change or supersede Drawings and Specifications except in specific cases when Contractor requests in writing and receives approval in writing for a deviation from Drawings and Specifications. Contractor's request for a change shall give, in detail, specific change requested and shall state reason for change. Changes requested by Contractor and approved by Contracting Officer and Engineer shall not be construed to include approval of any change except changed details specifically requested and approved.

I. Contractor shall also submit to Contracting Officer and Engineer, for review with such promptness as to cause no delay in work, all samples required by Contract Documents. All samples will have been checked by and stamped with approval of Contractor, identified clearly as to material, manufacturer, any pertinent catalog numbers, and use for which intended.

J. Contractor's attention is specifically directed to fact that no work shall be fabricated, nor equipment or materials ordered, nor any construction performed, prior to approval by Contracting Officer and Engineer of Shop Drawings applicable thereto.

Construction performed in violation of this requirement will be neither approved nor certified for payment until applicable Shop Drawings have been submitted and approved. If Contracting Officer and Engineer so direct, Contractor shall disassemble and remove any such construction performed prior to approval by Contracting Officer and Engineer of Shop Drawings applicable thereto, and Contractor will be allowed no additional compensation nor extension of contract time. If Contractor orders any equipment or materials prior to submission and approval of Shop Drawings, it is done at Contractor's risk.

K. Contractor is responsible for making necessary changes in other items, which result from deviations or changes requested by the Contractor and approved by Contracting Officer and Engineer, so that all items perform requirements and intent of Contract Documents.

L. Shop Drawings shall be of standardized sizes to enable Contracting Officer to maintain a permanent record of submissions.

1. Approved standard sizes shall be:
   a. 24 inches by 36 inches.
   b. 11 inches by 17 inches.
   c. 11 inches by 8 1/2 inches.

2. Provision shall be made in preparing Shop Drawings to provide a binding margin on left-hand side of sheet.
3. Shop Drawings submitted other than as specified herein may be returned for resubmittal without being reviewed.

1.03 MANUFACTURER'S CERTIFICATES

A. Prior to accepting installation, Contractor shall submit manufacturer's certificates for each item specified.

B. Such manufacturer's certificates shall state that:
1. Equipment has been installed under either continuous or periodic supervision of manufacturer's authorized representative.
2. It has been adjusted and initially operated in presence of manufacturer's authorized representative.
3. It is operating in accordance with specified requirements, to manufacturer's satisfaction.

C. All costs for meeting the above stated requirement shall be included in Contractor's bid price.

1.04 PROJECT DATA

A. Manufacturer's Standard Schematic Drawings
1. Modify Drawings to delete information that is not applicable to project.
2. Supplement standard information to provide additional information applicable to project.

B. Manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations, and other standard descriptive data.
1. Clearly mark each copy to identify all pertinent materials, products or models, or information.
2. Show dimensions and clearances required.
3. Certify performance characteristics and capacities.

C. Laboratory Analytical Results
1. Provide drawings indicating sample locations.
2. Provide analytical and associated QA/QC results.

D. Plans

1.05 CONTRACTOR RESPONSIBILITIES

A. Review Shop Drawings, Project Data, and Samples prior to submission.

B. Samples
1. Field measurements.
2. Field construction criteria.
3. Catalog numbers and similar data.

C. Coordinate each submittal with requirements of Work and of Contract Documents.

D. Contractor's responsibility for errors and omissions in submittals is not relieved by Contracting Officer and Engineer's review of submittals.

E. Contractor's responsibility for deviations in submittals from requirements of Contract Documents is not relieved by Contracting Officer and Engineer's review of submittals, unless Contracting Officer and Engineer give written acceptance of specific deviations.

F. Notify Contracting Officer and Engineer, in writing at time of submission, of deviations in submittals from requirements of Contract Documents.

G. Begin work which requires submittals after return of submittals with the Engineer's stamp and initials or signature indicating review and approval.

H. After Contracting Officer and Engineer's review, distribute copies.

1.06 SUBMISSION REQUIREMENTS

A. The Contractor shall schedule submissions at least 20 days before dates reviewed submittals will be needed, except where shorter or longer lead times are specified.

B. Submit the number of Samples specified in each of the Specification Sections.

C. Accompany submittals with transmittal letter (see attached form), in duplicate, containing:
   1. Submittal number (in sequence, beginning with 1).
   2. Date.
   3. Project title and number
   4. Contractor's name and address.
   5. The number of each Shop Drawing, Project Data and Sample submitted.
   6. Notification of deviations from Contract Documents.
   7. Return date required by Contractor.
   8. Other pertinent data

D. Submittals shall include:
   1. Date and revision dates
   2. Project title and number
   3. The names of:
      a. Engineer
      b. Contractor
      c. Supplier
      d. Manufacturer
      e. Separate detailer when pertinent
   4. Identification of product or material.
   5. Relation to adjacent structure or materials.
   6. Field dimensions, clearly identified as such.
   7. Specification section number.
   8. Applicable standards, such as ASTM number or Federal Specification.
   9. A blank space, 4 inches by 4 inches, for the Engineer's stamp.
   10. Identification of deviations from Contract Documents.

11. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of field measurements and compliance with Contract Documents.
12. Manufacturers Certificate of Compliance for manufactured or fabricated materials. See attached form.

E. Send copies to the following addresses:

Harding Lawson Associates	NAS Cecil Field Public Works
MAILING ADDRESS	MAILING ADDRESS
2590 Executive Center Circle East Tallahassee, FL 32301 (850) 775-5401	Building 1, Code 18R, PO Box 126 Jacksonville, FL 32215-0108 (904) 778-5620

1.07 RESUBMISSION REQUIREMENTS

A. General: Identify as a resubmission by adding a letter suffix to the original submittal number (1A for the first resubmission of the first submittal; 1B for the second resubmission; etc.).

B. Shop Drawings
1. Revise initial Drawings as required and resubmit as specified for initial submittal.
2. Indicate on Drawings any changes that have been made other than those requested by Contracting Officer and Engineer.

C. Project Data and Samples: Submit new data and samples as required for initial submittal.

1.08 DISTRIBUTION OF SUBMITTALS AFTER REVIEW

A. Distribute copies of Shop Drawings and Project Data that carry the Engineer's stamp, to the following as applicable:
1. Contractor's file.
2. Job site file.
3. Record Documents file.
4. Lower tier subcontractors.
5. Supplier.
6. Fabricator.

B. Distribute samples as directed.

1.09 CONTRACTING OFFICER'S AND ENGINEER'S DUTIES

A. Review submittals with reasonable promptness.

B. Review for:
   1. Design concept of project.
   2. Information given in Contract Documents.

C. Review of separate item does not constitute review of an assembly in which item functions.

D. The Engineer will affix stamp and initials or signature indicating review of submittal.

E. Return submittals to Contractor for distribution.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

--End of Section--

(Sample)

MANUFACTURER'S LETTERHEAD
CERTIFICATE OF
COMPLIANCE
(Manufactured or Fabricated Material)

Date _____

WE HEREBY CERTIFY that _____
(Description, Kind of Material, Model No., etc.)

Furnished to _____
(Name of Contractor) (Prime or Sub.)

For Use On _____
(Project Name)

No. _____ Owner _____

In the Amount of _____
(Quantity Represented)

Identified By _____
(Label, Marking, Seal No., Consignment, or Waybill No.)

Shipped on _____ 19__. Delivered on _____ 19__.

Shipped Via _____
(Method of Shipment, Car No., Truck No.)

MEETS THE REQUIREMENTS OF THE PERTINENT PROJECT PLANS, SPECIAL CONDITIONS AND SPECIFICATIONS OF THE SUBJECT PROJECT IN ALL RESPECTS. PROCESSING, PRODUCT TESTING, AND INSPECTION CONTROL OF RAW MATERIALS ARE IN CONFORMANCE WITH ALL APPLICABLE SPECIFICATIONS, DRAWINGS, AND/OR STANDARDS OF ALL ARTICLES FURNISHED.

All records and documents pertinent to this certificate and not submitted herewith will be maintained available by the undersigned for a period of not less than three years from the date of this certificate.

(Manufacturer)

Signed by _____

Title _____

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

Standard Operating Procedure

EXISTING UTILITIES AND UNDERGROUND STRUCTURES
SECTION 02016

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

A. Underground and Aboveground Storage Tank System Removal - Section 02051
B. Excavation, Backfill, and Compaction - Section 02221

1.02 DESCRIPTION

A. Any existing utilities shown on the Drawings are shown diagrammatically and it is not to be inferred that the locations shown are precise or that all existing utilities are depicted.

B. Coordinate with all applicable utility owners prior to abandonment of utilities or excavation at utility locations and proceed as directed by the utility owner. Acquire all required permits to do the utility work.

C. The Contractor shall be responsible for any and all damage caused by its efforts to any existing utilities, which are not to be abandoned and are to remain in service..

D. Contact the affected utility as soon as any damage is discovered.

E. The utility shall make the determination as to who makes the necessary repairs.

F. In areas where existing underground structures are shown or suspected, carefully uncover such structures to such extent as to enable the Contracting Officer or the Engineer to determine what adjustments, if any need, to be made to accommodate the presence or removal of such structures

1.03 USE OF EXISTING UTILITIES

A. The Contractor shall arrange for all temporary utility services required with the appropriate utility owner.

B. The Contractor is responsible for costs for meter installations (water, electric) and all utility billings (excluding monthly billing for Contracting Officer and Engineer telephone).

C. The Contractor shall be responsible for obtaining a temporary sewer permit and shall indicate how and if the sewer is to be used (i.e., sanitary, decon water, etc.).

The Contractor shall obtain prior written approval by the utility owner and Contracting Officer or the Engineer.

1.04 ABANDONED EXISTING UTILITIES

A. All existing utilities shall be capped at street curb or property line, abandoned in place, and disposed in accordance with the local governing entity and utility owner requirements. The abandonment of natural gas, sewer, and water lines shall include at a minimum a trench barrier as specified in Section 02221, "Excavation, Backfill, and Compaction".

B. Existing on-site manholes to be abandoned shall have the frame and cover removed, the top broken down or removed to 2 feet below grade, a hole punched through the bottom of the structure, and the structure filled with suitable backfill material.

C. Photograph closure of all utility service laterals which are abandoned prior to backfilling excavation.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

Not Applicable

-- End of Section--

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Naval Facilities Engineering Command
Decontamination and Closure

Standard Operating Procedure

EQUIPMENT DECONTAMINATION PROCEDURES
SECTION 02021

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

A. Special Project Plans and Procedures - Section 01125
B. Removal and Disposal of Debris and Contaminated Material - Section 02076
C. Shop Drawings, Project Data, and Samples – Section 01340

1.02 HEALTH AND SAFETY REQUIREMENTS

All work shall be completed in accordance with Special Project Plans and Procedures – Section 01125.

1.03 SUBMITTALS

Submit the following in accordance with Shop Drawings, Project Data, and Samples – Section 01340.

A. Equipment Decontamination Procedures

Equipment decontamination procedures shall be submitted as part of the HASP identified in Section 01125, "Special Project Plans and Procedures" and shall detail all equipment (catalog cuts shall be provided) and procedures proposed for decontamination of equipment used in contaminated areas. At a minimum, the decontamination procedures shall include:

1. Proposed water supply source and method.
2. Proposed pressure washing equipment and procedures.
3. Proposed decontamination procedures.
4. Pressure washer flow rate.
5. Minimum allowable decontamination time.
6. Temperature of decontamination water.
7. Criteria defining extent of decontamination to be achieved.
8. Identification of proposed decontamination technicians.

9. Decontamination pad plan.

1.04 CONTRACTOR RESPONSIBILITY

The Contractor shall be responsible for provision and maintenance of the equipment required for decontamination and for the maintenance of the decontamination pad, drainage pipes, collection structure, and all other facilities and equipment included in the equipment decontamination system. The Contractor shall be responsible for decontamination of all equipment requiring decontamination, as specified in Paragraph: Need for Decontamination.

A. Water Supply

The Contractor shall provide an acceptable supply of decontamination water, ensuring that a minimum of 1,000 gallons of decontamination water is always available at the site.

PART 2 PRODUCTS

2.01 PRESSURE WASHER

The Contractor shall provide potable pressure washer unit(s). The pressure unit(s) shall be capable of supplying low volume, high-pressure steam for decontamination. The pressure washer(s) shall be the property and responsibility of the Contractor.

2.02 HOSING AND FITTINGS

The Contractor shall provide all necessary hosing and fittings necessary to connect the pressure washer(s) to the water supply source.

2.03 MISCELLANEOUS EQUIPMENT

Decontamination equipment includes traps, drums, etc. The Contractor shall be responsible for providing all scrub brushes or other equipment necessary to remove caked or hardened material from the equipment. Disposal of all miscellaneous equipment shall be in accordance with Section 02076, "Removal and Disposal of Debris and Contaminated Material".

PART 3 EXECUTION

3.01 NEED FOR DECONTAMINATION

All structures, concrete sumps, floor drains, piping, and trenches identified in Section 01010, "Summary of Work", shall be decontaminated. All equipment within the Exclusion Zone, as defined in Section 01125, "Special Project Plans and Procedures" shall require decontamination to avoid spreading contamination into uncontaminated areas. All Contractor materials, equipment, and facilities that can be certified decontaminated shall be decontaminated, and inspected and approved by the Contracting Officer or the Engineer prior to removal from the site. The Contractor shall decontaminate all site improvements within the Exclusion Zone to remain. All small tools and other materials for which

decontamination is difficult or uncertain shall be packaged and disposed of by the Contractor in accordance with applicable or appropriate and relevant disposal regulations for contaminated materials. Examples of such equipment or materials are personal protective equipment, rope, lumber, plastic, etc.

3.02 EXTENT OF DECONTAMINATION

All structures and equipment requiring decontamination, as defined in Paragraph: Need for Decontamination, shall be washed to the extent that visible soil is removed. Any vehicles exiting the exclusion zone shall be washed to the extent that visible soil is removed from the vehicle body and undercarriage and no visible tracking of soil onto public roads occurs, as determined by the Contracting Officer or the Engineer. The decontamination area will be closed off to the public and as such will not be considered a public right-of-way during the course of work under this Contract.

3.03 CERTIFICATES OF DECONTAMINATION

The Contractor shall provide a certificate of decontamination for all equipment and materials removed from the project site as described by Section 01125, "Special Project Plans and Procedures". The Contractor shall provide a copy of each decontamination certificate to the Contracting Officer or the Engineer and shall maintain the original certificate at the Contractor's office.

3.04 OPERATION AND MAINTENANCE OF THE DECONTAMINATION PAD

The decontamination process shall be performed in such a manner that all water used and all soil removed during decontamination falls onto the pad and is captured by the decontamination pad. Soil captured shall be removed on a daily basis or as required to prevent sediment buildup within the decontamination pad, as determined by the Contracting Officer or the Engineer. The decontamination pad shall be washed down at the completion of each day of work. All soil removed shall be handled in accordance with Section 02076, "Removal and Disposal of Debris and Contaminated Material."

3.05 DECONTAMINATION PROCEDURES

A. Construction shall be sequenced to avoid spreading of contamination into uncontaminated areas. Contractor is strongly encouraged to sequence work so that contaminated media are addressed first, leaving the facility sufficiently clean so that subsequent work can be performed with less potential of spreading of contamination and reduced requirements for decontamination.

B. Equipment shall be decontaminated to avoid spreading contamination onto previously uncontaminated equipment. Small equipment (i.e., split spoons) shall be rinsed with potable water, washed with a solution of Alconox or other approved non-phosphate detergent and water, and rinsed with potable water. Alternative decontamination procedures and methods shall be approved by the Contracting Officer or the Engineer prior to their use. Perform decontamination at a specially designated decontamination area as authorized by the Contracting Officer or the Engineer.

3.06 STORAGE AND DISPOSAL OF DECONTAMINATION FLUIDS

For storage and disposal of decontamination fluids, refer to Section 02076, "Removal and Disposal of Debris and Contaminated Material".

--End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

Standard Operating Procedure

WATER COLLECTION AND TREATMENT
SECTION 02023

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

The publications outlined below are in addition to information provided in the Work Plan and other project plans including the Site Health and Safety Plan (HASP). The publications listed below form a part of this procedure to the extent referenced. The publications are referred to in the text by basic designation only.

STATE REGULATIONS

Chapter 62-730	Hazardous Waste

CODE OF FEDERAL REGULATIONS

40 CFR 136	Test Procedures for the Analysis of Pollutants
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste

1.02 RELATED STANDARD OPERATING PROCEDURES

A. Piping Removal – Section 02065
B. Underground and Aboveground Storage Tank System Removal – Section 02051
C. Waste Processing – Section 02095
D. Drum Handling and Removal – Section 02077
E. Fugitive Emission Control – Section 02080

1.03 DESCRIPTION OF WORK:

This Standard Operating Procedure (SOP) describes collection and treatment methods for: surface water and exterior dust suppression water, shower and laundry gray water, truck decontamination water, waste processing decontamination water, and interior dust suppression water. Whenever possible, water will be treated on-site and recycled or filtered and disposed of in storm or sanitary sewers. If sample results indicate that on-site treatment is not feasible, disposal will be at an off-site facility licensed to accept the indicated hazardous material. All activities conducted under this section shall be performed in accordance with all federal, state and/or local authorities having jurisdiction and as described herein.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.01 PREREQUISITES, PRECAUTIONS AND LIMITATIONS

A. Water for fire protection, decontamination facilities, shower facilities and on-site dust suppression will be provided by a temporary system to be arranged, designed, and built by the Contractor.

B. The perimeter of the project site and stockpiled soil areas shall be protected with silt fence and hay bales to minimize and filter storm water run-on and run-off.

C. Interior drain sumps will be covered and blocked off from the sanitary sewer prior to dust suppression activities to prevent water from the interior dust suppression operation from collecting in or escaping to the drains/sumps or sewer.

D. The existing site storm drain system shall be cleaned and repaired as necessary prior to water collection and treatment system use.

E. Prior to storm drain system use, a grit and oil removal system shall be installed to prevent untreated waters from escaping the project site to the local wastewater treatment works.

3.02 GENERAL

A. The water collection and treatment methods shall collect and treat waters generated which have similar characteristics in the same manner.

B. It is anticipated that all on-site water generated by surface water, interior and exterior dust suppression, decontamination facilities, waste processing facilities and shower and laundry facilities shall be collected and treated on-site prior to re-use and/or ultimate disposal off-site.

C. During decontamination activities, water generated will be visually inspected for NAPLs or other contaminants that may not be compatible with the treatment train. Samples shall be collected and analyzed for waste characterization and disposal determination in accordance with State stormwater discharge permit regulations. Incompatible liquids (e.g., hazardous materials and hazardous wastes) will be segregated into either drums or separate storage tanks for disposal at an appropriate off-site facility as identified in the Work Plan.

D. Water will be collected in settling ponds, sumps, bermed areas, and frac-tanks depending on the location and nature of operations being conducted.

3.03 WATER COLLECTION/CONTROL

Water collection and control methods will be provided for the following activities.

1. Surface water and dust suppression water in exterior work areas.

2. Water generated by dust suppression activities in interior work areas.

3. Water used to decontaminate (i.e., remove soils from) trucks and equipment leaving the site.

4. Water used to decontaminate structural steel, metal piping, tanks, and process equipment/machinery.

5. Water used for laundry and personnel decontamination.

A. Surface water and exterior dust suppression water

1. Surface water and dust suppression water collection practices shall be consistent with the procedures outlined in the Work Plan to minimize contact with and erosion of sediment.
2. Surface water and dust suppression water will be collected using the natural slope of the site, the existing storm drain system, existing retention ponds on site, trenches to be installed on the downgradient side of the and additional trenches as necessary. Prior to beginning decontamination activities:
   a. Existing catch basins will be inspected and cleaned (prior to decontamination and as required).
   b. Existing on-site catch basins shall be protected from debris, dust and sediments by covering them with geotextile and crushed stone to remove sediment from the water prior to the water entering the collection system.
   c. Catch basins in the soil storage area will be sealed to prevent sediment from entering the stormwater collection system. However, trunk lines will be maintained to allow collection of stormwaters from other areas on-site.
   d. Gravel/geotextile filters will be installed in swales connecting retention ponds and within the collection trenches.
3. Soil storage piles will be protected to minimize surface water contact with contaminated material, and reduce sediment transport in the run-off.
   a. Soil storage piles will be covered, as practicable with a stabilizing foam (refer to the Fugitive Emission Control SOP) or impermeable membrane to serve as a stormwater barrier.
   b. Soil piles will be bermed, either with cold patch or silt fence/hay bales, to minimize run-on to the piles.
   c. Silt fence/hay bale filters will be installed along the downgradient side of soil storage piles to filter any run-off exiting the area.
4. The surface water collection and treatment system will collect and treat the first inch of rain, as well as exterior dust suppression water. A single-tank grit and oil removal system will be installed to remove 80% of the solids from the stream prior to discharge into the sewerage system.

B. Water generated by dust suppression activities in interior work areas

1. Interior drains will be cut or blocked off prior to dust suppression activities to prevent water from the dust suppression operation from escaping to the sanitary or storm sewer.
   a. Drain locations will be identified and filled with concrete.
   b. Second floor drains will be severed, and water directed to the first floor through the severed lines.
2. Dust suppression water will be contained in the buildings/structures with berms as necessary and will be collected with existing sump pumps, absorbents, or wet vacuums.

3. Water generated from any asbestos abatement (done by others) will be pretreated by the asbestos abatement subcontractor, then treated in the on-site treatment system for re-use or disposal.
4. All dust suppression water generated subsequent to asbestos abatement will be collected, stored in frac-tanks, and treated for re-use or disposal.

C. Water used to decontaminate trucks and equipment
1. Truck and equipment decontamination facilities will be established in one or more locations (as described in the Work Plan) to decontaminate work-related traffic, if necessary, before leaving the exclusion zone.
2. Decontamination facilities will consist of bermed areas with sumps and submersible pumps located in the low areas.
3. Trucks and equipment will be decontaminated by means of a high-pressure wash and brushing as necessary when leaving the exclusion zone and going to other clean areas of the site.
4. A drip pad consisting of crushed stone will be built at the exit of each vehicle decontamination location to aid in the drying of tires prior to vehicles returning to public roadways.
5. Wastewater generated from the washing/decontamination of vehicle and equipment will be collected by sump pumps and conveyed to frac-tanks for treatment and re-use or disposal.
6. During decontamination activities, the water generated will be visually inspected for NAPLs or other contaminants that may not be compatible with the treatment train. Incompatible liquids will be sampled, characterized and disposed of as described in section 3.02 (C.) above.

D. Water used to decontaminate structural steel, process piping, drums, tanks, and process equipment/machinery
1. Decontamination of structural steel will take place at a separate area from the decontamination of process piping, drums, tanks and process equipment/machinery. Each decontamination area will contain a separate sump and submersible pump. For large equipment/machinery or tanks, decontamination may be accomplished in place if bermed areas designed to hold sufficient volume of decontamination water are constructed.
2. Decontamination will primarily consist of a high-pressure (greater than 500 psi), low-volume (less than 2 gpm) water spray or steam cleaner until contamination in the form of a sheen is no longer visible in the effluent stream. Consult the Waste Processing SOP.
3. Decontamination water shall be collected by sump pumps, wet vacuums, absorbents, or other means and conveyed to frac-tanks for treatment and re-use or disposal.
4. Existing drummed purge/well development water will be pumped into a frac-tank, sampled and processed on-site if results allow. Liquids that cannot be processed through an on-site wastewater treatment system will be disposed of at an appropriate off-site disposal facility. Sampling of the drummed liquids and Frac-tank will be conducted in accordance with the Drum Handling and Removal SOP.
5. During decontamination activities, the water generated will be visually inspected for NAPLs or other contaminants that may not be compatible with the treatment train. Incompatible liquids will be sampled, characterized and disposed of as described in section 3.02 (C.) above.

E. Shower and laundry gray water

1. Gray water, which includes water from decontamination showers and laundry facilities will be collected in a frac-tank, filtered, metered and discharged into the sanitary sewer system for treatment at the wastewater treatment plant.

3.04 WATER TREATMENT

Water collected from site activities will receive one of three types of treatment:

1) Surface water and water generated from exterior dust suppression activities will be treated in a Vortechnics oil and grit removal system before being released to the wastewater treatment plant.

2) Water generated from indoor dust suppression, decontamination of vehicles and equipment, decontamination of structural steel, equipment, piping, etc. will be collected in frac-tanks and treated in the wastewater treatment system for subsequent re-use or disposal.

3) Gray water will be filtered, metered, and discharged to the sanitary sewer.

Liquid wastewater unable to be treated by one of these three methods, including NAPLs (light or dense), sludge, solids, etc. will be sampled, characterized and disposed of as described in section 3.02 (C.) above.

A. Vortechnics oil and grit removal system

1. Surface water and dust control waters collected in the storm drain system shall be processed in a single-tank grit and oil removal system installed at a location upstream of the main storm drain pipeline and before being discharged into the wastewater treatment plant.
   a. The system is a precast unit which consists of a sediment trapping chamber, an oil separating chamber and an outlet chamber; each chamber includes a manhole for access and for removal of collected wastes.
   b. The system shall be sized to achieve a suspended solids removal efficiency of 80% for the first inch of rainfall from a 2-year storm event.
   c. The system shall be capable of passing greater flow rates with a reduced removal efficiency.
2. Storm water discharge from the first rainfall event at the outfall from the project site shall be sampled after the outfall has been discharging for approximately thirty (30) minutes. The sample is to be collected in accordance with the Work Plan, and analyzed for Total Suspended Solids, Copper, Lead, Zinc and PCBs. The criteria for acceptance for metals will be the industrial storm water targets (e.g., Cu 0.2 mg/l, Pb 0.05 mg/l, Zn 0.5 mg/l), not surface water quality or drinking water standards. A sample may also be used for determining 80% solids removal.
3. The State may require additional water treatment components and/or testing of surface water and dust control waters before discharge to the wastewater treatment plant.

B. Frac-tank storage and Wastewater Treatment System

1. Water collected from indoor dust suppression activities, pressure washing of structural steel, metal piping and metal tanks, decontamination of trucks as well as drummed purge/well development water will be stored in frac-tanks prior to treatment.

2. A skid mounted Wastewater Treatment System shall be located in or near the project site. Additional skid mounted treatment units will be utilized to facilitate mobility of treatment systems around the site, if necessary.
3. The treatment system will include:
   a. Wastewater storage frac-tanks to allow for settling of larger solids/particulates.
   b. An oil/water separator where oils and greases will be removed.
   c. A sand filter for removal of finer particulates.
   d. A granular activated carbon filter for removal of organics.
4. After installation, perform an initial adjustment process on the frac-tank treatment system to ensure proper functioning of the components and effectiveness of the treatment system.
5. Following treatment, the water will be transferred to a frac-tank for holding pending re-use or disposal to the wastewater treatment plant.
6. Piping will be located appropriately for re-use of treated water, or water trucks will be utilized to transport treated water between work zones.
7. Periodic sampling may be necessary to determine carbon replacement frequency. Sampling requirements will be determined based upon an assessment of the wastes encountered in the system. Sampling shall be conducted in accordance with the Work Plan.
8. The frac-tank treatment system will be designed to be fully automated with minimal operator involvement.
9. At the completion of all site decontamination activities, or as necessary, water will be sampled (in accordance with the Work Plan) and re-used or disposed either in the sanitary sewer system, or off-site depending on sample results. Water discharged to the sanitary system will flow through a filter bag to remove suspended solids larger than 5 microns.

C. Gray water filtering system
   1. Gray water from decontamination showers and washing/laundry facilities will be collected in a frac-tank.
   2. Collected water will be filtered, utilizing a two-step filtration process designed to remove suspended solids larger than 5-microns, metered, and discharged directly to the sanitary sewer for treatment at the wastewater treatment plant.

---End of Section---

Southern Division
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Decontamination and Closure

Standard Operating Procedure

UNDERGROUND AND ABOVEGROUND STORAGE TANK SYSTEM REMOVAL SECTION 02051

PART 1 GENERAL

1.01 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

A. Summary of Work - Section 01010
B. Regulatory Requirements - Section 01060
C. Special Project Plans and Procedures - Section 01125
D. Existing Utilities and Underground Structures - Section 02016
E. Removal and Disposal of Debris and Contaminated Material - Section 02076
F. Excavation, Backfill, and Compaction - Section 02221

1.02 DESCRIPTION

A. General

1. Tank closure consists of removing contents, purging, excavating, removing, cleaning, demolishing, disposing (salvage/scrap), and registering, if necessary, aboveground and underground fuel oil and other liquid storage tanks and associated piping. Contaminated soil excavation, beyond that necessary to remove the tanks or search for the unknown tank, is not included in this work.
2. This work includes performing explorations to locate tanks. If a tank is located, it shall be removed as specified in this Section.
3. This work consists of containerizing, sampling, and analyzing of media in the tanks to identify disposal requirements and obtain disposal approval, and transport and disposal at an approved disposal facility, and backfilling the excavation with clean borrow material.

B. The Contractor shall remove, recycle, and/or dispose of all aboveground and underground piping associated with the tanks.

C. Residual fluids contained in tanks shall be removed in accordance with API Publication 1604 prior to removal of the tanks.

D. The tanks and associated piping are to be removed by the Contractor. Minor structures not associated with the tanks or piping shall be removed by the Contractor only after consultation with the Contracting Officer or Engineer.

E. The Contractor shall wipe clean the suspected tanks using absorbent pads to render the tanks empty according to the API definition. Tanks and associated piping shall be cleaned and dismantled by the Contractor.

F. The Contractor shall clear the area as necessary to complete the specified work.

1.03 SUBMITTALS

A. The Contractor shall submit tank closure procedures as part of the Work Plan. The procedures shall describe the proposed methods for tank removal including details on excavation, fluid removal, tank purging and decontaminating, fluids handling, demolition of tanks, utilities, piping, and structures associated with the tanks, and dewatering and water disposal. Upon approval of the Work Plan, the Contractor shall submit copies of authorizations and permits from applicable local, state, and federal agencies to demolish, remove, and dispose of the tanks.

1.04 APPLICABLE REGULATIONS AND PUBLICATIONS

A. Regulations
   1. Federal Regulations
      a. 29 CFR Part 1910.120 and .146, Occupational Safety and Health Administration (OSHA) Standards - Hazardous Waste Operations and Confined Space Entry Procedures.
      b. 29 CFR Part 1926.650-652, Occupational Safety and Health Administration (OSHA) Standards Subpart P - Excavations.
   2. State Regulations
      a. Chapter 62-761 Underground Storage Tank Systems
      b. Chapter 62-762 Aboveground Storage Tank Systems
      c. Chapter 62-710 Used Oil
      d. Chapter 62-730 Hazardous Waste

B. Publications
   1. API Recommended Practice 1604, Removal and Disposal of Used Underground Petroleum Storage Tanks, Sections 1, 4, 5, and 7, Second Edition, December 1987, Supplement 1989.
   2. API Publication 2219, Safe Operating Guidelines for Vacuum Trucks in Petroleum Service, First Edition, November 1987.

PART 2 PRODUCTS

Not Applicable

PART 3 EXECUTION

3.01 SAFETY REQUIREMENTS

A. General
   1. Equipment and materials used on this project by the Contractor shall be specifically designed and manufactured for the function for which they are being used. The Contractor shall provide all materials and equipment in suitable and adequate quantity as required to accomplish the work specified herein, and as required to complete the project.
   2. Work shall be done in conformance with the rules and regulations pertaining to safety established by local, State, and Federal agencies, and as specified elsewhere in these Specifications.

3. The Contractor must minimize the potential for creating sparks by using safe work practices while operating equipment in the area and grounding to the tanks all motorized equipment.

B. Tank

1. The Contractor is required to obtain all necessary permits, such as a confined space entry permit, as needed.
2. As a safety precaution, the Contractor shall use an explosimeter to determine the Lower Explosive Limit (LEL) of the vapors in the UST/AST. The Contractor shall purge the UST/AST atmosphere with dry ice or other API-approved methods (excluding water methods), if necessary, in order to eliminate any flammable vapors. The Contractor shall take continuous readings to determine if additional purging is required prior to entry.
3. The Contractor shall monitor the oxygen levels in the UST/AST to ensure a safe atmosphere (Acceptable range: 19.5% - 23% Oxygen) prior to entry and during occupation of the confined space.
4. If no manways are accessible, the Contractor shall cut manways using a non-sparking tool (i.e., "sawz-all") to gain access to the UST/AST. Manned entry will be required to remove residual fluids and deposits inside the UST/AST.
5. The pipes and tanks shall only be cut using a safe, approved method. Cutting torches shall not be used to cut tanks or piping. No cutting of a tank shall occur until after the tank has been purged.

3.02 EXCAVATION PROCEDURES

Refer to Excavation, Backfill, and Compaction - Section 02221.

3.03 CLEANING AND REMOVAL PROCEDURES

A. Once UST locations are confirmed by exploratory excavation and utilities are marked and handled in accordance with Section 02221, "Excavation, Backfill, and Compaction", the Contractor shall expose the tops of the USTs and piping so that the tanks, piping, and appurtenances can be cleaned and removed.

B. Tank and System Cleaning

1. The Contractor shall drain and blow all product lines into the tanks using compressed air (not to exceed 5 psi), being careful to avoid any spillage to the excavation area. The Contractor shall disconnect product piping from the tanks and remove the piping.
2. The Contractor shall remove all piping, valves, connections, pumps, equipment, and structures associated with the UST with the exception of the vent line. The vent line should remain in connection until the tank is purged. Temporarily plug all other tank openings so that vapors will exit through the vent line during the tank purging process.
3. The Contractor shall purge the tank in accordance with requirements outlined in this Section.
4. The Contractor shall remove liquids and residues from the tanks by using either a vacuum truck for large volumes or explosion-proof, air-driven pumps for small volumes of liquids left in the tank. Pump motors and

suction hoses must be bonded to the tanks or otherwise grounded to prevent electrostatic ignition hazards. It may be necessary to use a hand pump to remove the last few inches of liquid from the bottom of the tanks. If a vacuum truck is used for removal of liquids or residues, the area of operation for the vacuum truck must be vapor-free. Refer to API Publication 2219 for vacuum truck operating and safety practices.

5. The inside of the tank will be wiped clean with absorbent pads to render the tanks empty according to the API definition. The tank shall be cleaned in accordance with API Recommended Practice 1604, with the exception that filling the tank with water shall not be used as a cleaning procedure.
6. The Contractor shall transfer all product, sludge, and residue from the tanks to a vacuum truck, if needed, or 55-gallon drums for disposal. All adsorbent pads and personal protective equipment (PPE) used during the cleaning shall be transferred to 55-gallon drums for disposal. Wastes generated during tank cleaning and removal shall be characterized and disposed in accordance with Section 02076, "Removal and Disposal of Debris and Contaminated Material".

C. Tank and System Excavation and Removal

1. All utilities and substructures not associated with the tank systems shall be secured and protected in a sound, safe manner to prevent any damage to them.
2. No piping associated with the underground tanks shall be left in place, unless special approval is obtained from the Contracting Officer or Engineer.
3. The Contractor shall use heavy equipment and necessary slings and hoists to remove the tanks from the supports or the ground.
4. All piping shall be cut in sections not to exceed 10 feet in length.
5. The Contractor shall ascertain the most appropriate method of tank disposal according to federal, state, and local regulations. The preferred method of disposal is to transport the tanks and associated piping to a permitted scrap metal reclamation facility approved by the Contracting Officer. The Underwriters Laboratories label (if it exists) shall be removed from each tank by the Contractor and submitted to the Contracting Officer. The tanks, piping, and fittings shall be rigged and loaded onto a DOT-approved truck for transportation.
6. The Contractor shall be responsible for collection and disposal of any groundwater, liquid, or solid wastes encountered that must be removed to facilitate tank excavation and removal.

3.04 BACKFILL AND COMPACTION

A. Refer to Excavation, Backfill, and Compaction - Section 02221.

3.05 DEBRIS AND LIQUID HANDLING AND DISPOSAL REQUIREMENTS

A. Refer to Removal and Disposal of Debris and Contaminated Material - Section 02076.

--End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

Standard Operating Procedure

PIPING REMOVAL
SECTION 02065

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

The publications outlined below are in addition to information provided in the project Work Plan and other project plans including the Site Health and Safety Plan (HASP). The publications listed below form a part of this procedure to the extent referenced. The publications are referred to in the text by basic designation only.

CODE OF FEDERAL REGULATIONS

29 CFR 1910.120	Hazardous Waste Operations and Emergency Response
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 172	Hazardous Materials Tables and Hazardous Communication Regulations

1.02 RELATED STANDARD OPERATING PROCEDURES

A. Free Liquids Removal – Section 02078
B. Underground and Aboveground Storage Tank System Removal – Section 02051
C. Waste Processing – Section 02095

1.03 DESCRIPTION OF WORK

This Standard Operating Procedure (SOP) provides for the removal of above-grade piping. The piping contains various liquids including but not limited to water, process fluids (i.e., solvents), oils, grease, and hydraulic fluids. It is critical to note that the contents of the piping are assumed to contain product and may be toxic, and all activities conducted under this section shall be performed in strict accordance with the approved site HASP, as well as with other appropriate federal, state, and/or local authorities having jurisdiction.

1.04 JOB CONDITIONS

It is assumed that any asbestos containing material (ACM) will be completely removed from around the pipes prior to cutting and removal. The potential asbestos (in the form of piping insulation) will be removed in accordance with the Asbestos Abatement Work Plan. In the general sequence of demolition, asbestos will be removed prior to the removal of piping and equipment.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.01 PREREQUISITES, PRECAUTIONS AND LIMITATIONS

A. Provide total containment for cutting/draining of pipes to be removed.

B. Containment material should be flame retardant or suitably protected if flame cutting is used.

C. Where sharp edges (i.e., pipe end, saw blades, etc.) may be a consideration, work gloves should be worn over protective rubber gloves for personnel protection.

D. When the use of air tools is considered necessary because of the need for high cutter speed or shock hazard from electric tools for example, the rear exhausting type is preferred to minimize the spread of contamination and the possibility of airborne dust generation.

E. The portion of the system to be removed should be isolated and drained. Non-isolatable portions should be completely vented and drained, dammed, or plugged to establish a seal prior to breach of the system.

F. An estimate of the amount of residual fluid (if any) expected during draining should be made. Collection container selection should be made based on this estimate and in accordance with the Free Liquids Removal SOP.

G. The existing building floor or storm drain system shall not be used because it may spread contamination to clean areas.

H. If possible, the external surface area of the pipe to be removed should be decontaminated prior to cutting and subsequent tool decontamination operations.

I. It may be necessary when cutting pipe to restrain both sides prior to the cut to prevent pipe whip from cold springing during installation.

J. All non-reusable contaminated material (protective clothing, containment material, etc.) and hazardous free-product or decontamination fluid shall be packed, labeled, stored, and disposed of in accordance with the workplan and the Waste Processing SOP.

3.02 GENERAL

A. System or Partial System Draining

1. After system isolation (3.01 E above) drain all residual liquid from that portion of the system to be removed in accordance with the Free Liquids Removal SOP.

2. The system should be drained to a collection container to allow for residual liquid pickup.
3. As an alternative to utilizing system drain fittings, a flanged joint, gage line or test fitting may be slowly loosened and liquid allowed to drain into a containment or into a catchment equipped with a drain.
4. After setup to collect the anticipated liquid, crack the drain valve or loosen flange bolts slowly. If a large amount of fluid is released retighten bolts or shut valve and notify supervisor.
5. If there are no low point drains or flanged joints in the system, a window or hole may be cut in the pipe run to be removed and the system pumped down into a container. A hand pump may be used for small amounts of liquid.

B. Cutting Contaminated Pipe Using a Hand Grinder

1. Place drop cloth with absorbent material under the work area.
2. Erect glove bag, bullpen or catch containment, as necessary to collect residual fluids. If necessary use a HEPA filtered vacuum or appropriate ventilation to control toxic fumes. The need for a HEPA filtered vacuum or ventilation will be determined by the HSO.
3. Perform grinding operation per the following steps, as applicable.
4. Grind on pipe or at butt welds to a predetermined depth which will leave approximately 1/16 in. of wall thickness, or, if the pipe is dry, until the pipe metal turns blue ("blue-line").
5. Grind socket welds to parent metal.

CAUTION: The vacuum cleaner should be in operation while the grinder is being operated or a vacuum grinder utilized. This may partially collapse the glove bag, if used, with the possible danger of cutting the glove bag. Use a lucite shield in the containment to protect the glove bag.

6. Vacuum or wipe down the glove bag, catch containment or bullpen.
7. Attach a pipe cutter or parting tool such that the cutting wheel is located in the pre-ground groove on the pipe.
8. Adjust the feed screw, tightening the spring until sufficient pressure is applied to the cutting wheel.
9. Rotate the pipe cutter or parting tool until the pipe is broken. Release the tool from the pipe by backing off the feed screw, as required.

CAUTION: When pipe wall is initially broken through, stop cutting and assess liquid leakage, if any. If liquid release is excessive, stop and notify supervisor.

C. Cutting Contaminated Pipe Using Pipe Cutter

1. Place drop cloth with absorbent material under the work area.
2. Decontaminate pipe in area to be cut. Reference 3.01 H.
3. Scribe marks at location of cut.
4. Make an initial shallow cut.
5. Ensure cutter wheels are tracking on the same line.
6. Erect glove bag or catch containment with drain capability, as required, and cut through pipe.

CAUTION: When pipe wall is initially broken through, stop cutting and assess liquid leakage. If fluid content is obviously under pressure, stop and notify supervisor.

7. Ensure open ends are capped.

D. Cutting Contaminated Pipe With a Power Saw

1. Stage Material, select an electric power saw.

NOTE: An air power saw, although somewhat faster operating, presents significant control problems in contaminated areas.

2. Identify pipe to be cut, verify and mark actual locations of cut(s).
3. Identify quantity of fluid to be expected when pipe is cut.
4. Place catch containment or suitable plastic sheet material of durable grade as a drop cloth directly under cut - hung such that low point is available to control liquid from pipe. An example drop cloth is a fiber reinforced plastic sheet.
5. Provide drainage if quantity of liquid expected is significant (relative to size of the catch containment or drop cloth).

NOTE: If significant or unknown quantities of liquid are expected, consideration should be given to drilling a hole in the top of the pipe and pumping the water out of the pipe using a Randolph Pump or equivalent. In either case, rigid support of the drop cloth may be necessary to ensure control of liquid.

6. Place HEPA filtered ventilation suction duct within one foot of cut on the side opposite the saw operator.
7. Begin cutting from the top down (on a horizontal pipe).
8. Stop cutting when liquid starts flowing from the cut in the pipe.
9. Assess the quantity of liquid present based on apparent pressure/flow.
10. Continue cutting when flow has stopped or is as expected.

CAUTION: Ensure the section of pipe remaining is properly supported prior to final cut.

E. Cutting Contaminated Pipe Using Burning Techniques

1. Obtain Welding and Flame Permit and provide a fire watch as necessary in accordance with the HASP. Consult with Contractor's designated HSO prior to work.
2. Protect adjacent equipment/components using flame retardant materials.
3. Ensure nearby personnel are properly protected.
4. Remove flammable materials from area.
5. Decontaminate surfaces to be cut to the lowest level reasonably attainable.
6. Place flame retardant drop cloth below the area to be cut.
7. Install ventilation trunk type exhaust and direct the exhaust flow away from the torch and away from the individual.

CAUTION: Consider the use of a spark arrestor on the ventilation trunk inlet to prevent burning the HEPA filter or flexible ductwork.

8. Perform cutting operation using the appropriate cutting procedure.

F. Process and store removed pipe in accordance with the workplan and the Waste Processing SOP.

--- End of Section ---

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Standard Operating Procedure

BERYLLIUM ABATEMENT
SECTION 02073

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

The specifications and standards listed below form a part of this procedure to the extent referenced.

CODE OF FEDERAL REGULATIONS (CFR) PUBLICATIONS

29 CFR 1910.134	Respiratory Protection
29 CFR 1910.145	Specifications for Accident Prevention Signs and Tags
29 CFR 1926.58	Asbestos
40 CFR 61	General Provisions, Subpart A
40 CFR 61	National Emission Standard for Asbestos, Subpart M
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 263	Standards Applicable to Transporters of Hazardous Waste
40 CFR 264	Standards Applicable to Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 763	Asbestos Abatement Projects, Subpart G
49 CFR 171	General Information
49 CFR 172	Hazardous Materials
49 CFR 173	General Shipping Requirements
49 CFR 177	Transporter Requirements
49 CFR 178-79	Container Specifications

AMERICAN NATIONAL STANDARD INSTITUTE (ANSI) PUBLICATION

29.2-79	Fundamentals Governing the Design and Operation of Local Exhaust Systems

U.S. ENVIRONMENTAL PROTECTION AGENCY (USEPA) PUBLICATION

EPA 560/5-85-024	Guidance for Controlling Asbestos Containing Materials in Buildings

NATIONAL INSTITUE OF OCCUPATIONAL SAFETY AND HEALTH

NIOSH Manual of Analytical Methods (NMAM)	Method 7102 Beryllium and compounds, as Be

1.02 DESCRIPTION OF WORK

This Standard Operating Procedure (SOP) describes the sampling, handling, and removal of beryllium dust and materials. All activities under this section shall be performed in accordance with the Contractor's approved Health and Safety Plan.

1.03 QUALITY CONTROL

A. Medical Requirements: Meet all medical requirements contained in 29 CFR 1926.58 including but not limited to medical exams and medical records.

B. Training

1. Ensure that all personnel exposed to airborne beryllium are familiar with the hazards of beryllium, safety and health precautions, and the use and requirements for protective clothing and equipment.

2. A "competent person" shall directly supervise all beryllium removal activities including but not limited to establishment of enclosures, ensuring enclosure integrity, controlling entry and exit from the enclosure, exposure monitoring, use of protective clothing and equipment, use of hygiene facilities, and use of engineering emission controls. The "competent person" shall meet all the requirements identified in 29 CFR 1926.58(b) and 29 CFR 1926.58(e)(6)(iii).

C. Permits and Notification

1. Secure necessary permits in conjunction with beryllium waste removal, hauling, and disposition and provide timely notification of such actions as may be required by federal, state, regional, and local authorities.

2. Notify the Contracting Officer and the Engineer two weeks prior to the start of work.

D. Safety Compliance

1. Comply with laws, ordinances, rules, and regulations of Federal, state, regional, and local authorities regarding handling, storing, transporting, and disposing of beryllium waste materials.

2. Comply with the applicable requirements of the current issue of 29 CFR 1926.58 and 40 CFR 61, Subparts A and M.

3. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting the work.

4. Where the requirements of this specification and reference documents vary, the most stringent requirements shall apply.

E. Respirator Program: Establish a respirator program as required by 29 CFR 1910.134.

1.04 SUBMITTALS

Prior to commencing beryllium material and waste abatement, the Contractor shall submit:

1. Manufacturers' certifications that vacuum pumps, ventilation equipment, and other equipment required to handle airborne beryllium waste conform to ANSI 29.21.

2. A Beryllium Management Plan which outlines the abatement procedures to be used in the removal and disposal of beryllium materials and waste (such plan shall conform to this section and substantially conform to the requirements of 40 CFR 61.22).

3. A list of disposal facilities proposed for the disposal of all beryllium waste associated with this Contract. The list shall contain the address, telephone number and contact name for each facility. The Contractor shall provide written approval from each disposal facility of its acceptance of beryllium waste from this Contract and written notice from each disposal facility that it is in conformance with its operating permit.

4. The name, address, and telephone number of the testing laboratory selected for the monitoring of airborne concentrations of beryllium dust in air and wipe samples along with documentation of satisfactory performance of sample analyses. Monitoring shall be conducted daily to establish the exposure of each employee who is exposed inside the work area.

5. All monitoring results to the Contracting Officer and Engineer within 14 working days of such monitoring.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.01 EQUIPMENT

A. Provide protective equipment as required by 29 CFR 1926.58.

3.02 WORK PROCEDURE

A. The Contractor is responsible for complying with all laws, ordinances, rules and regulations of Federal, state, and local authorities regarding handling, storing, transporting, and disposing of waste materials.

B. Provide beryllium control areas with caution signs and local exhaust as may be directed by the Contracting Officer or Engineer in accordance with these specifications and 29 CFR 1926.58, 40 CFR 61, Subparts A and B. Use wet removal procedures. Personnel shall wear and use protective clothing and equipment as required by 29 CFR 1926.58. Eating, smoking, or drinking shall not be permitted in the beryllium control area. Personnel of other trades not engaged in the removal and demolition of beryllium shall not be exposed at any time to airborne concentrations of beryllium unless trade personnel comply with all of the personnel protection provisions of this specification.

3.03 BERYLLIUM ABATEMENT PROCEDURES

A. General Procedures

1. Sufficiently wet beryllium material during removal, cutting, or other handling so as to reduce the emission of beryllium dust/materials. Method and techniques for removal are outlined in the appendices to 29 CFR 1926.58.

2. Remove materials and immediately place in plastic disposal bags. Where unusual circumstances prohibit the use of plastic bags, submit an alternate proposal for containment of beryllium dust/material to the Contracting Officer or Engineer for approval.

3. The Contractor may or may not use the following abatement procedures depending on the type of beryllium dust/materials and the Contractor's standard procedures. Alternate abatement procedures shall be detailed in the Contractor's approved Beryllium Management Plan.

B. Full Containment

1. Where deemed appropriate for beryllium dust/material removal, full containment shall be used. The Contractor shall isolate the work area for the duration of the abatement, completely sealing all openings. Any fixed objects will be covered with 6 mil polyethylene sheets taped securely in place. All polyethylene used for establishing containment areas shall be a fire retarding type.

2. The entire floor within the immediate, contained work area will be covered with two layers of 6-mil polyethylene extended up the vertical surfaces. On a daily basis, a 4-mil polyethylene liner will be placed below the planned work area.

3. Emergency exits shall be clearly marked by the Contractor's personnel and access will be maintained throughout the abatement activities. Fire extinguishers will be located in each work area.

4. The Contractor shall install and maintain negative pressure equipment during the abatement and decontamination process. A sufficient number of negative air machines will be installed to ensure a complete air change within the containment every 15 minutes.

5. Attached to each full containment will be a three-chambered decontamination facility. The Contractor's three-chambered decontamination shall consist of:
   a. An equipment room with an air lock to the work area and curtained doorway to the shower room.

b. A shower room with two curtained doorways, one to the equipment room and one to the clean room. The shower room shall contain sufficient showers with hot and cold water to support the planned crew during each work shift. The Contractor shall contain and filter all shower wastewater. Wastewater will be filtered through a 5.0-micron filter, and drained into a sanitary sewer upon approval of the sanitary facility.

c. A clean room with one curtained doorway/entrance and one curtained doorway into the shower room.

3.04 MONITORING

A. Monitoring of airborne concentrations of beryllium dust shall be in accordance with 29 CFR 1926.

B. Pre-removal Monitoring: Provide area monitoring inside prior to beginning work to establish ambient facility air quality.

C. Monitoring After Final Cleanup: Provide beryllium control area monitoring of beryllium and establish the Time Weighted Average (TWA) of less than 0.002 mg/m^3 after final clean-up but before removal of the enclosure of the beryllium control area. Monitoring shall use aggressive sampling techniques as described in the "Guidance for Controlling Asbestos-Containing Materials in Buildings" EPA 560/5- 85-024, Appendix M. Sampling shall be in accordance with NIOSH Analytical Method 7102. A minimum of five samples shall be taken for each beryllium control area. Provide area monitoring and establish the TWA 5 days after the enclosure of the beryllium control area is removed or after final clean-up when an enclosure is not required. The beryllium concentration from these samples shall be less than 0.002 mg/m^3. Should any of the final samples indicate a higher value, the Contractor shall take appropriate actions to re-clean the area and repeat the monitoring.

3.05 CLEANUP

A. General

1. Remove all beryllium dust/materials and associated debris.

2. The Contractor shall take any steps necessary to ensure that less than 0.002 mg/m^3 airborne beryllium remains in the work area.

B. Housekeeping

1. Essential parts of beryllium dust control are housekeeping and clean up procedures. Maintain surfaces of the beryllium work area free of accumulations of beryllium. Give meticulous attention to restricting the spread of dust and debris; keep wastes from being distributed over the general area. Do not blow down the space with compressed air.

2. When beryllium removal is complete, all beryllium dust/debris is removed from the site, and final clean-up is completed, certify the area as safe before the signs are removed. Certification shall be a written statement by the Contractor that airborne concentrations of beryllium are less than 0.002 mg/m^3 and all beryllium dust/material has been removed from the area. Dispose of filters in accordance with applicable waste regulations.

3.06 DISPOSAL

A. The Contractor shall be responsible for ensuring:

1. The beryllium dust/material and associated cleanup debris are evaluated and identified as a waste under 40 CFR 261.

2. Selection and acceptance of the beryllium dust/material at an approved treatment or disposal facility.

3. That the facility is properly permitted to accept the beryllium.

4. That the facility provides the stated disposal services.

5. That the disposal facility is in compliance with its permit(s) at the time of beryllium disposal.

B. The Contractor shall collect beryllium waste, scrap, debris, bags, containers, equipment, and beryllium-contaminated clothing that may produce airborne concentrations of beryllium dust, and place in sealed impermeable bags. Affix caution label to each bag.

C. Procedure for hauling shall comply with 40 CFR 263, state, regional, and local standards.

D. Dispose of beryllium dust/materials at an appropriately licensed disposal facility.

3.07 MANIFEST RECORDS

A. Originate, maintain, and provide Transporter with copies of waste shipment manifests and/or bills of lading records for all beryllium dust/materials; verify wastes and quantities of each load shipped.

B. The manifest forms and records shall be consistent with the State of Florida, USEPA, and U.S. Department of Transportation requirements.

C. The Contracting Officer or an agent for the Contracting Officer will sign the manifest. The Contracting Officer or the Engineer will review the manifest for completeness and accuracy prior to final release.

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

Standard Operating Procedure

REMOVAL OF PCB TRANSFORMERS, EQUIPMENT, AND LIQUID SECTION 02074

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

The publications outlined below are in addition to information provided in the project Work Plan and other project plans including the Site Health and Safety Plan (HASP). The publications listed below form a part of this Standard Operating Procedure (SOP) to the extent referenced. The publications are referred to within the text by the basic designation only.

CODE OF FEDERAL REGULATIONS (CFR)

29 CFR 1910.145	Accident Prevention Signs and Tags
29 CFR 1910.1000	Air Contaminants
49 CFR 171	General Information, Regulations, and Definitions
49 CFR 172	Hazardous Materials Tables and Hazardous Materials Communications Regulations
49 CFR 173	Shipments and Packaging
49 CFR 178	Shipping Container Specification
40 CFR 761	Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions

1.02 RELATED STANDARD OPERATING PROCEDURES

A. Drum Handling and Removal – Section 02077
B. Free Liquids Removal - Section 02078

1.03 DESCRIPTION OF WORK

This SOP addresses the requirements for the removal of polychlorinated biphenyls (PCBs) and the handling of PCB containing materials including transformers, miscellaneous equipment, and liquid. There are several commercial products containing a mixture of PCB congeners, the most common are the Aroclors 12XX (the XX represents the percent of chlorine that comprises the mixture of PCBs and is frequently 60 or Aroclor 1260). This SOP is intended for use where PCB fluids or materials containing PCB at concentrations of 50 parts per million (ppm) and above are to be removed and recycled or disposed of.

1.04 DEFINITIONS

A. Leak - Leak or leaking means any instance in which a PCB Article, PCB Container, or PCB Equipment has any PCBs on any portion of its external surface.

B. PCBs - PCBs as used in this SOP shall mean the same as PCBs, PCB Article, PCB Article Container, PCB Container, PCB Equipment, PCB Item, PCB Transformer, PCB-Contaminated Electrical Equipment, as defined in 40 CFR 761, Section 3, Definitions.

C. Spill - Spill means both intentional and unintentional spills, leaks, and other uncontrolled discharges when the release results in any quantity of PCBs running off or about to run off the external surface of the equipment or other PCB source, as well as the contamination resulting from those releases.

1.05 SAFETY AND QUALITY ASSURANCE

A. Training

Instruct employees on the dangers of PCB exposure, on respirator use, decontamination, and applicable OSHA and EPA regulations as appropriate. Familiarize employees with the requirements of the HASP.

B. Certified Industrial Hygienist (CIH)

The services of an industrial hygienist certified by the American Board of Industrial Hygiene shall be obtained to certify training, review and approve building-specific PCB removal procedures, including determination of the need for personal protective equipment (PPE) and health monitoring in performing PCB removal work. It is assumed that the Contractor's site Health and Safety Officer (HSO) will hold the designation of CIH.

C. Regulation Documents

Maintain at all times at the field office or otherwise readily available to each employee, one copy each of 29 CFR 1910.1000, 40 CFR 761, this SOP, and relevant site-specific documents referenced in Section 1.02 of this SOP.

D. Surveillance Personnel

Surveillance personnel may enter PCB control areas for brief periods of time provided they wear disposable polyethylene gloves and disposable polyethylene foot covers, as a minimum. Additional protective equipment may be required in accordance with the HASP if respiratory hazard is involved or if skin contact with PCB is involved.

1.06 EQUIPMENT

A. Special Clothing

Work clothes shall consist of PPE as required by OSHA regulations and the HASP, including, but not limited to the following:

1. Disposable coveralls
2. Gloves (Disposable rubber gloves may be worn under these)
3. Disposable foot covers (polyethylene)
4. Chemical safety goggles
5. Half-mask cartridge respirator

B. PCB Spill Kit

Assemble a spill kit to include the following items and minimum quantities:

ITEM	MINIMUM QUANTITY
1. Disposable gloves (polyethylene)	6 prs
2. Gloves with a high degree of impermeability to PCB	6 prs
3. Disposable coveralls with permeation resistance to PCB	4 ea
4. Chemical safety goggles	2 ea
5. Disposable foot covers (polyethylene)	6 prs
6. PCB Caution Sign: "PCB Spill--Authorized Personnel Only"	2 ea
7. Banner guard or equivalent banner material	30 meters
8. Absorbent material	200 lbs
9. Blue polyethylene waste bags	5 bags
10. Cloth back tape	5 ea
11. Area access logs, blank	1 roll
12. Brattice cloth, 2 m x 2 m	10 ea
13. Rags	1 piece
14. Ball point pens	20 ea
15. Herculite, 1.5 m x 1.5 m and 3 m x 3 m	2 ea
16. Blank metal signs and grease pencils	2 ea
17. Waste container (may be used as container for kit)	208 liter (55 gal) drum

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.01 PROTECTION

A. Decontamination Room, Clean Room, and Shower Facilities

NOTE: This paragraph (3.01 A) only applies if work involves cleanup of large PCB spills or if airborne contamination exists. Consult the HSO for recommendations.

1. Construct a decontamination room, clean room, and shower facilities. Provide rooms with doors and attach to the exit ways of PCB work areas. Rooms shall be of sufficient size to accommodate the operation within. Provide portable toilet and shower facilities. Locate shower facilities between the clean room and decontamination room. Existing facilities with water closets, urinals, wash basins, and showers may be used if available. Provide separate clothing lockers or containers in each room to prevent contamination of street and work clothes.
2. Remove PCB-contaminated PPE in the decontamination room. PCB-contaminated PPE should be containerized and labeled in accordance with Sections 3.07 A and 3.07 B (1) and (2) of this SOP. Workers shall then proceed to showers. Workers shall shower before lunch and at the end of each workday. Hot water, towels and soap, should be available and hygienic conditions should be monitored by the HSO.

B. PCB Control Area

Isolate PCB control area by physical boundaries (i.e., caution tape) to prevent unauthorized entry of personnel. Food, drink, and smoking materials shall not be permitted in areas where PCBs are handled or PCB items are stored.

C. Personal Protection

Workers shall wear and use PPE, as recommended by the HSO and in accordance with the HASP.

D. Footwear

Work footwear shall remain inside work area until completion of the job.

E. Permissible Exposure Limits (PEL)

The PEL for PCBs is 0.5 milligram/cubic meter (3.1×10^{-8} pound/cubic foot) on an 8-hour time weighted average basis. Compliance with this criterion should be monitored for by the HSO and in accordance with the HASP.

F. Special Hazards

1. PCBs shall not be exposed to open flames or other high temperature sources since toxic decomposition by-products may be produced.

2. PCBs shall not be heated to temperatures of 55 degrees C (135 degrees F) or higher without the HSO's concurrence.

G. PCB Caution Label

40 CFR 761, Subpart C. Affix labels to PCB, solid or liquid, waste containers and other PCB-contaminated items. Provide label with sufficient print size to be clearly legible, with bold print on a contrasting background, displaying the following: CAUTION: Contains PCBs (Polychlorinated Biphenyls).

H. PCB Caution Sign

29 CFR 1910.145. Provide signs at approaches to PCB control areas. Locate signs at such a distance that personnel may read the sign and take the necessary precautions before entering the area.

3.02 WORK PROCEDURE

This Section discusses the work procedures necessary for the removal of PCBs. PCBs will be containerized and marked as required by USEPA and USDOT regulations as specified herein.

A. No Smoking

Smoking is not permitted within 15 m (50 feet) of the PCB control area. Locate "No Smoking" signs as appropriate.

B. Work Operations

Ensure that work operations or processes involving PCB or PCB-contaminated materials are conducted in accordance with 40 CFR 761 and the applicable requirements of this section, including but not limited to:

1. Identifying in advance a temporary, on-site PCB storage site (refer to Work Plan).
2. Notifying the HSO prior to commencing the operation.
3. Reporting leaks and spills to the HSO.
4. Promptly cleaning up spills.
5. Maintaining an access log of employees working in a PCB control area and providing a copy to the HSO upon completion of the operation.
6. Inspecting PCB and PCB-contaminated items and waste containers for leaks and forwarding copies of inspection reports to the Contracting Officer.
7. Maintaining a spill kit as specified in paragraph entitled "PCB Spill Kit" (1.06 B).
8. Maintaining inspection, inventory and spill records.

3.03 PCB TRANSFORMERS

A. Transformer Removal

Prior to draining or containerizing PCB transformers for off-site shipment, the transformer should first be disconnected and removed from its service location using the following procedure:

1. Shut-off electrical power to the transformer and lock-out/tag-out power source in accordance with 29 CFR 1910.145.
2. Disconnect all electrical connections leading to and from the transformer.
3. Disconnect associated switches and voltage regulators.
4. Remove mounting hardware and transformer from its mount. Consult with HSO regarding special safety considerations when removing transformers mounted overhead (utility poles, etc.).
5. Transport transformer and associated switches and regulators to a contained, secure location for draining and/or packaging.
6. Containerize or place in drip pans any transformer or associated equipment observed to be leaking.
7. If leaks are evident, follow PCB spill cleanup procedures under Section 3.06.

B. Draining of Transformer Liquid

Unless hermetically sealed (solder or fusion sealed with no access ports), all transformers, switches, and regulators should be drained of PCB liquid using the following procedure:

1. Consult with PCB Liquid Removal Section 3.05 for removal and handling considerations.
2. Place PCB equipment in a contained, secure location. Polyethylene sheeting may be used for spill containment
3. Through access ports, drains, or openings, drain all PCB liquid from equipment into a portable containment vessel or drum as in (4) and (5) below.
4. Place the drained liquid into DOT Specification 17E closed-top drums (40 CFR 178). The drums shall not contain more than 190 liters (50 gal.) of liquid.
5. If PCB equipment cannot be drained, place it in DOT Specification 17C open-top drums (40 CFR 178).
6. Provide drums and drained PCB electrical equipment with caution labels as specified in Section 3.01 G.
7. Stencil the date drained on each transformer or other electrical equipment.
8. Add absorbent material to transformers or electrical equipment to absorb residual fluid.
9. Locate and store empty transformers, ancillary electrical equipment, and drummed PCB liquid and equipment in accordance with the Work Plan.

C. Laboratory Analysis

All drained transformer and electrical equipment PCB liquid shall undergo sampling and laboratory analysis in accordance with the Work Plan prior to off-site shipment and disposal. The only two exceptions to this requirement are:

1. The transformer is hermetically sealed (solder sealed or fusion sealed; no access ports or openings).
2. The nameplate states that the transformer contains PCB fluid such as pyranol, interteen, etc.

D. Drum Markings

Stencil on DOT-approved 208 liter 55 gallon drums (see 3.03 B (4) and (5)) containing PCB liquid the following:

1. PCB concentration in ppm (based on laboratory results in 3.03 C)
2. Date drum filled
3. Serial number of transformer liquid came from
4. National Stock Number (based on (1) above)
   a. "9999-00-OIL" for <50 ppm
   b. "9999-00-CONPCB" for 50-499 ppm
   c. "9999-00-PCBOIL" for >500 ppm

Note: For disposal purposes, do not mix different concentration ranges of PCB liquid in the same drum. Transformers and equipment unable to be sampled (3.03 C) will be assumed to contain > 500 ppm PCB. Drums must have 50 mm (2-inch) ullage (space above the liquid from the top of the drum).

3.04 PCB EQUIPMENT REMOVAL

PCB bearing equipment other than transformers and ancillary equipment may be encountered. These items may include control panel capacitors, overhead bus duct capacitors, capacitors in fluorescent light ballasts, and regulators. Procedures for removal of this equipment are described below.

A. If possible, drain fluid from electrical equipment, following the procedures of Section 3.03 B items (1), (2), and (3), also, containerize as per (C) below, and analyze for PCB content. See PCB Liquid Removal Section 3.05 for removal and handling considerations.

B. Assume all sealed, fluid bearing electrical equipment contains > 500 ppm PCB unless otherwise marked by the manufacturer as "PCB free" or "No PCB". Note: fluorescent light ballasts manufactured prior to 1978 typically contain small PCB capacitors. These capacitors should be removed and disposed of as PCB waste

C. Containerize PCB equipment in accordance with Section 3.03 B (4), (5), and (6) and mark containers holding PCB as per Section 3.03 D.

D. Locate and store drummed PCB equipment and liquid in accordance with the Work Plan.

3.05 PCB LIQUID REMOVAL

This section describes general removal and handling procedures for liquid PCBs. Refer to Sections 3.03 D and 3.07 for containerizing PCB liquid.

A. Confined Spaces

As feasible, do not carry out PCB removal operations in confined spaces. A confined space shall mean a space having limited means of egress and inadequate cross ventilation.

B. Control Area

Establish a PCB control area around the PCB liquid as specified in paragraph entitled "PCB Control Area" (3.01 B). Only personnel briefed on the elements in the paragraph entitled, "Training" (1.05 A) and on the handling precautions shall be allowed into the area.

C. Exhaust Ventilation

Consult with HSO to determine if exhaust ventilation is required. If used, exhaust ventilation for PCB operations shall discharge to the outside of building and away from personnel.

D. Temperatures

As feasible, handle PCBs at ambient temperatures and not at elevated temperatures.

E. Solvent Cleaning

Clean contaminated tools, containers, etc. after use by rinsing three times with an appropriate solvent or by wiping down three times with a solvent wetted rag. Suggested solvents are stoddard solvent or hexane. Containerize and store decontamination waste as per the Work Plan.

F. Drip Pans

Drip pans are required under portable PCB transformers or other equipment being drained. For leaking equipment, it is recommended that the drip pans containment volume be at least one and one-half times the internal volume of PCBs in the item.

G. Evacuation Procedures

Aid for a seriously injured worker shall not be delayed for reasons of decontamination. Consult with HSO and HASP for injured worker evacuation procedures.

3.06 PCB SPILL CLEANUP REQUIREMENTS

Refer to the requirements of 40 CFR 761, Section 125 and the Work Plan for responding to PCB spills. This section provides a summary of the requirements.

A. PCB Spill Reporting

Immediately report to the HSO any PCB spills on the ground or in the water, PCB spills in drip pans or PCB leaks. For spills of greater than 10 lbs. or more by weight of PCBs, the spill must be reported to the National Response Center (1-800-424-8802) and USEPA Region 4 Toxic Substances Branch (1-.404-562-4300).

B. PCB Spill Control Area

Rope off an area around the edges of a PCB leak or spill and post a "PCB Spill Authorized Personnel Only" caution sign. Immediately transfer leaking items to a drip pan or other container.

C. PCB Spill Cleanup

Initiate cleanup of spills as soon as possible, but no later than 48 hours of its discovery. [To clean up spills, personnel shall wear the PPE prescribed in paragraph entitled "Special Clothing" (1.06 A).] If misting, elevated temperatures or open flames are present, or if the spill is situated in a confined space, notify the HSO. Mop up the liquid with rags or other conventional absorbent. The spent absorbent shall be properly contained and disposed of as solid PCB waste in accordance with the requirements of this SOP and the Work Plan.

D. Records and Certification

Document the cleanup with records of decontamination in accordance with 40 CFR 761, Section 125, Requirements for PCB Spill Cleanup. Develop certification of decontamination by the HSO.

E. Sampling Requirements

Perform post cleanup sampling as required by 40 CFR 761, Section 130, Sampling Requirements, and the Work Plan. Do not remove boundaries of the PCB control area until site is determined satisfactorily clean by the HSO.

3.07 STORAGE FOR DISPOSAL

A. Storage Containers for PCBs

49 CFR 178. Store liquid PCBs in U.S. Department of Transportation (DOT) Specification 17E containers. Store nonliquid PCB mixtures, articles, or equipment in DOT Specification 5, 5B, or 17C containers with removable heads.

B. Waste Container Marking and Labeling

Label with the following:

1. "Solid (or Liquid) Waste Polychlorinated Biphenyls"
2. The PCB Caution Label, paragraph entitled "PCB Caution Label"
3. The date the item was placed in storage and the name of the cognizant activity/building.

C. PCB Articles and PCB-Contaminated Items

Label with items (2) and (3) above.

D. Temporary Storage Site

Follow the storage requirements specified in the Work Plan. Listed below are recommendations for a temporary PCB storage area:

1. Adequate roof and walls to prevent rainwater from reaching the stored PCBs.
2. An adequate floor which has continuous curbing with a minimum 6-inch high curb. Such floor and curbing shall provide a containment volume equal to at least two times the internal volume of the largest PCB article or PCB container stored therein or 25 percent of the total internal volume of all PCB equipment or containers stored therein, whichever is greater.
3. No drain valves, floor drains, expansion joints, sewer lines, or other openings that would permit liquids to flow from the curbed area.
4. Floors and curbing constructed of continuous smooth and impervious materials such as portland cement, concrete or steel to prevent or minimize penetrations of PCBs.
5. Not located at a site which is below the 100-year flood water elevation.
6. Each storage site shall be posted with the PCB Caution Sign paragraph entitled "PCB Caution Sign."

3.08 CLEANUP

Maintain surfaces free of accumulations of PCBs. Restrict the spread of dust and debris; keep waste from being distributed over work area. Do not remove the PCB control area and warning signs prior to the site HSO's approval. Reclean areas showing residual PCBs.

3.09 DISPOSAL

Comply with disposal requirements and procedures outlined in 40 CFR 761 and the procedures in the Work Plan.

NOTE: Federal regulations (40 CFR 761) require that generators, transporters, commercial storers, and disposers of PCB waste possess USEPA identification numbers. Verify that the project site has a U.S. EPA generator identification number for use on the Hazardous Waste Manifest. If not, the facility must file for and obtain a temporary I.D. number from the USEPA prior to commencement of removal work.

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

Standard Operating Procedure

REMOVAL AND DISPOSAL OF DEBRIS AND CONTAMINATED MATERIAL SECTION 02076

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

A. Summary of Work - Section 01010
B. Special Project Plans and Procedures - Section 01125
C. Equipment Decontamination Procedures - Section 02021
D. Underground and Aboveground Storage Tank System Removal - Section 02051
E. Excavation, Backfill, and Compaction - Section 02221

1.02 DESCRIPTION

A. This specification covers the Contractor's requirements for management of the material, equipment, and personnel associated with the removal, handling, and disposal of demolition debris, contaminated demolition debris, contaminated soils, waters and other contaminated material. All activities conducted under this section shall be performed in strict accordance with the Contractor's approved Health and Safety Plan (HASP), as well as with other appropriate specification sections. Removal and disposal of asbestos is covered in Section 02075, "Removal and Disposal of Asbestos."

B. Contaminated material removal is primarily a pre-demolition activity. Some contaminated material must be removed prior to the removal of any asbestos-containing material (ACM). All contaminated material shall be removed prior to general demolition to the extent practicable. Removal of some contaminated material that is obstructed by non-contaminated debris may follow general demolition activities.

C. Unforeseen Contaminated Material: If the Contractor encounters material, not otherwise identified as contaminated, which may be dangerous to human health or the environment if disturbed during construction operations, the Contractor shall stop that portion of the work and cover the area or wastes to prevent exposure to the elements and to avoid coming in contact with the material. The Contractor shall immediately notify the Contracting Officer and the Engineer concerning the possible existence of such material. The intent is to identify material such as friable and nonfriable asbestos, polychlorinated biphenyls (PCBs), or other contaminated material whose presence or locations were previously unknown. Within 14 calendar days, the Contracting Officer or the Engineer will perform testing to characterize the material. If the material is not contaminated, the Contracting Officer or the Engineer will direct the Contractor to proceed without change. If the material is contaminated and must be disturbed or handled to accomplish the work, the Contracting Officer will direct a change order pursuant to the Contract Agreement.

1.03 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

1. Code of Federal Regulations (CFR) Publications

29 CFR 1910.120	Hazardous Waste Operations and Emergency Response
29 CFR 1910.1200	Hazard Communication Standard
29 CFR 1926	Construction Standards
29 CFR 1926, Subpart H	Materials Handling, Storage, and Disposal
29 CFR 1926, Subpart T	Demolition
40 CFR 261	Identification and Listing of Hazardous Wastes
40 CFR 262	Generator Standards
40 CFR 263	Transporter Standards
40 CFR 264	TSDF Standards
40 CFR 268	RCRA Land Disposal Restrictions
40 CFR 270	Hazardous Waste Permit Program
40 CFR 761	Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions
49 CFR 171	General Information
49 CFR 172	Hazardous Material
49 CFR 173	General Shipping Requirements
49 CFR 177	Transporter Requirements
49 CFR 178-79	Container Specifications

2. U.S. Environmental Protection Agency (USEPA) Publication

EPA/540/2-85/003	Dust Control at Hazardous Waste Sites (dated November 1985)
OSWER Directive 9834.11	Revised Procedures for Implementing Off-site Response Actions

3. American National Standard Institute (ANSI)

Z 9.2-79	Fundamentals Governing the Design and Operation of Local Exhaust Systems
Z 88.2-80	Practices for Respiratory Protection

4. Underwriters Laboratories, Inc. (UL)

586-85	High-Efficiency, Particulate, Air Filter Units

5. State of Florida

62-730	Hazardous Waste
62-701	Solid Waste Disposal Facilities

1.04 DEFINITIONS

A. Contaminated Material - Any material that poses a potential health risk or requires special handling and disposal procedures beyond conventional debris handling or disposal procedures to protect the environment.

B. Hazardous Material - Contaminated material that is either a listed RCRA hazardous waste or meets the RCRA characteristics of a hazardous waste. These materials require special handling and disposal as defined by RCRA.

C. PCB-Contaminated Material - Materials such as transformers or concrete that are contaminated with PCBs and require special handling and disposal. Transformers containing less than 50 ppm PCBs can be disposed as solid waste at a non-TSCA, appropriately permitted landfill. Any concrete, etc. that has concentrations of 10 ug/100 cm^2 shall be handled and disposed in accordance with 40 CFR 761.

D. Contaminated Material Staging/Stockpile Area - A secure area within the limits of the Exclusion Zone used for storage of contaminated material prior to removal of same from the project site.

E. Staging/Stockpile Area - The area of the site in which the Contractor stockpiles non-contaminated debris and material.

F. Hazardous Waste Manifest - A legal document used to track the generation, transport, and disposal of RCRA-hazardous waste in accordance with regulations specified in 40 CFR 262-263. The Hazardous waste manifest to be used shall be the Uniform Hazardous Waste manifest (EPA Form 8700-22, Rev. 9-88) or an appropriate State hazardous waste manifest or a hazardous waste manifest from the State where material is to be shipped.

G. TSDF - A treatment, storage, or disposal facility permitted to accept hazardous or non-hazardous wastes in accordance with provisions of 40 CFR 264

H. RCRA - Resource Conservation and Recovery Act.

1.05 SUBMITTALS

Submit the following in accordance with Section 01340, "Shop Drawings, Project Data, and Samples":

A. As part of the Work Plan described in Section 01125, "Special Project Plans and Procedures", the Contractor shall describe the procedures to be followed in the removal, loading, and handling of contaminated debris and other contaminated material, and water, as well as the sampling and analysis procedures for profiling wastes and debris. Those procedures should be in agreement with standards or methods in the following Federal Code of Regulations: 29 CFR 1926.65, 40 CFR 261, and 49 CFR 172, and state regulations.

B. The Contractor shall submit a list of TSDFs, construction and demolition (C&D) debris disposal facilities, water disposal facilities, solid waste disposal facilities, PCB disposal facilities, and any other disposal facilities proposed for the disposal of all

material associated with this Contract. The list shall contain the address, telephone number and contact name for each facility. The Contractor shall provide written approval from each of its acceptance of material from this Contract and written notice that each is in conformance with its operating permit.

C. Provide copies of the written notification to all rental companies concerning the intended use of rental equipment and the possibility of contamination of the equipment.

D. Submit a complete waste profile sheet and sample(s) of material to be shipped to the selected disposal facility in accordance with the facility's requirements. These items shall be submitted in advance such that sufficient time is allowed for analysis, approval, and scheduling and the overall project schedule is not affected. Sampling and analysis results conducted prior to this Contract are available from the Contracting Officer.

E. Submit written evidence to the Contracting Officer and the Engineer, including the name, address, and USEPA identification number, that the hazardous/non-hazardous waste transporter and TSDF are approved for hazardous/non-hazardous waste transport-disposal by the USEPA and State or local regulatory agency(s) in accordance with provisions of 49 CFR 171-179, 40 CFR 262-264, and are CERCLA acceptable. Submit to the Contracting Officer and the Engineer the generator's copy of the hazardous waste manifests and/or bills of lading, certifying the amount of material delivered to the TSDF within 6 days after delivery. Submit copies of the TSDF copy of hazardous/non-hazardous waste manifests/bills of lading within 40 days of the date waste was transported from the site.

F. Submit weight tickets documenting all tonnage of material removed from the site and disposed at the approved disposal facilities.

PART 2 PRODUCTS

2.01 EQUIPMENT

A. Storage for Contaminated Solid Material: The Contractor shall provide 8-mil polyethylene material for placing and covering any temporary contaminated material stockpiles. A small berm shall be constructed of 4" x 4" minimum lumber placed around the staging area. The plastic sheet shall be placed over the berm and properly anchored to hold the sheeting in place.

B. Storage Containers for Contaminated Water: The Contractor shall provide frac tanks or drums for the temporary storage of contaminated water.

C. Drums for Transportation and/or Storage: DOT-approved containers (Specification 17E for fluids), as required for small quantity containerization. DOT-approved trucks for transport and disposal of large quantities of soils and liquids.

PART 3 EXECUTION

3.01 GENERAL REQUIREMENTS

A. No on-site activities shall be permitted to start until the Contractor has adequately addressed all comments on the Health and Safety Plan (HASP). Take all necessary precautions to adequately protect personnel and public and private property in the areas of work. Personnel shall wear and utilize protective clothing and equipment as specified in the approved HASP. Eating, smoking, or drinking shall not be permitted in the Exclusion and Contamination Reduction Zones as defined in 29 CFR 1910.120. Site work zones shall be clearly marked. If a hazardous/non-hazardous material spill occurs outside of the Exclusion Zone, stop work immediately, notify the Contracting Officer and the Engineer immediately, and correct the condition prior to resumption of work in accordance with the Environmental Protection and Contingency Plan.

B. Prior to commencing removal or demolition activities, the Contractor shall conduct initial site inspections in accordance with provisions of the approved HASP. The Contractor shall locate and clearly delineate and mark in the field the Exclusion Zone, the Contamination Reduction Zone, and the Support Zone, as directed by the site Health and Safety Officer pursuant to health and safety considerations as identified in the approved HASP. The limit of the Exclusion Zone shall not be decreased to less than the outer limits of known contaminated material and delineated with marking paint on the floor of the building by the Contracting Officer or the Engineer without written approval from the Contracting Officer and the Engineer.

C. Obtain necessary permits and licenses in conjunction with hazardous waste removal, hauling, and disposition, and furnish timely notification of such actions required by federal, state, regional, and local authorities. Notify the Contracting Officer and the Engineer in writing 5 days prior to the commencement of removal work. Hazardous waste material shall be labeled in accordance with 40 CFR 761.

D. All vehicles and equipment entering the Exclusion Zone shall be considered contaminated and shall not leave the Exclusion Zone without being properly decontaminated as specified in the Contractor's HASP. Route traffic within the Exclusion Zone away from remediated areas to prevent recontaminating these areas.

3.02 DEBRIS AND CONTAMINATED MATERIAL REMOVAL AND HANDLING

A. Prior to hazardous waste removal activities, the Contractor shall determine the extent of required hazardous waste and debris removal. No hazardous material removal shall occur until location coordinates have been established and approved by the Contracting Officer or the Engineer.

B. The Contractor shall implement the procedures for handling drums and bulk containers in accordance with 29 CFR 1926, Subpart H and as proposed in the Work Plan.

C. The Contractor shall inspect each drum and bulk container to assure its integrity prior to being moved.

D. Labeling of drums and bulk containers shall be performed in accordance with 40 CFR 261, and 49 CFR 172, State regulations and as proposed in the Work Plan.

E. The Contractor shall construct the contaminated material storage/stockpile area prior to removal of any materials from the buildings.

F. Removal and handling of specific types of debris and contaminated material shall be as follows:

1. General Floor Debris and paint chips shall be removed, placed in containers, and stored in the contaminated material storage/stockpile area until removed from the site for disposal. Sawdust that is not contaminated may be placed in the Staging/Stockpile area.
2. Existing full, partially full, and empty containers shall be removed from the buildings and stored in the contaminated material storage/stockpile area until they are removed from the site for disposal. The Contractors shall provide additional containers to hold any existing containers that are damaged or in danger of leaking.
3. Contaminated concrete shall be removed and placed in the contaminated material storage/stockpile area. PCB-contaminated concrete, debris, etc. shall be kept separate from other material.
4. Underground storage tanks - The Contractor shall include in the Work Plan, procedures for tank closure including purging, removing, cleaning and demolishing for disposal existing tanks specified in Section 02051, (Underground Storage Tank Systems Removal) which shall conform to applicable state closure requirements. UST(s), piping, and fittings shall be removed from the premises as soon as possible.

   The following is the information available on these tanks:

   a. Permitting of tank closures will be coordinated with the Contracting Officer and the Engineer.
   b. The Contracting Officer or the Engineer will conduct soil sampling at the tank locations, if required
5. Excavated soils: Excavated contaminated soil removed are placed in a contaminated material storage/stockpile area.
6. Fluorescent light ballasts, transformers, mercury vapor lamps, lead acid batteries, radioactive smoke detectors, radioactive exit signs, mercury switches, CFC-containing air conditioning units and intact fluorescent light bulbs: The Contractor shall remove these items from the building and store them in containers in the contaminated storage/stockpile area. Air conditioning units may be handled as non-contaminated material only if the CFCs have been removed from the unit for recycling.
7. Demolition debris: Demolition debris shall be placed in the storage/stockpile area where it will be staged for salvage or disposal.
8. Equipment: Manufacturing equipment that remains in the building shall be removed from the building and placed in the storage/stockpile area until removed for salvage.
9. Water/Wastewater/Decontamination/Dewatering Fluids: Fluids shall be collected in containers and placed in the contaminated storage/stockpile area until they are tested, treated, and/or removed from the site.
10. Underground Storage Tank Wash Water: The Contractor shall collect water from the washing of the tanks into appropriate containers. The Contractor shall treat or dispose of decontamination fluids in a manner acceptable to the Contracting Officer, as described in the Contractor's Work Plan.

G. On-site Hauling - Construction equipment working in or entering the Exclusion Zone may not leave the Exclusion Zone until it has been decontaminated. Vehicles used to convey the hazardous material from the removal area to the staging/stockpile area are subject to the restrictions established in this section.

H. Contaminated Material Staging/Stockpile Area - Prior to any demolition activities, the Contractor shall establish staging/stockpile areas within the Exclusion Zone for the storage of all contaminated waste and debris. Separate areas shall be established for hazardous and non-hazardous materials. All contaminated excavated material shall be stored, contained, and bermed to prevent stormwater run on and runoff. Contaminated materials shall be segregated by type within the contaminated material storage/stockpile area to avoid cross-contamination; e.g., PCB-contaminated materials shall be kept separate from other contaminated materials.

I. Off-Site Transport - All hazardous debris and other hazardous material associated with this Contract shall be transported and disposed at licensed TSDFs. Loading of off-site transport vehicles shall occur only in the area specified for this activity. The transport vehicles shall be equipped and permitted to carry hazardous material, and be placarded upon leaving the site. Offsite waste transport shall be in accordance with all relevant provisions of 40 CFR 263, 49 CFR 171-179 and State regulations. Material shall be properly labeled in accordance with the requirements of 40 CFR 761. Following loading, the transport vehicle shall be decontaminated and shall then immediately proceed to the certified scale for weighing. Loading equipment is considered hazardous and shall not leave the Exclusion Zone without first being decontaminated. Vehicles shall leave the site by the designated route.

J. All soil or sludge collected as a result of vehicle decontamination shall be removed and contained on a daily basis or sooner if conditions warrant. Such soil or sludge is considered a contaminated and shall be removed by hand shovels and containerized. Care shall be taken not to spill or otherwise contaminate areas of the Contamination Reduction Zone outside of the Exclusion Zone. The Contractor shall submit his/her proposed method of accomplishing this task within his/her Work Plan.

K. Incidental Garbage and Rubbish - All incidental garbage and rubbish generated by Contractor activities (i.e., excluding debris and waste resulting directly from structure demolition, hazardous waste removal, etc.) shall be placed in approved Contractor furnished containers to prevent the spread and accumulation of dust and dirt, and shall be removed from the area as often as necessary, but not less than at least once at the end of each week. Incidental garbage and rubbish shall not be disposed of in contaminated material containers.

3.03 DEBRIS AND CONTAMINATED MATERIAL DISPOSAL

A. The Contractor shall be responsible for ensuring:
   1. Debris and material characterization to determine regulatory-based disposal requirements, as to be specified in Contractor's Work Plan.
   2. Selection and acceptance of the specified waste at an approved treatment or disposal facility.
   3. That the facility is properly permitted to accept the stated waste.
   4. That the facility provides the stated disposal services.

5. That the disposal facility is in compliance with its permit(s) at the time of waste disposal.
6. That each type of debris and material is sufficiently characterized for disposal, as required by each disposal facility, to enable the Contracting Officer to sign disposal manifests.

B. Disposal of Solid Wastes - Handling and disposal of solid waste material shall be in strict accordance with State regulations.

C. Disposal of Demolition Debris - Demolition Debris that will not be salvaged for recycle or reuse shall be disposed at a landfill permitted to accept demolition debris as specified in Section 02221, "Excavation, Backfill, and Compaction".

D. Disposal of Hazardous Wastes - Handling and disposal of hazardous waste material, e.g., PCB- contaminated soil and concrete, including sampling and testing, shall be in strict accordance with 40 CFR 160 and 268 and State regulations.

E. Disposal of Non-Hazardous Waste - Contaminated material not classified as hazardous shall be disposed of in accordance with RCRA Subtitle D and State regulations.

F. Disposal of Wastewater - Water from the decontamination of vehicles, equipment, and debris shall be collected and containerized. Water shall be transported off-site for treatment and disposal at an approved facility. The frequency of this removal shall depend on the decontamination operation and on the decontamination pad construction. Any spillage of this water onto previously uncontaminated areas shall be cleaned up and decontaminated to the satisfaction of the Contracting Officer and the Engineer at the Contractor's expense. The Contractor shall submit its proposed method for accomplishing this task in its Work Plan. Decontamination water supplying, collection, containerization, sampling and analysis, transport, and disposal is the Contractor's responsibility and included as part of the health and safety activities.

G. Disposal of PCB-Contaminated Material: Transformers containing less than 50 ppm PCBs can be disposed as solid waste at a municipal landfill. Any concrete, etc. that has wipe sample concentrations greater than 10 ug/100 cm^2 shall be handled, labeled, and disposed in accordance with 40 CFR 761. Material that has less than 10 ug/100 cm^2 shall be cleaned, broken up, and disposed at an approved C&D landfill.

H. Disposal/Recycling of PCB-Ballasts: PCB ballasts shall be packaged and sent to a PCB ballast recycling facility. The facility shall separate PCB materials from non-PCB contaminated materials. Non-PCB materials shall be recycled for reuse. PCB materials shall be disposed of according to the requirements of 40 CFR 761.

I. Disposal/Recycling of Fluorescent Lights: Intact fluorescent lights shall be sent to a fluorescent light recycling facility.
1. Recycle Facility Requirements
   a. The facility shall convert the lights into aluminum end caps, crushed glass, phosphor powder, and liquid mercury.
   b. The recycling facility shall be in full compliance with federal, state, and local discharge and OSHA regulations.
   c. The facility shall recover a minimum of 98% by weight of the mercury from the lamps and shall produce a minimum 99% by weight free flowing mercury.

d. The recycling facility shall verify that the material end users are in compliance with federal, state, and local environmental regulations.
e. The recycling facility shall routinely test glass, phosphor powder, and end cap recovered materials for TCLP mercury.

J. Disposal/Recycling of CFC wastes: All CFCs from air conditioning units which will not be salvaged and reused as a complete unit shall be recovered and recycled to prevent additional hazardous waste generation in accordance with 40 CFR 261.4(b)(12).

K. Dewatering fluid from existing sumps and basements - The Contractor shall locate a local disposal option, such as the POTW for disposal of dewatering fluids from existing sumps and basements. The Contractor shall be responsible for any approvals, permits, inspections, and characterization associated with this disposal.

3.04 MANIFEST RECORDS

A. The Contractor shall originate, maintain, and provide Transporter with copies of waste shipment manifests and/or bills of lading records for all wastes; verify wastes and quantities of each load shipped.

B. The manifest forms and records shall be consistent with the State, USEPA, and U.S. Department of Transportation requirements.

C. The Contracting Officer will sign the hazardous waste manifest. The Contracting Officer or the Engineer will review the manifest for completeness and accuracy prior to final release.

D. The Contracting Officer will supply the generator number for the site.

3.05 DECONTAMINATION

A. All Contractor material, equipment, and facilities shall be decontaminated as specified in Section 02021, "Equipment Decontamination Procedures" and as specified in the approved HASP and/or Environmental Protection and Contingency Plan.

B. Demolition of decontamination facilities (if any) - Prior to demolition, the Contracting Officer or the Engineer will verify that all contaminated material has been removed from the site. Following all decontamination activities, completely remove the decontamination facility. Any resulting debris from demolition will be treated as contaminated and disposed of accordingly. Care shall be taken not to contaminate the site during decontamination, demolition, or disposal activities.

--End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

Standard Operating Procedure

DRUM HANDLING AND REMOVAL
SECTION 02077

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

The publications outlined below are in addition to information provided in the Work Plan and other project plans including the Site Health and Safety Plan (HASP). The publications listed below form a part of this procedure to the extent referenced. The publications are referred to in the text by basic designation only.

STATE REGULATIONS

Chapter 62-730	Hazardous Waste

CODE OF FEDERAL REGULATIONS

29 CFR 1910.120	Hazardous Waste Operations and Emergency Response
29 CFR 1926.65	Hazardous Waste Operations and Emergency Response
49 CFR 172	Hazardous Materials Tables and Hazardous Communication Regulations
49 CFR 173	Shippers - General Requirements for Shipments and Packaging
49 CFR 177	Hazardous Materials - Carriage by Public Highway
49 CFR 178	Shipping Container Specification
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 263	Standards Applicable to Transporters of Hazardous Waste
40 CFR 264	Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 265	Interim Status Standards for Owners and Operators of Hazardous Waste, Treatment, Storage and Disposal Facilities

1.02 RELATED STANDARD OPERATING PROCEDURES

A. Waste Processing – Section 02095
B. Free Liquids Removal – Section 02078

1.03 DESCRIPTION OF WORK

This standard operating procedure (SOP) describes the handling and removal of drums containing miscellaneous waste fluids and solids. Drums may contain liquid, sludge, or solid hazardous materials or hazardous waste, decontamination water, drilling water, and drilling cuttings. Additional drums will potentially be generated during project site activities including drums containing dust suppression fluids, decontamination water, and removal of pipe containing various fluids. Drums containing drilling and decontamination water will be combined in on-site storage tanks (i.e., frac tanks) and disposed of in bulk. Drums containing hazardous materials (i.e., PCBs or materials failing the TCLP method) will be disposed off-site by a licensed disposal contractor.

The procedures described in this SOP were adapted based on a USEPA publication entitled "Standard Operating Safety Guides" number 9285.1-03, PB92-963414, dated June 1992.

1.04 DEFINITION

A. Contaminated Materials Staging/Stockpile Area - The Contractor shall identify in the Work Plan an area on the site to be used as a temporary staging area.
B. Hazardous Waste Manifest - A legal document used to track the generation, transport, and disposal of RCRA-hazardous waste materials in accordance with regulations specified in 40 CFR 262-263.
C. TSDF - A treatment, storage, or disposal facility permitted to accept hazardous wastes in accordance with provisions of 40 CFR 264.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

Drum removal should generally occur in the following sequence: (1) inspection; (2) sampling; (3) characterization; and (4) staging. This section describes the procedures to be used for each. Under some circumstances, as described below, the sequence may vary. This section also describes procedures for drum handling and opening, waste bulking, and shipment.

CAUTION: Accidents may occur during handling of drums and other hazardous waste containers. Hazards include detonations, fires, explosions, vapor generation, and physical injury resulting from moving heavy containers by hand and working around stacked drums, heavy equipment, and deteriorated drums. While these hazards are always present, proper work practices - such as minimizing handling and using equipment and procedures that isolate workers from hazardous substances - can minimize the risks to site personnel.

3.01 INSPECTION

Drums and containers will be inspected and their integrity assured before being moved. Drums or containers that cannot be inspected before being moved because of storage conditions (e.g., buried beneath the earth, or stacked several tiers high in a pile) will be moved to an accessible location and inspected before further handling. The drums will be inspected and evaluated for:

1. DOT labels, words, or other marks indicating the contents
2. Signs of deterioration/leakage
3. Drum type
4. Configuration of the drumhead
5. Airborne contaminant levels
6. Accessibility

DOT labels, words, or other markings will indicate if the drums once contained hazardous, for example, corrosive, toxic, flammable, or reactive, or other potential dangers.

Signs of deterioration include corrosion, rust, and leaks that could indicate the drum is unsafe to move.

Drum types indicate contents. For instance, polyethylene- or PVC-lined drums often contain strong acids or bases. Drums made of unusual metals such as aluminum, nickel, and stainless steel usually contain extremely dangerous materials. Single-walled drums, which are used as pressure vessels and have fittings for both product filling and placement of an inert gas, can contain reactive, flammable, or explosive substances.

The configuration of the drumhead indicates the state of the contents. For instance, drums on which the whole lid is removable are designed to contain solids or semi-solids. Drums with an affixed lid with a bunghole are designed for liquids.

Additional information will be obtained through monitoring instrumentation. The breathing zone and area around the drums will be monitored in consultation with the site Health and Safety Officer (HSO) with instruments such as the photoionization detector (PID), radiation survey meter, flame ionization detector (FID), combustible gas indicator and so forth. The results of this survey will be used to help classify the drums into preliminary hazard categories such as:

1. Leaking/deteriorated
2. Bulging
3. Explosive/shock-sensitive

The accessibility of individual drums should be assessed to determine if special equipment (hoist, forklift, etc.) is required to move the drum or if physical hazards may be encountered during removal.

The worker must keep in mind that drums often are mislabeled, particularly if they have been reused; therefore, even clearly labeled drums should be handled with care and the contents considered suspect. The HSO should be informed of drum inspection results to identify and manage specific exposure and hazard possibilities.

3.02 DRUM HANDLING

The purpose of handling is to (1) respond to any obvious problems that might impair worker safety, such as leakage, or the presence of explosive substances; (2) unstack and orient drums for sampling; and (3) if necessary, to organize drums into different areas on site to facilitate characterization and remedial action. Handling may or may not be necessary, depending on how the drums are positioned at the site.

Since accidents occur frequently during handling, particularly initial handling, drums should only be handled if necessary. In all phases of handling, personnel should be alert for new information about potential hazards. These hazards should be responded to and reported to the HSO before continuing with more routine handling operations. Overpack drums (larger drums in which leaking or damaged drums are placed for storage or shipment [see 49 CFR Part 173.3(c)]) and an adequate volume of chemical resistant absorbent should be kept near areas where minor spills may occur. Where major spills may occur, a chemical resistant containment berm adequate to contain the entire volume of liquid in the drums should be constructed before any handling takes place. If the drum contents spill, personnel trained in spill response should be used to isolate and contain the spill.

Several types of equipment can be used to move drums: (1) A drum grappler attached to a hydraulic excavator; (2) a small front-end loader, which can be either loaded manually or equipped with a bucket sling; (3) a rough terrain forklift; (4) a roller conveyor equipped with solid rollers; and (5) drum carts designed specifically for drum handling. Drums are also sometimes moved manually. The drum grappler is the preferred piece of equipment for drum handling. It keeps the operator removed from the drums so that there is less likelihood of injury if the drums detonate or rupture. If a drum is leaking, the operator can stop the leak by rotating the drum and immediately placing it into an overpack. In case of an explosion, grappler claws help protect the operator by partially deflecting the force of the explosion.

The following procedures should be used to maximize worker safety during drum handling and movement:

1. Train personnel in proper lifting and moving techniques to prevent back injuries.
2. Make sure the vehicle selected has sufficient rated load capacity to handle the anticipated loads, and make sure the vehicle can operate smoothly on the available road surface.
3. Air-condition the cabs of vehicles to increase operator efficiency; protect the operator with heavy splash shields.
4. Supply operators with appropriate respiratory and personal protective equipment when needed. Consult with the HASP and HSO in making this determination. Normally either a combination self-contained breathing apparatus (SCBA)/supplied-air respirator (SAR) with the air tank fastened to the vehicle, or an airline respirator and an escape SCBA are used because of the high potential hazards of drum handling. Use chemically resistant clothing and face-shields. This improves operator efficiency and provides protection in case the operator must abandon the equipment.
5. Have overpacks ready before any attempt is made to move drums.
6. Before moving drums or nearby structures and/or equipment, determine the most appropriate sequence in which the various drums and other containers should be moved. For example, small containers may have to be removed first to permit heavy equipment to enter and move the drums.
7. Exercise extreme caution in handling drums that are not intact and tightly sealed.
8. Ensure that operators have a clear view of the roadway when carrying drums. Where necessary, have ground workers available to guide the operator's motion.

The following procedures should be used when handling bulging drums:

1. Pressurized drums are extremely hazardous. Wherever possible, do not move drums that may be under internal pressure, as evidenced by bulging or swelling.
2. If a pressurized drum has to be moved, whenever possible handle the drum with a grappler unit constructed for explosive containment. Either move the bulged drum only as far as necessary to allow seating on firm ground, or carefully overpack the drum. Exercise extreme caution when working with or adjacent to potentially pressurized drums.

The following procedures should be used when handling leaking, open, and deteriorated drums:

1. If a drum containing a liquid cannot be moved without rupture, immediately transfer its contents to a sound drum using a pump designed for transferring that liquid. If a drum cannot be pumped due to inaccessibility, if possible, plug holes in drum using a commercially available emergency drum repair sealant or plug before moving into an overpack container.
2. Using a drum grappler, place leaking drums that contain sludges or semi-solids, open drums that contain liquid or solid waste, and deteriorated drums that can be moved without rupture immediately in overpack containers.

The following procedures should be used when handling buried drums:

1. Prior to initiating subsurface excavation, use ground penetrating systems to estimate the location and depth of the drums.
2. Remove soil with great caution to minimize the potential for drum rupture.
3. Have a dry chemical fire extinguisher on hand to control small fires.

3.03 OPENING DRUMS

Whenever possible, drums will be opened and sampled before moving them. If the drums must be handled before sampling, extreme caution will be used and the procedures followed as outlined in Subsection 3.02. Regardless of whether the drums are opened before or after handling, the opening procedures are the same. To enhance the efficiency and safety of drum-opening personnel, the following procedures will be instituted:

1. Unless background information warrants the use of a lower level of personal protective equipment, the opening of drums is to be done at Level B. Airline respirators with an escape SCBA will be used whenever possible as this enables workers to operate in relative comfort for extended periods. When airline respirators are used, the connections to the source of air will be protected from contamination and the entire system protected from physical damage. Consult with HSO for respirator and personal protective equipment requirements prior to opening any drums.
2. Personnel will be protected by keeping them at a safe distance from the drums being opened. Establish an exclusion zone using yellow caution tape. If personnel must be located near the drums, explosion-resistant plastic shields will be used to protect them in case of detonation. The controls for drum opening equipment, monitoring equipment, and fire suppression equipment will be located behind the explosion-resistant plastic shields.
3. If there is a reasonable potential for a flammable atmosphere to exist, intrinsically safe and non-sparking tools will be used.

4. If possible, continuous monitoring will be conducted during a drum opening. The sensors of the monitoring equipment, such as colorimetric tubes, dosimeter, radiation survey instruments, explosion meters, organic vapor analyzers, and oxygen meters, will be placed as close as possible to the source of contaminants (i.e., at the drum opening).
5. Remote-controlled devices will be used to open drums whenever possible. These devices include: (1) a pneumatically operated impact wrench to remove drum bungs; (2) a hydraulically or pneumatically operated drum piercers; and (3) backhoes equipped with bronze spikes for penetrating drum tops in large-scale operations.
6. Picks, chisels, or firearms will not be used to open drums.
7. If the drum shows signs of swelling or bulging, all steps will be performed slowly. Excess pressure will be relieved prior to opening and, if possible, from a remote location using devices such as a pneumatic impact wrench or hydraulic penetration device. If pressure must be relieved manually, a barrier such as explosion-resistant plastic sheeting will be placed between the worker and bung to deflect any gas, liquid, or solids that could be expelled as the bung is loosened.
8. Special metal drums and polyethylene- or PVC-lined drums will be opened through the bung by removal or drilling. Extreme caution will be exercised when manipulating these containers.
9. Open bungs and drill openings will be resealed as soon as possible with new bungs or plugs to avoid explosions and/or vapor generation. If an open drum cannot be resealed, the drum will be placed into an overpack. Any openings in pressurized drums will be plugged with pressure-venting caps set to a 5-pounds-per-square-inch (psi) release to allow venting of vapor pressure.
10. Equipment will be decontaminated after each use to avoid mixing incompatible wastes.

3.04 SAMPLING

Because it often involves direct contact with unidentified wastes, sampling drums can be potentially dangerous. Sampling shall be conducted whenever the contents of a drum or container are unknown. Before the collection of any sample, a complete sampling plan will be developed with the approval of the HSO. Elements of a sampling plan should include the following:

1. A thorough background investigation to gather all available information about the waste
2. A determination of which drums should be sampled.
3. A selection of the appropriate sampling device(s) and container(s).
4. Procedures for sampling and sample packaging and transportation (consult with site Work Plan).
5. The required personal protective equipment based on available information about the wastes and site conditions.

When manual sampling is required, the following procedures must also be included:

1. Sampling personnel will be kept at a safe distance while drums are being opened and will sample only after opening operations are complete.
2. Workers will not lean over other drums to reach the drum being sampled, unless absolutely necessary.
3. Drum tops will be covered with plastic sheeting or other suitable noncontaminated materials, if appropriate, to avoid excessive contact with the drum tops.

4. Workers will not stand on drums. This is extremely dangerous. Mobile steps or another platform will be used to achieve the height necessary to safely sample from the drums.
5. Samples will be obtained with either glass rods or vacuum pumps. Contaminated items, such as discarded rags, will not be used to sample as the sample can become contaminated and the contaminant might not be compatible with the waste in the drum, causing a reaction or explosion. Glass rods will be removed prior to pumping to minimize the damage to pumps.

3.05 CHARACTERIZATION

The goal of characterization is to obtain data necessary to determine how to safely and efficiently package and transport the wastes for treatment and/or disposal. If wastes are bulked, they must be sufficiently characterized to determine which of them can be safely combined. Standard compatibility tests should be used to segregate wastes into broad categories, including water reactive, oxidative, and radioactive. By identifying broad waste categories, compatible waste types can be safely bulked on-site without the risk of explosion, and disposal options can be determined. In some cases, further analysis may be necessary in accordance with the site Work Plan to identify the waste materials more precisely.

3.06 STAGING

Although every attempt should be made to minimize drum handling, drums may have to be staged to facilitate characterization and remedial action, and to protect drums from potentially hazardous site conditions (e.g., movement of heavy equipment and high temperatures that might cause explosion, ignition, or pressure buildup).

Staging of drums and containers will be performed in accordance with the site Work Plan. However, the following text provides recommendations for the proper staging of drummed wastes until the drums can be prepared for off-site shipment and disposal.

A. The establishment of the staging area is the first step in the process. The staging area will be in the exclusion zone, will be located and designed to minimize the amount of drum or container movement, will be provided with adequate access and egress routes, and will be well away from all nonessential personnel, other operations, and hazardous, flammable, or combustible materials. Drums and containers within the staging area will be kept to the minimum number necessary to identify and classify them safely and prepare them for transport. Bulk storage of drums will only be permitted once the contents have been thoroughly characterized.

B. The number of staging areas will depend on site-specific circumstances such as the scope of the operation, the accessibility of drums in their original positions, and the expected hazards. The extent of staging must be determined individually for each site, and should always be kept to a minimum. The most number of staging areas a site should have is five. These areas can include:

1. Initial Staging Area. The area where drums are organized according to type, size, and suspected contents and are stored prior to sampling.

2. Opening Area. The area where drums are opened, sampled, and resealed. This area will be located a safe distance from the original waste disposal or storage site and from all staging areas to protect a chain reaction in case of fire or explosion.
3. Sampling Area. During large-scale remedial or emergency tasks, a sampling area, set up at some distance from the opening area, will be used to minimize the number of personnel in the opening area in the event of an explosion.
4. Second Staging Area. Also known as a holding area, this is where drums are temporarily stored after sampling, pending characterization of their contents. **Unsealed drums with unknown contents will not be placed in the second staging area in case they contain incompatible materials.** Either the contents of the drums will be removed or the drum will be overpacked.
5. Final Staging Area. Also known as a bulking area where substances that have been characterized are bulked for transport to treatment or disposal facilities. If a final staging area is warranted, it will be designed in the following manner:
   a. The final staging area will be located as close as possible to the site exits.
   b. The area will be graded and covered with plastic sheeting.
   c. A dike will be installed around the entire area.
   d. Drums will be segregated according to their basic chemical categories (e.g., acids, heavy metals, and pesticides). Separate areas will be constructed for each of the waste types present to preclude the possibility of intermingling incompatible chemicals when bulking.

In all staging areas, drums will be staged two wide with two rows per area. These rows will be spaced 7 to 8 feet apart to enable movement of drum handling equipment.

3.07 BULKING

For efficient transportation, bulking of chemicals might be desirable (see Waste Processing SOP). This involves mixing together and placing similar wastes in large containers such as tanks or vacuum trucks. Bulking will be done only after thorough characterization of the waste. Initial characterization to determine general classifications (e.g., auto-reactives, water reactives, inorganic acids, organic acids, heavy metals, pesticides, cyanides, inorganic oxidizers, and organic oxidizers) may not be enough. In most cases, additional sampling and analysis to further characterize the wastes, for hazardous waste determination or disposal facility requirements, will have to be conducted. Bulking is performed in the final staging area using the following procedures:

1. Inspect each tank trailer or waste container and remove any residual materials from it prior to transferring any bulked materials. This will prevent reactions between incompatible chemicals.
2. Use pumps that are properly rated and that have a safety relief valve with a splash shield to move hazardous liquids. Make sure the pump hoses, casings, fittings, and gaskets are compatible with the material being pumped.
3. Before beginning work, inspect hose lines to ensure that all lines, fittings, and valves are intact with no weak spots.
4. Take special precautions when handling hoses as they often contain residual material that can splash or spill on the personnel operating the hoses. Protect personnel against accidental splashing. Protect lines from vehicle and pedestrian traffic.
5. Store flammable liquids in approved containers.

3.08 SHIPMENT

The contents of all drums and containers will be identified and classified prior to packaging for shipment. The packaging, shipment, and transportation of drums or bulked material will be done in accordance with applicable USDOT, USEPA, and State regulations (refer to the Work Plan). The following procedures will be used when shipping the hazardous materials to a treatment, storage, or disposal facility:

1. The final staging (bulking) area will be situated as close as possible to the site exit.
2. A circulation plan will be prepared that will minimize conflict between the cleanup teams and waste haulers. Traffic signs, lights, and other control devices will be used when necessary.
3. Adequate areas for on-site and hauling vehicles to turn around will be provided.
4. Waste-hauling vehicles will be kept in a safe area until ready for loading with drivers remaining in the cab. The duration that the drivers are in the hazardous area will be minimized.
5. Ensure that the driver is outfitted with appropriate protective equipment.
6. All drums will be tightly sealed before loading. Leaking or deteriorated drums will be overpacked. Drums will be loaded one high and secured to prevent shifting during transport.
7. Bulk solids will be kept several inches below the top of the truck container. Loads will be covered with a layer of clean soil, foam, and/or tarp and secured to prevent shifting or release during transport.
8. Decontaminate vehicle tires prior to leaving the site to ensure that contamination is not carried onto public roads.

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

Standard Operating Procedure

FREE LIQUIDS REMOVAL
SECTION 02078

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

The publications outlined below are in addition to information provided in the Work Plan and other project plans including the Site Health and Safety Plan (HASP). The publications listed below form a part of this procedure to the extent referenced. The publications are referred to in the text by basic designation only.

STATE REGULATIONS

Chapter 62-710	Used Oil
Chapter 62-730	Hazardous Waste

CODE OF FEDERAL REGULATIONS

29 CFR 1910.120	Hazardous Waste Operations and Emergency Response
29 CFR 1910.146	Permit-Required Confined Spaces
40 CFR 178	Shipping Container Specifications
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste

AMERICAN PETROLEUM INSTITUTE

API RP 1604	Removal and disposal of used underground petroleum storage tanks

1.02 RELATED STANDARD OPERATING PROCEDURES

A. Piping Removal – Section 02065
B. Underground and Aboveground Storage Tank System Removal – Section 02051
C. Removal of PCB Transformers, Equipment, and Liquid – Section 02074
D. Mercury Handling/Disposal – Section 02079
E. Drum Handling and Removal – Section 02077

1.03 DESCRIPTION OF WORK

This Standard Operating Procedure (SOP) describes the handling and removal of free liquids contained in above-grade piping, equipment fluid reservoirs, aboveground and underground storage tanks, and below-grade sumps. These liquids may include, but are not limited to contaminated water, process fluids (i.e., solvents), oils, grease and hydraulic fluids. It is important to note that such liquids may be toxic, and all activities conducted under this section shall be performed in accordance with the HASP and comply with all federal, state and/or local authorities having jurisdiction and as described herein. Further, the Site Health and Safety Officer (HSO) shall be consulted prior to the handling and removal of any hazardous liquid.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.01 PREREQUISITES, PRECAUTIONS AND LIMITATIONS

A. Refer to the Piping Removal, Equipment Removal, and Underground and Aboveground Storage Tank System Removal SOPs for procedures (preparation for access, spill control, etc.) to be conducted prior to commencing free liquid removal from above-grade piping, equipment reservoirs, sumps, and aboveground or underground storage tanks as appropriate.

B. If liquid PCB or mercury is encountered, refer to either the Removal of PCB Transformers, Equipment and Liquid, or the Mercury Handling/Disposal SOP.

C. Precautions shall be taken to ensure that free liquids do not spill during removal procedures, cutting, or disconnecting of fittings. This includes the use of drip pans, polyethylene sheeting, or other means of secondary containment to control releases. Contingency measures shall be immediately available such as sorbents and spill clean up materials during liquid removal activities.

D. Spills shall be promptly reported to the Contractor's HSO, controlled, contained, and cleaned up in accordance with the workplan and HASP. Spills of hazardous substances may need to be reported to governing agencies. Notification and reporting requirements shall be followed in accordance with the workplan and HASP.

E. In some cases, aboveground or underground tank entry may be necessary for liquid or residual solids removal. Confined space entry and air monitoring requirements will be in accordance with the HASP and provisions of 29 CFR 1910.146. Confined space work practices shall be reviewed and approved by the Contractor's HSO.

F. At a minimum, workers shall conduct liquid removal activities in Level D Personal Protective Equipment (PPE), using chemical resistant coveralls, face-shields, gloves and booties when warranted and in accordance with the HASP. The HSO shall review work procedures and PPE prior to conducting work.

3.02 GENERAL

A. Prior to removing piping, equipment or tanks, any unidentified liquid contents shall be characterized to determine if it must be disposed of as hazardous waste, or if special work practices or higher grades of PPE are required.
   1. Free liquids shall be sampled and analyzed for Resource Conservation and Recovery Act (RCRA) hazardous waste characteristics (i.e., ignitability, reactivity, corrosivity, and toxicity) as specified by the workplan.
   2. Prior to the collection of any sample, sampling procedures will be developed in accordance with the workplan and reviewed and approved by the HSO.

B. Container selection for removed liquids should be made based on fluid volume estimate and waste characteristics.
   1. Typical containers include DOT approved closed top 55-gallon drums (DOT Specification 17-E), or portable tanks of appropriate construction with liners as necessary, in accordance with the workplan and 40 CFR 178.

C. It may be necessary to use a hand pump to remove small amounts of liquid from piping, equipment, tanks, or reservoirs. Pumps shall be constructed of materials compatible with the liquid to be removed.

D. Refer to the Piping Removal, Equipment Removal, and Underground and Aboveground Storage Tank System Removal SOPs for further processing, cleaning, and decontamination procedures after free liquids have been removed.

E. Whenever possible contaminated water collected will be combined in on-site storage tanks (frac-tanks) for treatment in accordance with the Water Collection and Treatment SOP. If sample results indicate that on-site treatment is not feasible, disposal will be at an off-site facility licensed to accept the indicated hazardous material.

F. Consult the Waste Processing SOP for waste liquid bulking procedures, if applicable. Also, refer to the workplan for container staging, marking and labeling, and disposal requirements.

G. Liquid contents of drums and tanks may contain non-aqueous phase liquid (NAPL), in the form of light NAPL (LNAPL) or dense NAPL (DNAPL). In this case, the free product shall be containerized, sampled, and characterized separate from the aqueous component of tank or drum contents.

3.03 ABOVE GRADE PIPING

A. For free liquids in piping, system drain fittings shall be utilized to drain residual liquid into a collection container. Refer also to the Piping Removal SOP.

B. Alternatively, a flanged joint, gauge line, or test fitting may be slowly loosened and liquid allowed to drain into a collection container.
   1. If a large amount of fluid is released, re-tighten fitting, notify supervisor and reassess whether sufficient containment volume is on hand.

2. If there are no low point drains or flanged joints in the system, a window or hole may be cut in the piping in accordance with the procedures outlined in the Piping Removal SOP before draining the system into a container.

C. Decontaminate and process piping in accordance with the Waste Processing SOP.

3.04 EQUIPMENT RESERVOIRS

A. Equipment should be disconnected from process piping/hoses and isolated for draining in accordance with the Equipment Removal SOP. Equipment reservoir drain fittings should be utilized to drain residual liquid into a collection container. Some equipment may require partial dismantling in order to completely remove free liquids.

B. As required, a HEPA filtered vacuum cleaner designed to handle liquids, or a hand pump compatible with the liquid to be removed may be used.

C. Fuel tanks, coolant reservoirs, and hydraulic fluid reservoirs should be drained using explosion proof or air-driven pumps compatible with the liquid being removed.

1. Pump motors and suction hoses must be bonded to the tank or reservoir, or otherwise grounded to prevent electrostatic ignition hazards (API RP 1604).

D. Consult with the Removal of PCB Transformers, Equipment and Liquid SOP if hydraulic fluids or other oils are suspected to contain PCBs.

E. Decontaminate and process equipment in accordance with the Equipment Removal, and Waste Processing SOPs.

3.05 ABOVEGROUND STORAGE TANKS

A. Where possible, existing tank system pumps and drain fittings shall be used to transfer free liquids to appropriate containers.

B. Tanks containing fuel or combustible liquid shall be drained using explosion proof or air-driven pumps (compatible with liquid being removed) if existing tank system pumps are inoperable.

1. Pump motors and suction hoses must be bonded to the tank or reservoir, or otherwise grounded to prevent electrostatic ignition hazards (API RP 1604).

C. A vacuum truck shall be used for removal of large volumes of free liquids. The area of operation for the vacuum truck shall be vapor free. The truck shall be located upwind from the tank or reservoir and outside the path of probable vapor travel. Vacuum pump exhaust gases shall be discharged through a hose of adequate size and length downwind of the truck and tank area.

D. Tank or reservoir contents unable to be transferred by conventional pumping methods are considered to be non-pumpable solids or sludge.

1. As necessary, tank top sections will be sheared off to gain access into tanks in accordance with the Underground and Aboveground Storage Tank System Removal SOP. Laborers will shovel solid contents into appropriate containers for removal after appropriate safety precautions are followed in accordance with the HASP.

E. Decontaminate and process aboveground storage tanks in accordance with the Underground and Aboveground Storage Tank System Removal and Waste Processing SOPs.

3.06 UNDERGROUND STORAGE TANKS

A. Where possible, existing tank system pumps and drain fittings shall be used to transfer free liquids to appropriate containers.

B. As necessary, submersible pumps compatible with the liquid being removed shall be used to drain free liquids.

C. Tanks containing fuel or combustible liquid shall be drained using explosion proof or air-driven pumps compatible with liquid being removed.

1. Pump motors and suction hoses must be bonded to the tank or reservoir, or otherwise grounded to prevent electrostatic ignition hazards (API RP 1604).

D. A vacuum truck shall be used for removal of large volumes of free liquids. The area of operation for the vacuum truck shall be vapor free. The truck shall be located upwind from the tank or reservoir and outside the path of probable vapor travel. Vacuum pump exhaust gases shall be discharged through a hose of adequate size and length downwind of the truck and tank area.

E. Tank or reservoir contents unable to be transferred by conventional pumping methods are considered to be non-pumpable solids or sludge.

1. As necessary, tank top sections will be sheared off to gain access into tanks in accordance with the Underground and Aboveground Storage Tank System Removal SOP. Laborers will shovel solid contents into appropriate containers for removal after appropriate safety precautions are followed in accordance with the HASP.

F. Decontaminate and process underground storage tanks in accordance with the Underground and Aboveground Storage Tank System Removal and Waste Processing SOPs.

-- End of Section --

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

Standard Operating Procedure

MERCURY HANDLING AND DISPOSAL
SECTION 02079

PART 1 GENERAL

1.01 RELATED CODES AND STANDARDS

The publications listed below form a part of this procedure to the extent referenced and are referred to in the text by basic designation only. The work procedures of this SOP have been developed to incorporate the substantive requirements of these codes and standards. The current edition of each reference shall be utilized.

CODE OF FEDERAL REGULATIONS

40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 273	Standards for Universal Waste Management
49 CFR 172	Hazardous Materials Tables and Hazardous Communication Regulations
49 CFR 173	Shippers – General Requirements for Shipments and Packaging
49 CFR 178	Shipping Container Specification

FLORIDA ADMINISTRATIVE CODE

Chapter 62-730	Hazardous Waste

1.02 RELATED PROJECT PLANS

The documents listed below developed specifically for the NAS Cecil Field decontamination project form a part of this SOP to the extent referenced.

1. Remediation Work Plan (WP)
2. Site Health and Safety Plan (HASP)

1.03 RELATED STANDARD OPERATING PROCEDURES

The documents listed below developed specifically for the NAS Cecil Field project form a part of this SOP to the extent referenced.

1. Regulatory Compliance – Section 01060
2. Equipment Decontamination Procedures – Section 02021
3. Removal and Disposal of Debris and Contaminated Material – Section 02076
4. Waste Processing – Section 02095

1.04 DESCRIPTION OF WORK

This Standard Operating Procedure (SOP) covers the methods to be used in the handling and disposal of liquid mercury and mercury containing material including thermometers, thermostats, mercury vapor lights, fluorescent lighting and mercury bearing equipment. This work shall be conducted in accordance with the project plans referenced above and comply with all federal, state and/or local authorities having jurisdiction and as described herein.

PART 2 PRODUCTS

2.01 MATERIALS

The following list of materials and equipment is recommended for execution of this SOP. The list is intended as a recommendation only; equivalent materials and equipment may be substituted during field operations if changes have been approved by the Contracting Officer or Engineer.

1. Mercury absorbent
2. Flowers (microcrystalline) of sulfur or calcium polysulfide
3. Dilute nitric acid or concentrated sulfuric acid or bleach
4. Mercury vacuum equipped with a carbon filter
5. Personal protective equipment as described under Section 3.02 A
6. 55-gallon drums (closed-top) or 1-gallon mercury containers
7. Dextrite Fluorescent Light Disposer

PART 3 EXECUTION

3.01 PREREQUISITES, PRECAUTIONS AND LIMITATIONS

A Walkdowns conducted prior to decontamination will identify mercury bearing equipment type and location. Sound structures suspected of containing mercury and/or mercury bearing equipment shall be specified in the Work Plan.

B. Removal of mercury and/or mercury bearing equipment shall be completed prior to other decontamination activities and in accordance with this SOP.

3.02 GENERAL REQUIREMENTS

A. PERSONAL PROTECTION EQUIPMENT (PPE)

Consult with the Site Health and Safety Officer (HSO) and HASP to determine specific PPE requirements prior to conducting work. In general, the following procedures shall be utilized:

1. Two layers of protective gloves shall be worn to prevent repeated or prolonged skin contact with liquid mercury or mercury bearing equipment.

2. Full face air purifying respirator with metallic mercury vapor (MSA cartridge Mersorb-H. Merc/HE) cartridge with HEPA filter.

3. Contact lenses shall not be worn when working in suspected mercury contaminated areas.

4. Use of protective clothing necessary to prevent repeated or prolonged skin contact with liquid mercury or mercury contaminated material. Use of disposable uniforms is recommended such that a contaminated uniform is not a source of absorption through the skin. If a worker's clothing may have become contaminated with mercury, worker shall change into uncontaminated clothing before leaving the work site. Non-impervious clothing contaminated with mercury shall be placed in closed containers for storage until it can be discarded of. Consult with Work Plan for storage and disposal requirements.

B. PREVENTIVE MEASURES

1. All containers of mercury and its compounds shall be kept tightly closed. Material shall be handled or transferred in an approved fume hood or with adequate ventilation. Store at as low a temperature as possible to reduce volatilization of mercury.

2. Work area (packaging, storage, etc.) floors should be non-porous and should be washed on a regular basis with dilute calcium sulfide solution or other suitable reactant to ensure that trace amounts of mercury are removed. Contaminated wash water shall be collected and treated as described in Waste Processing SOP, Section-02095. Polyethylene sheeting may be used to protect porous floors.

3. Eating and smoking shall not be permitted in areas where mercury is handled, processed or stored. Employees who handle mercury shall wash their hands thoroughly with soap or mild detergent and water before eating, smoking or using toilet facilities. All employees shall shower thoroughly each day before leaving the site.

C. EXPOSURE INFORMATION

1. Mercury is a poison and is therefore toxic. The primary exposure routes of concern are through inhalation and ingestion. Do not take internally or inhale mists or vapors. Do not get in eyes, on skin, or on clothing.

2. Mercury may be irritating on contact with skin, eyes, and mucous membranes.

3. Mercury exposure first aid and emergency response procedures shall be developed in consultation with the HSO and posted near or made immediately available to workers conducting mercury removal activities.

D. MERCURY MONITORING

1. Perform real-time monitoring for mercury by use of a Mercury Vapor Analyzer when working with exposed liquid mercury.

2. Consult with HSO and HASP for OSHA and NIOSH mercury exposure limits and monitoring guidelines.

3. When liquid mercury is unexpectedly encountered during decontamination activities, work will be immediately stopped.

4. Workers will be trained in the recognition of liquid mercury and exposure hazards.

5. Evacuate the area of all non-essential personnel if exposed liquid mercury is encountered.

6. Follow the liquid mercury removal or spill response procedures described in Section 3.05 of this SOP.

3.03 LIQUID MERCURY HANDLING AND DISPOSAL

It is not believed that large quantities of liquid mercury are present at the NAS Cecil Field facilities. However, small quantities may be encountered as decontamination activities continue. This liquid mercury will most likely be from broken mercury thermometers, thermostats, mercury vapor lights, fluorescent lights, or other mercury bearing equipment. The procedures outlined in this section address how liquid mercury should be removed and disposed of. These procedures may also be followed for the clean up of liquid mercury spills.

A. Secure area containing liquid mercury using caution tape or other physical barriers and eliminate any ignition sources until the area is determined to be free from explosion or fire hazard.

B. Notify and consult with HSO to identify proper PPE and health monitoring requirements.

C. Control migration of mercury, if uncontained, by using mercury compatible berms or absorbent. Prevent any liquid mercury from entering storm or sanitary sewer drains.

D. The use of sulfur or calcium polysulfide encourages the formation of mercuric sulfide that reduces the rate of mercury vapor loss during removal or spill clean up. This material should be applied to large (> 0.25 gal.) volumes of liquid mercury during removal activities.

E. Remove liquid mercury using a special mercury vacuum with a carbon filter. Absorbent materials may be used for removing small volumes of mercury.

F. Depending on volume encountered, liquid mercury shall be transferred to one (1) quart or one (1) pint glass containers. Containers shall be closed top and shall seal to prevent escape of mercury vapors. Absorbent contaminated with mercury shall be placed into closed-top

55-gallon metal drums. Use containers until they are approximately 80 percent full. Use polyethylene sheeting to control any spills during transfer.

G. Label, mark, store, and dispose drums and containers as hazardous waste in accordance with the requirements of the Work Plan and the regulations cited in Section 1.01. If liquid mercury is to be recycled, also follow procedures noted in the Work Plan and the particular requirements of the recycling contractor.

H. Decontaminate surfaces exposed to liquid mercury using a dilute calcium sulfide solution or other suitable reactant. Containerize and dispose of decontamination fluid and equipment in accordance with the Work Plan.

I. Discard contaminated PPE in accordance with the Work Plan, and follow personnel decontamination procedures described in the HASP and Section 3.02 B of this SOP

3.04 MERCURY EQUIPMENT HANDLING AND DISPOSAL

Mercury containing equipment likely to be encountered at NAS Cecil Field facilities includes mercury bearing thermometers, thermostats, mercury vapor lights, fluorescent lighting, and miscellaneous equipment. The procedures outlined in this section describe how mercury equipment should be removed and disposed of.

A. If spills or leaks of mercury do occur, follow the procedures for liquid mercury removal described in Section 3.03.

B. Assume the exterior surfaces of mercury equipment are contaminated with mercury and therefore follow the PPE requirements of Section 3.02 A.

C. Caution shall be used in order to prevent mercury-bearing equipment from breaking. Liquid mercury should not be drained from equipment. This work is best done by a disposal or recycling contractor.

D. Mercury equipment (thermostats, mercury switches etc.) will be separated and segregated from fixtures to the extent possible. Place mercury equipment in open-top 55-gal. drums (49 CFR 178) in a manner that will prevent breakage during transportation. Use mercury compatible absorbent as a buffer.

1. Label, mark, store, and dispose of mercury equipment containers as hazardous waste in accordance with the requirements of the Work Plan and the regulations cited in Section 1.01.

2. If mercury equipment is to be recycled, also follow procedures noted in the Work Plan and the particular requirements of the recycling contractor.

3. If mercury equipment is being managed as a "universal waste" label, mark and dispose of in accordance with 40 CFR 273.

E. Fluorescent light tubes and mercury vapor lights shall be separated and segregated from fixtures to the extent possible. Lights will be drummed on-site in accordance with SOP Waste Processing, using a GAC filter equipped Dextrite Fluorescent Light Disposer which crushes and bags lights for disposal offsite by a fluorescent light contractor in accordance with the Work Plan.

F. Discard contaminated PPE as appropriate (refer to Work Plan) and follow the personnel decontamination procedures described in the HASP and Section 3.02 B of this SOP.

3.05 SPILL RESPONSE

Spills or uncontrolled releases of liquid mercury shall be responded to immediately. Consult with the Work Plan to determine requirements and procedures for reporting mercury spills or releases to the regulatory authorities. The liquid mercury removal procedures described in Section 3.03 shall be followed in accordance with the HASP, in the event of a spill or release.

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

Standard Operating Procedure

FUGITIVE EMISSION CONTROL
SECTION 02080

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

The publications outlined below are in addition to information provided in the Work Plan and other project plans including the Site Health and Safety Plan (HASP).

1.02 RELATED STANDARD OPERATING PROCEDURES

A. Waste Processing – Section 02095
B. Water Collection and Treatment – Section 02023
C. Equipment Decontamination – Section 02021

1.03 DESCRIPTION OF WORK

This Standard Operating Procedure (SOP) provides the methods to be used to control fugitive dust emissions during all construction and decontamination activities. Dust control measures will generally include the following: water sprays, misting and/or hosing down areas; using non-hazardous surfactant water additives; and using non-hazardous foaming agents. Calcium chloride may also be used for some operations for dust suppression. This work shall also be conducted in accordance with the Work Plan and comply with all federal, state and/or local authorities having jurisdiction.

1.04 JOB CONDITIONS

A. Contaminants of Concern: Due to the possible presence of asbestos containing materials in building components, asbestos is a particulate of concern. Other potential emissions include lead and arsenic particulates and PCB and volatile organic compound vapors. Due to these potential contaminants, dust control measures shall be established and in place prior to the start of all construction or decontamination activities, including all waste/debris and soil handling activities. Dust control measures shall also be used for all traffic areas or haul roads, staging areas, process areas or other support areas incidental to work areas.

B. Air Monitoring: When necessary, real-time particulate monitoring and long term exposure monitoring at work areas for worker safety and fence line air monitoring will be conducted during all work operations in accordance with the project Work Plan. The Contractor's Health and Safety Officer (HSO) shall determine when monitoring is required. Based on the air monitoring results and the action levels stated in the Work Plan, the effectiveness of the dust control measures during each construction activity will be evaluated and the need for additional, alternative or corrective measures determined. Visual observations shall also be used during all work activities as additional assurance dust control measures are working

with the goal of no visible dust present. The protection of on-site and off-site persons/employees from the potential harmful effects of fugitive dust emissions is the primary goal of this SOP.

C. Quality Assurance: In order to ensure the validity of the fugitive dust measurements performed, the quality assurance/quality control procedures outlined in the Work Plan will be followed including, but not limited to periodic instrument calibration, operator training, daily instrument performance (span) checks, and record keeping.

D. Weather Conditions: During extreme wind conditions, some work activities that have a greater potential to create dust or other emissions shall be temporarily suspended until more favorable conditions. During light or moderate rain events, most work activities may continue, utilizing the benefit of added water unless rain intensity or the work activity will create erosion or contaminated runoff.

E. Documentation: When beginning every new work activity, information shall be recorded in daily inspection reports on the dust control measures used, application rates, locations, monitoring measurements, problems and other pertinent data so that successful procedures may be reapplied or the dust control measures refined for other similar tasks.

1.05 SUBMITTALS

Prior to the selection, purchase, and use of a surfactant or foam agent, manufacture data including product properties, material safety data sheets, concentrations, and use rates shall be provided to the governing authorities having jurisdiction for approval. Approved materials shall be used throughout the duration of this project and shall not be replaced by other materials without prior/additional approvals.

PART 2 PRODUCTS

2.01 MATERIALS

A. Water: The water used will be provided by a temporary on-site water distribution system connected to a potable water supply. This may include direct connection to or truck delivery from the supply to an elevated/pressurized storage tank with sufficient capacity to meet anticipated needs. This will ensure that the water used will not be brackish or contain salt, oil, acid, injurious alkali, or other objectionable materials.

B. Surfactants and Foam Agents: The surfactants and foam agents used for dust suppression shall be effective for the fugitive particulates and other emissions expected and shall be biodegradable, non-toxic, non-hazardous, non-flammable, contain no shelf life limitations, require no chemical mixing, require minimal clean-up, contain no temperature limitations and will not harden. In addition, the following requirements for time duration foams shall be used:

1. Temporary foam - temporary foam will be white in color after application and control dust effectively for up to 24 hours.
2. Intermediate foam - intermediate foam shall be green in color after application and control dust effectively for up to 5 days.
3. Long Term Foam - long term foam shall be black or dark brown in color after application and control dust effectively for up to 90 days.

C. Calcium Chloride: Calcium chloride used for dust suppression shall conform to the requirements of AASHTO M144-86.

PART 3 - EXECUTION

3.01 MOBILE UNITS

A. General: Mobile equipment dedicated specifically for controlling fugitive dust emissions may be used throughout decontamination activities. Mobile units shall be provided for both the application of water only, and water and surfactants or foam agents.

B. Use: Each active work area shall have at least one dedicated mobile unit.

C. Unit: The unit shall be trailer mounted and consist of a diesel powered air compressor, a water/chemical solution tank with a pressure gauge, and a system of hoses and/or spray bar and nozzles. For the application of foaming agents, mobile units shall meet the requirements recommended by the foaming agent manufacturer.

3.02 WATER SPRAYING/MISTING

A. General: The primary method for controlling dust emissions at active work areas will be through the use of water sprays, misting and /or hosing down. Water shall be applied prior to and during construction or decontamination activities.

B. Application: Water application for controlling fugitive dust emissions shall be conducted with mobile units as well as a system of fire hoses. Sufficient pressure shall be provided to disperse the water from the nozzle in an atomized state to create a fog or mist. The application of water shall be continuously monitored to ensure adequate moisture is applied and to prevent/minimize overly wet conditions in which rivulets or runoff is produced. In areas where runoff is created it shall be collected and treated as outlined in the Water Collection and Treatment SOP. In addition, the measures outlined in the Work Plan shall be in place prior to the application of water in the event runoff is created.

C. Earthwork: All active soil handling operations, including excavation, filling, grading, loading/unloading, and transport will be conducted using water misting to sufficiently moisten soil and prevent dust generation. Runoff or muddy conditions will be avoided. The following measures will be used for both on-site generated soils and soils originating off-site:

1. All haul roads and traffic areas shall be treated with a water spray.
2. Construction equipment buckets, blades, tracks or other parts which contact soil shall be treated with a water spray.
3. Dump truck beds shall be treated with a water spray during soil loading/unloading operations.
4. The entire surface of all active disturbed soil areas shall be kept sufficiently moist to prevent dust during operations including fill/excavation faces, backfills, new grading and storage piles

D. Waste Handling: During decontamination activities waste debris may require removal, processing and disposal and water misting shall be used during these operations to control dust. The following measures will be used:

1. All haul roads and traffic areas shall be treated with a water spray.
2. Waste process equipment including crushers, buckets, rollers or other parts that contact waste debris/rubble shall be treated with a water spray.
3. Dump truck beds shall be treated with a water spray during waste loading/unloading operations.
4. The entire ground surface in and around all active waste handling/processing areas including waste stockpiles shall be kept sufficiently moist to prevent dust during operations.

F. Surfactants: If required for any operation, the use of an approved surfactant water additive may be directed by the site superintendent to enhance the effectiveness of water to control dust by decreasing the surface tension of the water.

3.02 FOAMING AGENTS

A. General: Foaming agents shall be used as the primary dust control measure on non-active disturbed or open earthwork areas. Disturbed or open areas in which work has been conducted but where the work will be suspended temporarily (up to 24 hours) or for longer periods (up to 90 days) will require an application of foaming agent. Active or on-going construction areas will control dust with the water spray/misting procedures outlined in paragraph 3.01 above.

B. Application: The foaming agent shall be applied using mobile units conforming to the requirements stated herein and as recommended by the foaming agent manufacturer. The manufacturer recommendations for concentration and application rates shall be followed. The application technique for the three different time duration foams shall be the same. A minimum of 1 inch thick layer of foam shall be applied over the entire disturbed area for each type of foam used unless the foam manufacturer recommends a thicker layer for some applications, in which case the thicker layer will be used.

C. Protection: During the application of foaming agents, the recommendations provided by the manufacturer for worker safety shall be followed as well as the requirements outlined in the project Work Plan. Only workers trained in the application of the foaming agents will be used to conduct foaming operations.

D. Time Duration: As stated in paragraph 2.01.B, three time duration foams shall be used on-site:
1. Temporary foam will be used on disturbed or open areas that will remain non-active for a maximum of 24 hours.
2. Intermediate foam will be used on disturbed or open areas that will remain non-active for a maximum of 5 days.
3. Long term foam that will control dust for up 90 days will be used on areas where grading with soil/debris is completed and before a clean fill cover is constructed.
4. Should a period of inactivity extend past the time duration of the foam used, a second (or more if required) application of foam will be used to keep the area stabilized.

3.03 CALCIUM CHLORIDE

A. Use: Calcium chloride may be used as an alternative to water misting primarily in traffic areas, haul roads or on ground surfaces around buildings/structures or where equipment is operating. The use of calcium chloride in place of water misting will be determined by the site superintendent. Calcium chloride will not be used in place of foaming agents.

B. Application: Calcium chloride will be applied by mechanical spreaders or by hand. The rate of application shall be determined during initial applications and monitoring/documenting the effectiveness. For each subsequent operation where calcium chloride is used, the rate of application and effectiveness will be recorded so that refinements may be made as required.

3.04 OTHER MEASURES

Additional methods which will be used in conjunction with the application of water, water and surfactants or foaming agents to suppress dust emissions include: restricting vehicle speed; hauling waste/soil with tarp covers; scheduling/sequencing construction activities to minimize the amount of open or disturbed areas at one time; using plastic sheeting or tarps to cover temporary waste/soil stockpiles; covering completed fill areas or other disturbed areas as soon as practical with a clean fill cover, seeding and mulching these areas; or using a combination of methods stated in this SOP for certain activities.

3.04 DECONTAMINATION

Decontamination procedures outlined in the project Work Plan and equipment decontamination SOP shall be strictly followed to prevent dirty vehicles from leaving the site that could create dust emissions on public streets.

---End of Section---

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

Standard Operating Procedure

WASTE PROCESSING
SECTION 02095

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

The publications outlined below are in addition to information provided in the Work Plan and other project plans including the Site Health and Safety Plan (HASP). The publications listed below form a part of this procedure to the extent referenced. The publications are referred to in the text by basic designation only.

CODE OF FEDERAL REGULATIONS

29 CFR 1910.120	Hazardous Waste Operations and Emergency Response
40 CFR 261	Identification and Listing of Hazardous Waste
49 CFR 172	Hazardous Materials Tables and Hazardous Communication Regulations
49 CFR 173	Shippers - General Requirements for Shipments and Packaging
49 CFR 178	Shipping Container Specifications

STATE REGULATIONS

Chapter 62-701	Solid Waste Facilities
Chapter 62-710	Used Oil
Chapter 62-730	Hazardous Waste

1.02 RELATED STANDARD OPERATING PROCEDURES

A. Piping Removal – Section 02065
B. Water Collection and Treatment – Section 02023
C. Drum Handling and Removal – Section 02077
D. Removal of PCB Transformers, Equipment, and Liquid –Section 02074

E. Fugitive Emission Control – Section 02080
F. Liquid Mercury Removal – Section 02079

1.03 DESCRIPTION OF WORK

This Standard Operating Procedure (SOP) describes the procedures necessary to process and handle the various materials and wastes removed during decontamination. This SOP describes the processing requirements for both the on-site and off-site disposition of materials and wastes including disposal and recycling. The sampling and characterization of materials and wastes and the preferred disposal location for each type shall be identified in the Work Plan.

1.04 JOB CONDITIONS

It is assumed that all asbestos containing material (ACM) removed from the building interiors (such as insulation, ceiling and floor tiles, interior transite panels, etc.) will be handled and disposed off-site by the certified asbestos abatement contractor.

It is assumed that all materials will be sampled prior to demolition in accordance with the Work Plan and that different waste streams have been identified based on sampling results and disposal requirements.

Temporary storage/stockpiling areas, decontamination facilities, and waste stream processing locations shall be established prior to decontamination activities. The number and location of these facilities shall be referenced in the Work Plan.

All waste processing activities, including handling, transport, sizing, and placement shall be conducted using dust suppression procedures outlined in the Fugitive Emission Control SOP.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.01 GENERAL

Material removed from the facility can be grouped together into three general categories: (1) Hazardous Materials for off-site disposal, (2) Non-hazardous materials for off-site disposal (i.e., salvageable equipment or scrap metals), and (3) On-site disposal. When possible, debris and other material will be segregated and collected for disposal in close proximity to the deconatmination location to minimize double handling of materials. All materials will be processed (i.e., decontaminated if appropriate and sized appropriately) as soon as possible after removal occurs.

The Work Plan shall provide a description of the decontamination facilities and the waste stream processing locations. The Work Plan shall also provide a description of activities related to the transportation, temporary storage, management and disposal of waste materials. The Work Plan shall also describe each category of waste and provides a brief description of how each will be handled as summarized below:

A. Off-Site Disposal of Hazardous Materials - potentially includes ACM, drummed decontamination liquids, tank wastes, laboratory wastes, transformers, used personal

protective equipment (PPE), spent carbon filters, and miscellaneous piping, equipment, tanks or steel that cannot be decontaminated to meet the recycler's requirements.

B. Off-Site Disposal of Non-Hazardous Materials - includes recycling decontaminated metal such as machinery, dust collectors, pumps, metal walls, steel, tanks, drums, boilers, kettles, ovens, and kilns. Additional material included in this waste stream is wood, furniture, other clean construction debris.

C. On-Site Disposal Materials - includes paper and cardboard products suitable for disposal into the local dumpster.

All material and debris disposed of off-site shall be labeled, packaged, manifested, and transported by the disposal subcontractor in accordance with RCRA, USDOT and State of Florida DOT requirements.

3.02 WASTE PROCESSING

A. Recycled Metal will be disposed of off-site by a subcontractor. The following processing requirements are suggested, however, they may change based on the requirements of the subcontractor.

1. All metal will be decontaminated using a high pressure wash in order to remove visible dust contamination and liquid residues (both interior and exterior). There shall be no free draining liquid contained within or on any metal item being disposed of off-site. Decontamination procedures shall use a high pressure water wash in accordance with USEPA guidelines for decontamination operations on Superfund sites (see *USEPA publication No. EPA/600/2-85/028: 'Guide for Decontaminating Buildings, Structures, and Equipment at Superfund Sites,'* dated March 1985).
2. All metal will be cut into pieces small enough to fit into a roll-off container, assuming 5x8x12 foot roll-off containers will be used.
3. All tanks shall be cut into pieces no larger than 5 feet in order to fit into a roll-off container.
4. All piping will be reduced to lengths no greater than 5 feet using the pipe cutting techniques specified in the Piping Removal SOP.
5. Equipment shall be disassembled into pieces smaller than 5 feet in dimension.
6. All empty drums will be crushed prior to placement in the roll-off container.

B. Drummed liquids (i.e., decontamination fluids, drilling water, and purge water) will be consolidated (bulked) into frac tanks and treated on-site in accordance with the Water Collection and Treatment SOP

1. Drums containing decontamination, drilling, and purge water shall be opened and consolidated (bulked) in accordance with the Drum Handling and Removal SOP.
2. Drum contents shall be transferred into the frac tanks by lifting the drum using a backhoe equipped with grapplers, or pumping the contents using a submersible pump.
3. The empty drums will be processed in accordance with procedures A-1 and 2 of this section.

C. Drummed and bagged soil and sludges will be handled as follows.

1. Drums containing soil and sludges shall be handled in accordance with the Drum Handling and Removal SOP.
2. Drum contents shall be transferred into a dump truck by lifting the drum using a backhoe equipped with grapplers.
3. Soil "supersacks" will be cut opened and emptied into dump trucks using a bulldozer or other appropriate equipment.
4. Dump trucks shall transport the soil to an approved landfill for disposal.
5. The empty drums will be processed in accordance with procedures A-1 and 2 of this section.
6. Empty supersacks will be temporarily stored for off-site disposal.

D. Interior ACM will be fully abated and removed for off-site for disposal by an asbestos abatement subcontractor. The details on the handling, packaging, transportation and disposal requirements for waste asbestos is presented in the Asbestos Abatement SOP.

E. Exterior ACM and wood containing ACM shall be disposed of off-site by a subcontractor. The contractor shall consolidate all exterior ACM into sealed containers for disposal.

1. Wood and ACM shall be placed into sealed containers in accordance with the AAWP.
2. Precautions shall be taken while working around ACM. Personnel shall wear proper personal protective equipment (PPE) and efforts will be made to reduce airborne contaminants by covering and wetting the materials, and by minimizing the cutting and handling of the debris (refer to AAWP).

F. Liquids generated during decontamination activities include gray water (showers and laundry facilities), decontamination water (both vehicle and equipment), and runoff (dust control and storm water). The processing and disposal of these liquids is described in the Water Collection and Treatment SOP.

Other liquids encountered during decontamination activities include liquid/semi-solid sludges, tank wastes, and lab wastes. These liquids will be sampled and characterized in accordance with the Work Plan, prepared for shipment, and removed by a disposal subcontractor to a licensed disposal facility. All drums will be handled in accordance with the Drum Handling and Removal SOP.

G. Items made of wood, including roofing materials, structural supports, walls, and furniture will be segregated into hazardous and non-hazardous debris piles when possible. All wood containing asbestos will be handled under procedures D or E of this section. When wood is characterized as non-hazardous, it will be disposed of at an off-site construction debris landfill. All wood will be reduced in size to fit into a roll-off container. In the event contaminated wood is detected during sampling, the wood will be disposed of by a subcontractor at an off-site landfill accepting hazardous materials.

H. Electrical items include miscellaneous wiring, fixtures, conduit, fluorescent light tubes, light fixtures with ballasts, and transformers.

1. Miscellaneous wiring, fixtures, and conduit will generally be disposed of in an off-site non hazardous landfill, unless the fixtures contain ballasts. Fixtures will be reduced in size or crushed using heavy equipment to less than 5 feet in dimension.

2. Fluorescent light tubes will be separated from fixtures and segregated to the extent possible. The fluorescent light tubes will be bagged, crushed and drummed for disposal at an off-site facility.
3. Fixtures containing non-PCB ballasts will be segregated and shipped to off-site recycling facilities. Packaging and shipment will be performed by the recycler. PCB bearing ballasts will be packaged and shipped off-site for disposal as per the Removal of PCB Transformers, Equipment, Equipment, and Liquid SOP.
4. Management of other PCB electrical equipment is also presented in the Removal of PCB Transformers, Equipment, and Liquid SOP. These items will be shipped off-site to an appropriate disposal facility. Non-PCB transformers may be recycled as scrap metal (see procedure A of this section).

J. PPE will be disposed of at an appropriate off-site facility. Non-hazardous PPE shall be bagged and disposed of in a solid waste landfill. Hazardous PPE shall be drummed and disposed of in an appropriate hazardous waste landfill.

K. All spent carbon/filter materials from on-site water treatment operations will be recycled and disposed of at off-site facilities. The carbon will be sent off-site for regeneration if possible. If it cannot be regenerated, the carbon will be disposed at an appropriate disposal facility.

---End of Section---

Southern Division
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Standard Operating Procedure

EXCAVATION, BACKFILL, AND COMPACTION
SECTION 02221

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

A. Summary of Work: Section 01010
B. Existing Utilities and Underground Structures: Section 02016
C. Underground and Aboveground Storage Tank System Removal: Section 02051
D. Removal and Disposal of Debris and Contaminated Material: Section 02076
E. Special Project Plans and Procedures – Section 01125
F. Shop Drawings, Project Data, and Samples – Section 01340

1.02 REFERENCES

A. Excavation, backfill, and compaction work shall be conducted in accordance with all Federal, State, and local requirements, as well as industry standards, including 29 CFR Part 126, Department of Labor, Occupational Safety and Health Administration Standards - Excavations.

B. The publications listed below form a part of this specification to the extent referenced. Where referenced in the text, the publications are referred to by the basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 117	Test Method for Material Finer Than No. 200 Sieve in Mineral Aggregates by Washing
ASTM C 136	Sieve Analysis of Fine and Coarse Aggregates
ASTM D 1556	Standard Test Method for Density of Soil in Place by the Sand-Cone Method
ASTM D 1557	1978 (R 1990) Moisture Density Relations of Soils and Soils-Aggregate Mixtures Using 10-lb (4.54-kg) Rammer and 18-in. (457-mm) Drop
ASTM D 2167	1994 Test Method for Density and Unit Weight of Soil in place by the Rubber Balloon Method
ASTM D 2487	Classification of Soils for Engineering Purposes

ASTM D 2922	(R 1990) Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
ASTM D 3017	Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth)

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)

T27-88	1988 Standard Specifications for Transportation Materials and Methods of Sampling and Testing "Sieve Analysis of Fine and Coarse Aggregate"

C. Other References

DOT SS-1	Florida Department of Transportation (FDOT), 1991. "Road and Bridge Construction, 1991."

1.03 DESCRIPTION

A. This work shall consist of excavation of utilities, tanks, and other underground structures as specified in Section 02016, "Existing Utilities and Underground Structures", Section 02051, "Underground Storage Tank System Removal", Section 02060, "Building Demolition", Section 02061 "Slab Demolition", and Section 02076, "Removal and Disposal of Debris and Contaminated Material"; excavation of contaminated soils, backfilling of excavations and all subsurface holes; hauling, placement, and compaction of fill material; and provision, placement, and compaction of all materials necessary to conduct the work for this project.

B. Disturbance of existing soil shall be restricted to the excavation required to conduct below grade demolition and tank removals. Approximately 1.5 feet of soil shall be removed from around all sides of each tank. Existing soil shall not be used for filling voids located in different areas of the site. Unless specifically authorized by the Contracting Officer, excavated soil shall be replaced in the hole it was removed from and compacted.

C. Additional soil excavation, not specifically associated with demolition activities, shall only be conducted at the direction of the Contracting Officer. If additional suspected contaminated soils are encountered, the Contractor shall notify the Contracting Officer immediately and proceed as directed. Excavate additional suspected contaminated soil only at the direction of the Contracting Officer.

1.04 SUBMITTALS

Submit the following in accordance with Section 01340, "Shop Drawings, Project Data, and Samples".

A. Provide submittals as part of the Work Plan submittal specified in Section 01125, "Special Project Plans and Procedures".

B. Provide analytical data which documents that all off-site material to be used as backfill or fill is uncontaminated.

C. Field test reports to be submitted during construction as specified in the Field Quality Assurance paragraph in this Section.
   1. Grain-size analysis (ASTM C-117 and C-136) results, including percent passing information for each sieve designation and grain size curve.
   2. Moisture-density relationship (ASTM D-1557) results (when test is required), including density versus moisture content curve, zero air voids line, and maximum dry density and optimum water content
   3. Field density and moisture content test (ASTM-D-2922, D-3017) results, including date, location relative to the construction base line, dry density, water content, percent of proctor, reference proctor material classification, and pass/fail determination.
   4. Field monitoring of adjacent structures, as described in this section.
   5. Field records of dewatering activities and system status, as described in this section.

1.05 QUALITY ASSURANCE

A. Codes and Standards: Perform excavation work in compliance with applicable requirements of governing authorities having jurisdiction.

B. Testing and Inspection Service: The Contractor shall employ a geotechnical consultant and testing laboratory acceptable to the Contracting Officer to perform soil testing and inspection service for quality control testing during earthwork operations.

C. Test Reports: Submit 2 copies of the following reports directly to the Contracting Officer from the testing services, with copy to the Contractor:
   1. Gradation reports on borrow material (ASTM C 117, C 136, and D 2487).
   2. One moisture density curve for each type of borrow used (ASTM D 1556).
   3. Field density test reports (ASTM D 2922 and D 3017).

1.06 JOB CONDITIONS

A. Existing Utilities: Locate existing underground utilities in the areas of work. If utilities are to remain in place, provide adequate means of protection during earthwork operations.

B. Should uncharted, or incorrectly charted, piping or other utilities, contaminated soil, industrial wastes, etc. be encountered during excavation, consult the Contracting Officer immediately for directions. Cooperate with the Contracting Officer and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of utility owner. Do not interrupt existing utilities serving others, except when permitted in writing by the Contracting Officer, and then only after acceptable temporary utility services have been provided. Coordinate with utility companies for shut-off of services if lines are active.

C. Caution shall be used by the Contractor when conducting below grade demolition activities or exploratory excavations in areas in which underground storage tanks may exist to avoid potential releases of contents. Caution shall also be used in the location of existing utilities that are indicated to remain to avoid damage to these pipes.

D. Protection of Persons and Property: Barricade open excavations occurring as part of this work and post with warning lights. Operate warning lights as recommended by authorities having jurisdiction or standard practice. Protect structures, utilities, sidewalks, pavements, and other facilities which are to remain, from damage caused by settlement, lateral movement, undermining, washout and other hazards created by earthwork operations.

E. All excavations shall be conducted using required OSHA safety standards by providing adequate bracing or shoring or sloping excavation side slopes at safe grades.

PART 2 PRODUCTS

2.01 SOIL MATERIALS

A. Common Borrow: Shall be earth, suitable for embankment construction. It shall be free of perishable rubbish, peat, organic matter, large rock fragments, or other unsuitable material. AASHTO M145 Classifications A-1 through A-5 may be used. Use of other materials as common borrow in select areas is at the discretion of the Contracting Officer and the Engineer only.

B. Granular Borrow: Shall conform to AASHTO M145 Classifications A-1 and A-3. Material meeting Classification A-2 may be used, if approved by the Contracting Officer and the Engineer for applications when frost susceptibility is not a factor.

C. Gravel: Shall conform to AASHTO M145 Classifications A-1 and A-3 except as revised herein: The maximum aggregate size shall be 635 mm (2-1/2 inches) and a maximum of 15% shall pass the 0.075 mm (200) sieve.

PART 3 EXECUTION

3.01 SAFETY

A. Examine the areas and conditions under which excavating, filling, and grading are to be performed and notify the Contracting Officer in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner.

B. Barricades

1. The Contractor shall use traffic barricades with flashing lights where driver or pedestrian safety may be jeopardized. In areas that are left open overnight, the Contractor shall provide adequate barricades to prevent the unauthorized entrance into the work area.

2. The Contractor shall be responsible for barricading and clearly marking any entrance or exit to a work area where the safety of any person entering or exiting the area may be jeopardized. The barricade exit shall have a minimum warning that reads "DANGER-AUTHORIZED PERSONNEL ONLY." Prior to the start of Work, the Contractor shall contact the local Fire Marshal and other local authorities for the requirements of barricading any work area. The Contractor shall be responsible for all costs associated with installing and removing the barricades.

C. Utilities

1. The Contractor shall field verify all locations of structures, substructures, and utilities prior to the start of construction in accordance with Section 02016, "Existing Utilities and Underground Structures".
2. The locations of all underground utilities and structures near the suspected USTs must be marked prior to the beginning of Work. Utility and subsurface markings shall be in a manner that will allow equipment operators and other personnel a clear view of the utility locations.
3. The Contractor shall coordinate with the Contracting Officer and utility authorities for the appropriate utility services to be turned off before exploratory excavation is started.
4. The Contractor shall disconnect utilities as necessary to complete the work. The Contractor shall protect all substructures and utilities encountered in the excavation from any distress.
5. The Contractor shall be responsible for any damage to existing utilities caused by Contractor's efforts.
6. The Contractor shall contact the affected utility as soon as the damage is discovered.
7. The utility shall make the determination as to who is to make the necessary repairs.

D. Excavation

1. The Contractor is responsible for sloping and stabilizing all excavations in compliance with local codes and ordinances having jurisdiction, OSHA requirements or standard AGC practice. Shore and brace where sloping is not possible because of space restrictions or stability of material excavated. Maintain sides and slopes of excavations in a safe condition until completion of backfilling.
2. The Contractor is required to obtain all construction-related permits, as necessary.
3. The Contractor shall divert clean surface water runoff away from excavations. Any surface water or groundwater that enters the excavation must be pumped, collected, and disposed of properly by the Contractor.
4. Orange or yellow fluorescent warning tape shall be installed at least 20 feet in all directions from the perimeter of the excavations.
5. Once an excavation has begun, the Contractor shall not permit smoking or any open flames within 50 feet of the excavation.

3.02 EXCAVATION

Excavation is required for abandonment of utilities; removal of underground tanks; removal of pits, vaults, and other subsurface structures; removal of building foundations, basement floors, basement walls, etc., and removal of contaminated soil. No extra compensation shall be allowed for excavation work covered by the bid proposal. In locations where contaminated soil has been removed as directed by the Contracting Officer, 10-mil polyethylene sheeting shall be used to line the hole, and the excavation shall be backfilled with clean fill.

3.03 SHORING AND BRACING

Provide materials for shoring and bracing, such as sheet piling, uprights, stringers and cross-braces, in good serviceable condition. Establish requirements for excavation shoring and bracing to comply with local codes and authorities having jurisdiction. Maintain shoring and bracing in excavations regardless of time period excavations will be open. Carry down shoring and bracing as excavation progresses. Shoring and bracing shall be designed by an engineer specializing in geotechnical engineering and licensed to practice engineering in the state where the project site is located.

3.04 PROTECTION OF EXCAVATIONS

The Contractor shall completely cover the soil and debris within the excavation with polyethylene sheeting at the conclusion of the excavation or at the end of the day, whichever is sooner, to protect from the weather and protect excavations from rainfall and surface water infiltration. Polyethylene is to be anchored or weighted down as necessary to prevent loosening by wind. The Contractor shall be responsible for keeping excavations free of standing water, in general, prevent infiltration of rain or surface water. The Contractor shall maintain the integrity of the polyethylene at all times and is responsible for immediate repair of the polyethylene as necessary.

3.05 MATERIAL STORAGE

A. Stockpile satisfactory excavated materials where directed, until required for backfill or fill. Place, grade, and shape stockpiles for proper drainage. Locate and retain soil materials away from edge of excavations. Dispose of excess soil material and waste materials as herein specified.

B. Contaminated soil that may be removed from excavations or as directed by the Contracting Officer shall be stockpiled in the zone or area specified in Section 02076, "Removal and Disposal of Debris and Contaminated Material". The Contractor shall stockpile contaminated soils, if necessary, in poly-protected stockpiles or bulk containers to prevent exposure to rainfall or surface runoff.

3.06 CLOSING ABANDONED UNDERGROUND UTILITIES

A. Abandon utilities as required by each utility owner or as specified in this Section if the utility owner has no requirements.
   1. Close open ends of abandoned underground utilities, indicated to remain, permanently with closures sufficiently strong to withstand pressures which may result after closing.
   2. Close open ends of metallic conduit and pipe with threaded galvanized metal caps or threaded plastic plugs, or other suitable method for the type of material and size of pipe.

3. Do not use wood plugs.
4. Close open ends of concrete and masonry utilities with not less than 8" thick brick masonry bulkheads, constructed to completely fill the opening.
5. Wet brick before laying. Lay brick in mortar so as to form a full bed with ends and side joints in one operation. Joints shall not be more than three-eighths (3/8) in. wide. Protect fresh masonry from freezing or from rapid drying, as necessary, and maintain protection until mortar has set.
6. For natural gas, sewer, and water utility closures provide a 2-foot thick trench barrier. The barrier shall be constructed from clay material conforming to the "CL" classification under the unified soil classification system. Clay shall be placed in 12" lifts and compacted with a mechanical compactor to achieve a minimum of 90% proctor density. The barrier shall extend to 5 feet past either side of the trench, to the water table or 5 feet below the trench depth, and to within 1 foot of the ground surface.

3.07 COMPACTION

A. General: Control soil compaction during backfilling providing the minimum percentage of density specified.

B. Percentage of Maximum Density Requirements: Compact common borrow or granular borrow to not less than 90% of maximum dry density (determined in accordance with ASTM D1557).

C. Moisture Control: Where a layer of backfill or fill soil material must be moisture conditioned before compaction, uniformly apply water to surface of the layer of soil material, in proper quantities to prevent free water appearing on surface during or subsequent to compaction operations.
1. Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density.
2. Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread and allowed to dry. Assist drying by disking, harrowing or pulverizing until moisture content is reduced to a satisfactory level.

D. Frequency of Compaction Testing: One (1) test every 500 cubic yards.

3.08 BACKFILL AND FILL

A. General: Place acceptable backfill material in layers to required elevations. Completely fill below-grade areas and voids resulting from demolition of structures. In excavations and subsurface holes, use satisfactory granular or common borrow material to a depth of 4 inches below finished grade.

B. Backfill excavations and subsurface holes as promptly as work permits, but not until completion of the following:
1. Acceptance by the Contracting Officer of complete demolition.
2. Inspection and acceptance of abandonment of underground utilities.
3. Removal of shoring and bracing, and backfilling of voids with satisfactory materials.
4. Removal of trash and debris.

C. Concrete and masonry demolition debris material will not be allowed for use as fill material within 2 feet of final grade.

D. Placement and Compaction: Place backfill and fill materials in layers not more than 8" in loose depth for material compacted by heavy compaction equipment, and not more than 4" in loose depth for material compacted by hand-operated tampers.

1. Before compaction, moisten or aerate each layer as necessary to provide the optimum moisture content. Compact each layer to required percentage of maximum dry density for each area classification. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.
2. Place backfill and fill materials evenly adjacent to structures, to required elevations. Take care to prevent wedging action of backfill against structures by carrying the material uniformly around structure to approximately same elevation in each lift.

3.09 GRADING AND COMPACTION

A. General: Uniformly grade areas within limits of grading under this Section, including adjacent transition areas, in accordance with the Contractor's conceptual final grading and drainage plan submitted as part of the Work Plan. Smooth finished surface within specified tolerances, compact with uniform slopes to provide drainage to existing catch basins.

B. Grading: Once all building demolition is completed, grade smooth and even, free of voids, compacted as specified, and to required elevation. Actual grade control and drainage patterns may be adjusted to better suit existing elevations and to reduce the amount of fill required to facilitate drainage for the site. The Contractor shall take survey elevations to confirm or revise the conceptual drainage pattern. The Contractor shall submit revisions to the conceptual drainage plan to the Contracting Officer for approval. During placement, maintain lines and grades including slope for drainage.

C. Compaction: After grading, compact subgrade surfaces to the depth and percentage of maximum density specified.

3.10 FIELD QUALITY CONTROL

A. Quality Control Testing During Construction: Allow testing service to examine and test subgrades and fill layers. Before further construction work is performed, test results meeting the requirements of 3.07B herein, shall be obtained.

1. Perform field density tests in accordance with ASTM D1556 (sand cone method), ASTM D2167 (rubber balloon method), or ASTM D2922 (nuclear method) as applicable.

3.11 MAINTENANCE

A. Protection of Graded Areas: Protect newly graded areas from traffic and erosion. Keep free of trash and debris. Repair and re-establish grades in settled, eroded, and rutted areas to prevent ponding and promote positive drainage.

B. Reconditioning Compacted Areas: Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, re-shape, and compact to required density prior to further construction.

3.12 DISPOSAL OF EXCESS AND WASTE MATERIALS

A. Removal from Owner's Property: Remove waste materials, including excess and unacceptable excavated material, trash and debris, and properly dispose of it off of Owner's property.

--End of Section--

Southern Division
Naval Facilities Engineering Command
Decontamination and Closure

Standard Operating Procedure

PAVEMENT, PORTLAND CEMENT CONCRETE (MINOR)
SECTION 02563

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

AMERICAN CONCRETE INSTITUTE (ACI)

ACI 301	1989 Structural Concrete for Buildings
ACI 305R	1991 Hot Weather Concreting
ACI 306.1	1990 Cold Weather Concreting

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A 184/A 184M	1990 Fabricated Deformed Steel Bar Mats for Concrete Reinforcements
ASTM A 185	1990 (Rev. A) Steel Welded Wire Fabric, Plain, for Concrete Reinforcement
ASTM A 497	1990 (Rev. A) Steel Welded Wire Fabric, Deformed, for Concrete Reinforcement
ASTM A 615	1990 Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
ASTM A 617/A 617M	1990 Axle-Steel Deformed and Plain Bars for Concrete Reinforcement
ASTM C 31	1990 (Rev. A) Making and Curing Concrete Test Specimens in the Field
ASTM C 33	1990 Concrete Aggregates
ASTM C 94	1990 Ready-Mixed Concrete
ASTM C 143	1990 (Rev. A) Slump of Portland Cement Concrete
ASTM C 150	1989 Portland Cement

ASTM C 171	1969 (R 1986) Sheet Materials for Curing Concrete
ASTM C 172	1990 Sampling Freshly Mixed Concrete
ASTM C 231	1991 Air Content of Freshly Mixed Concrete by the Pressure Method
ASTM C 260	1986 Air-Entraining Admixtures for Concrete
ASTM C 309	1989 Liquid Membrane-Forming Compounds for Curing Concrete
ASTM C 494	1990 Chemical Admixtures for Concrete
ASTM C 618	1991 Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete
ASTM C 989	1989 Ground Granulated Blast-Furnace Slag for Use in Concrete and Mortars
ASTM D 98	1987 Calcium Chloride

1.2 SUBMITTALS

Submit the following in accordance with Section 01340, "Shop Drawings, Project Data, and Samples":

1.2.1 SD-02, Manufacturer's Catalog Data

a. Curing materials

b. Admixtures

c. Dowel

d. Reinforcement

Submit a complete list of materials including type, brand, source for cement, fly ash, pozzolan, admixtures, and applicable reference specifications.

1.2.2 SD-05, Design Data

a. Concrete Mix Design

Thirty days minimum prior to concrete placement, submit a mix design for each strength and type of concrete.

1.3 DELIVERY, STORAGE, AND HANDLING

ASTM C 94

PART 2 PRODUCTS

2.1 MATERIALS

2.1.1 Cement

ASTM C 150, Type I or II.

2.1.2 Water

Fresh, clean, and potable.

2.1.3 Aggregates

Free from any substance that may be deleteriously reactive with the alkalies in the cement.

2.1.3.1 Fine Aggregates

ASTM C 33

2.1.3.2 Coarse Aggregates

ASTM C 33, Size No 67

2.1.4 Admixtures

Where not shown or specified, the use of admixtures is subject to written approval of the Contracting Officer.

2.1.4.1 Air-Entraining

ASTM C 260

2.1.4.2 Retarding

ASTM C 494, Type B or D

2.1.4.3 Accelerating

ASTM D 98, Type S, Grade 1

2.1.4.4 Water Reducing

ASTM C 494, Type A, D, E, F, or G

2.1.4.5 Fly Ash and Pozzolan

ASTM C 618, Type N, F, or C, except that the maximum allowable loss on ignition shall be 6 percent for Types C and F.

2.1.4.6 Ground Iron Blast-Furnace Slag

ASTM C 989, Grade 120

2.1.5 Forms

Wood, plywood, steel, or other suitable material.

2.1.6 Reinforcement

2.1.6.1 Reinforcement for Slabs

Welded steel wire fabric shall conform to ASTM A 185 and welded deformed steel wire fabric shall conform to ASTM A 497. Deformed steel bar mats shall conform to ASTM A 184/A 184M. Bar reinforcement shall conform to ASTM A 615 and ASTM A 617/A 617M, Grade 60.

2.1.7 Curing Materials

2.1.7.1 Impervious Sheeting

ASTM C 171 with a minimum sheet thickness of 10 mils

2.1.7.2 Liquid Membrane-Forming Compound

ASTM C 309, white pigmented, Type 2, Class B, free of paraffin or petroleum.

2.1.7.3 Liquid Chemical Sealer-Hardener Compound

Compound shall be magnesium fluosilicate that, when mixed with water, seals and hardens the surface of the concrete. Do not use on exterior slabs exposed to freezing conditions. Compound shall not reduce the adhesion of resilient flooring, tile, paint, roofing, waterproofing, or other material applied to concrete.

2.1.8 Joint Fillers and Sealants

New joints shall match existing alignment.

2.2 CONTRACTOR-FURNISHED MIX DESIGN

At the option of the Contractor, those applicable material sections of the Florida Department of Transportation Standard Specifications for Class A, 3,000 pounds per square inch (psi) strength concrete shall govern in lieu of this specification for concrete. Do not change the selected option during the course of the work.

PART 3 EXECUTION

3.1 FORMS

3.1.1 Construction

Construct forms shall be removable without damaging the concrete.

3.1.2 Coating

Before placing the concrete, coat the contact surfaces of forms, except existing pavement sections where bonding is required, with a non-staining mineral oil, non-staining form coating compound, or two coats of nitro-cellulose lacquer. When using existing pavement as a form, clean existing concrete and then coat with asphalt emulsion bondbreaker before concrete is placed.

3.1.3 Grade and Alignment

Check and correct grade elevations and alignment of the forms immediately before placing the concrete.

3.2 REINFORCEMENT

ACI 301. Provide bars, wire fabric, and other reinforcing materials, including wire ties, supports, and other devices necessary to install and secure the reinforcement.

3.3 MEASURING, MIXING, CONVEYING, AND PLACING CONCRETE

3.3.1 Measuring

ASTM C 94

3.3.2 Mixing

ASTM C 94, except as modified herein. Begin mixing within 30 minutes after the cement has been added to the aggregates. If the air temperature is greater than 85 degrees Fahrenheit (°F), reduce mixing time and place concrete within 60 minutes. Additional water may be added to bring the slump within required limits as specified in Section 11.7 of ASTM C 94, provided that the specified water-cement ratio is not exceeded

3.3.3 Conveying

ASTM C 94

3.3.4 Placing

ACI 301, except as modified herein. Do not exceed a free vertical drop of 3 feet from the point of discharge. When placing reinforced concrete in two courses, place second course within 30 minutes of striking off first course.

3.3.5 Vibration

Immediately after spreading concrete, consolidate the concrete with internal type vibrating equipment along the boundaries of all slabs regardless of slab thickness, and interior of all concrete slabs 6 inches or more in thickness using internal vibrating equipment. For reinforced pavement laid in two courses, vibrate only the top course. Vibrate concrete for full depth adjacent to edge forms and joints. Limit the duration of vibration to that necessary to produce consolidation of the concrete. Excessive vibration will not be permitted. Vibrators shall not be operated in the concrete at one location for more than 15 seconds. At the option of the Contractor, vibrating equipment of a type approved by the Contracting Officer may be used to compact the concrete in unreinforced pavement slabs less than 6 inches thick.

3.3.5.1 Vibrating Equipment

Operate equipment, except hand-manipulated equipment, ahead of the finishing machine. Select the number of vibrating units and power of each unit to properly consolidate the concrete. Mount the units on a frame that is capable of vertical movement and, when necessary, radial movement, so the vibrators may be operated at any desired depth within the slab or be completely withdrawn from the concrete. Clear distance between frame-mounted vibrating units that have spuds that extend into the slab at intervals across the paving lane shall not exceed 30 inches. Distance between the end of the vibrating tube and the side form shall not exceed 2 inches. For pavements less than 10 inches thick, operate the vibrators at mid-depth parallel with or at a slight angle to the subbase. For thicker pavements, angle the vibrators toward the vertical, with the vibrator tip preferably about 2 inches from the subbase, and the top of the vibrator a few inches below the pavement surface. Vibrators may be pneumatic, gas driven, or electric, and shall be operated at frequencies within the concrete of not less than 8,000 vibrations per minute. Amplitude of vibration shall be such that noticeable vibrations occur at 1.5-foot radius when the vibrator is inserted in the concrete to the depth specified.

3.3.6 Cold Weather

Except with authorization, do not place concrete when the ambient temperature is below 40 °F or when the concrete is likely to be subjected to freezing temperatures within 24 hours. When authorized, when concrete is likely to be subjected to freezing within 24 hours after placing, heat concrete materials so that the temperature of the concrete when deposited is between 65 and 80 °F. Methods of heating materials are subject to approval of the Contracting Officer. Do not heat mixing water above 165 °F. Remove lumps of frozen material and ice from the aggregates before placing aggregates in the mixer. When specifically approved by the Contracting Officer, the Contractor may add not more than 2 percent dihydrate calcium chloride by weight of cement. Dissolve the admixture in a portion of the mixing water and add to the mix at the drum in a manner that will ensure uniform distribution of the agent throughout the batch. Follow practices found in ACI 306.1.

3.3.7 Hot Weather

Maintain required concrete temperature in accordance with Figure 2.1.5 in ACI 305R to prevent the evaporation rate from exceeding 0.2 pound of water per square foot of exposed concrete per hour. Cool ingredients before mixing or use other suitable means to control concrete temperature and prevent rapid drying of newly placed concrete. After placement, use fog spray, spread and remove

polyethylene sheeting between finishing operations, apply monomolecular film, or use other suitable means to reduce the evaporation rate. Start curing when the surface of the fresh concrete is sufficiently hard to permit curing without damage. Cool underlying material by sprinkling lightly with water before placing concrete. Follow practices found in ACI 305R.

3.4 FINISHING CONCRETE

Start finishing operations immediately after placement of concrete. Use finishing machine, except hand finishing may be used in emergencies and for concrete slabs in inaccessible locations or of such shapes or sizes that machine finishing is impracticable. Finish pavement surface on both sides of a joint to the same grade. Finish formed joints from a securely supported transverse bridge. Provide hard finishing equipment for use at all times. Transverse and longitudinal surface tolerances shall be 1/4 inch in 10 feet.

3.4.1 Side Form Finishing

Strike off and screed the concrete to the required slope and cross-section by a power-driven transverse finishing machine. Transverse rotating tube or pipe shall not be permitted unless approved by the Contracting Officer. Elevation of the concrete shall be such that, when consolidated and finished, the pavement surface will be adequately consolidated and at the required grade. Equip the finishing machine with two screeds that are readily and accurately adjustable for changes in pavement slope and compensation for wear and other causes. Make as many passes over each area of pavement and at such intervals as necessary to give the proper compaction, retention of the coarse aggregate near the finished surface, and a surface of uniform texture, true to grade and slope. Do not permit excessive operation over an area, which will result in an excess of mortar and water being brought to the surface.

3.4.1.1 Equipment Operation

Maintain the travel of machine on the forms without lifting, wobbling, or other variation of the machine that tend to affect the precision of concrete finish. Keep the tops of the forms clean by a device attached to the machine. During the first pass of the finishing machine, maintain a uniform ridge of concrete ahead of the front screed for its entire length.

3.4.1.2 Joint Finish

Before the concrete is hardened, correct any edge slump of the pavement, exclusive of edge rounding, in excess of 0.02 foot. Finish the concrete surface on each side of the construction joints to the same plane, and correct all deviations before the newly placed concrete has hardened.

3.4.1.3 Hand Finishing

Strike-off and screed the surface of the concrete to elevations slightly above finish grade so that when the concrete is consolidated and finished the surface of the pavement is at the indicated elevation. Vibrate the entire surface until the required compaction and reduction of surface voids is secured with a strike-off template.

3.4.1.4 Longitudinal Floating

After the initial finishing, further smooth and consolidate the concrete by means of hand-operated longitudinal floats. Use floats that are not less than 12 feet long and 6 inches wide and stiffened to prevent flexing and warping.

3.4.2 Surface Finish

Surface finish of new pavement shall match existing.

3.4.2.1 Brooming

Finish the surface of the slab by brooming the surface with a new wire broom at least 18 inches wide. Gently pull the broom over the surface of the pavement from edge to edge just before the concrete becomes non-plastic. Slightly overlap adjacent strokes of the broom. Broom perpendicular to the centerline of the pavement so that the corrugations produced will be uniform in character and width, and not more than 1/16 inch in depth. Broomed surface shall be free from porous spots, irregularities, depressions, and small pockets or rough spots such as may be caused by accidentally disturbing particles of coarse aggregate embedded near the surface.

3.4.3 Edging

At the time the concrete has attained a degree of hardness suitable for edging, carefully finish slab edges, including the edges at formed joints, with an edge having a maximum radius of 1/8 inch. When brooming is specified for the final surface finish, edge transverse joints before starting the brooming, then operate the broom to obliterate as much as possible the mark left by the edging tool without disturbing the rounded corner left by the edger. Clean by removing all loose fragments and soupy mortar from corners or edges of slabs that have crumbled and areas that lack sufficient mortar for proper finishing. Refill the voids solidly with a mixture of suitable proportions and consistency and refinish. Remove unnecessary tool marks and edges. Remaining edges shall be smooth and true to line.

3.4.4 Repair of Surface Defects

ACI 301

3.5 CURING AND PROTECTION

Protect concrete adequately from injurious action by sun, rain, flowing water, mechanical injury, tire marks, and oil stains and do not allow it to dry out from the time it is placed until the expiration of the minimum curing periods specified herein. Use impervious-sheeting curing, or liquid membrane-forming compound, except as specified otherwise herein. Do not use membrane-forming compound on surfaces where its appearance would be objectionable, on any surface to be painted, where coverings are to be bonded to the concrete, or on concrete to which other concrete is to be bonded. Maintain the temperature of the air next to the concrete above 40 °F for the full curing periods.

3.5.1 Impervious-Sheeting Curing

Wet entire exposed surface thoroughly with a fine spray of water and then cover with impervious sheeting. Lay sheets directly on the concrete surface and overlap 12 inches. Make sheeting not less than 18 inches wider than the concrete surface to be cured. and weight down on the edges and over the transverse laps to form closed joints. Repair or replace sheets when torn or otherwise damaged during curing. Leave sheeting on concrete surface to be cured for at least 7 days.

3.5.2 Liquid Membrane-Forming Compound Curing

Seal or cover all joint openings prior to application of the curing compound to prevent the curing compound from entering joint. Compound shall remain on concrete for 7 days before sealer or covering is removed and placing joint sealing material in joints.

3.5.2.1 Application

Apply compound immediately after surface loses its water sheen and has a dull appearance and before joints are sawed. Agitate curing compound thoroughly by mechanical means during use and apply uniformly in a two-coat continuous operation by suitable power-spraying equipment. Total coverage for the two coats shall be at least 1 gallon of undiluted compound per 200 square feet. Compound shall form a uniform. continuous. coherent film that will not check. crack. or peel and shall be free from pinholes or other imperfections. Apply an additional coat of the compound immediately to areas where the film is defective. Respray concrete surfaces that are subject to heavy rainfall within 3 hours after curing compound has been applied in the same manner.

3.5.2.2 Protection of Treated Surfaces

Keep concrete surfaces to which liquid membrane-forming compounds have been applied free from vehicular traffic and other sources of abrasion for not less than 72 hours. Foot traffic is allowed after 24 hours for inspection purposes. Maintain continuity of the coating for the entire curing period and repair damage to the coating immediately.

3.6 FIELD QUALITY CONTROL

3.6.1 Sampling

Collect samples of fresh concrete in accordance with ASTM C 172 during each working day as required to perform all tests specified herein. Make test specimens in accordance with ASTM C 31.

3.6.2 Testing

3.6.2.1 Consistency Tests

Determine slump in accordance with ASTM C 143. Take samples for slump determination from the concrete while it is being placed. Perform tests at the beginning of a concrete placement

operation and at subsequent intervals to ensure that the specification requirements are met. In addition, perform tests each time test beams cylinders are made.

3.6.2.2 Air Content

Test air-entrained concrete for air content at the same frequency as specified for slump tests. Determine percentage of air in accordance with ASTM C 231 on samples taken during placing of the concrete in the forms.

3.6.2.3 Surface Tests

After curing, test pavement surface with a straightedge or a device that will reveal irregularities in the concrete surface. Remove and replace concrete, mechanically grind or profile concrete surface, or correct surface as approved, for any portion of the pavement showing irregularities greater than 1/4 inch in 10 feet in a longitudinal and transverse direction.

3.6.2.4 Test for Pavement Thickness

Measure during concrete placement to determine in-place thickness of concrete pavement.

3.6.3 Reinforcement

Inspect reinforcement prior to installation to assure it is free of loose flaky rust, loose scale, oil, mud, or other objectionable material.

-- End of Section --

PRIORITY 1

T, 5-1
PRIORITY 1 MATRIX
NAS CECIL FIELD
DECONTAMINATION AND CLOSURE
APRIL 1999

	Building No.	Name	No Action Required	Remove POL/Haz Waste	Concrete Cleaning	Decon AST	Decon O/W Separator	Decon/ Close Hydraulic Lifts	Removal/ Recycle Mercury Lamps	Piping Cleanout	Decon UST	Remove PCB Dielectric Fluid	Decon Beryllium Dust	Cost Estimate
1	7	Flammable and Hazardous Materials Storage		x										$3,269
2	9	Main Fire Station		x	x									$6,030
3	11	Steam Generating Plant		x	x		x							$7,130
4	13	Hangar 13		x										$3,269
5	14	Hangar 14	x											$0
6	48	Maintenance Aircraft Spare Storage (check)	x											$0
7	67	Hangar 67		x	x									$6,408
8	72	Flightline Fire Station		x										$3,269
9	80	Automotive Maintenance and Repair Shop		x				x						$36,314
10	81	Maintenance Building		x	x						x			$6,509
11	91	Mess Hall		x			x							$5,385
12	101	Former Pesticide Building							x					$3,264
13	216	Fire Pump/Air Compressor Building		x	x		x							$7,217
14	247	Public Works Maintenance Storage Shed	x											$0
15	279	Wading Pool	x											$0
16	280	Bathhouse		x										$3,269
17	281	Swimming Pool	x											$0
18	282	Pool Pavilion	x											$0
19	293	DT1 High Speed Refueling Office	x											$0
20	329	Parachute Loft	x											$0
21	338	Training Building		x			x			x				$8,405
22	345	Main Pool	x											$0
23	346	Wading Pool	x											$0
24	347	Patio Area	x											$0
25	397	Pesticide Storage Building		x							x			$5,547
26	398	Golf Course Storage Facility	x											$0
27	814	400 Hertz Generator Building for Hangar 815							x					$3,362
28	815	Hangar 815		x										$3,269
29	816	Motor Generator Building for Hangar 815	x											$0
30	817	Motor Generator Building for Hangar 825							x					$3,362
31	825	Hangar 825		x			x					x	x	$36,822
32	832	Flight Simulator Training Building (PCB transformer)		x								x		$12,725
33	835	Line Shack	x											$0
34	836	Line Shack	x											$0
35	843	Building 832 Storage Facility	x											$0
36	863	Hangar 13 Electrical Distribution Building	x											$0
37	882	Chiller Building		x										$3,269
		TOTALS	17	17	5	0	5	1	3	1	2	2	1	$168,094

PROJECT SUMMARY REPORT

BUILDING 7
Building 7
Cecil Field FL
RCL
11/03/98

Category			Amount
PA/SI		$	0
Site Assessment		$	0
Studies			0
Remedial Design			0
RA Capital			392
Site Work			0
Sampling and Analysis			0
RA Professional Labor			0
Subcontractor Overhead & Profit			18
General Conditions			1,666
Studies/Professional Labor Overhead			0
Prime Contractor Home Office			124
Subtotal		$	2,200
Prime Contractor Profit - (Fee)	(8.95%)		197
RA Operations and Maintenance			0
O&M Service Contract Overhead, Tax & Profit			0
Subtotal		$	2,397
Escalation			328
Total Contract Costs		$	2,725
Contingencies	(10.00%)		272
Project Management	(10.00%)		272
Total Project Costs		$	3,269

********** END OF REPORT **********

Date 11/03/98
Time 14:38

ESTIMATE STATUS REPORT

Project:
BUILDING 7
Building 7
Cecil Field FL
RCL
11/03/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 7
Building 7
Single Site
RCL
11/03/98

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 7 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 7 DIRECT COST: $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 7
Cecil Field FL
Building 7
RCL
11/03/98

Project Comments:

Site:
BUILDING 7
Building 7
RCL
11/03/98

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 9
Building 9
Cecil Field FL
RCL
10/29/98

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		1,267
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		77
General Conditions		2,494
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		227
Subtotal	$	4,065
Prime Contractor Profit - (Fee) (8.73%)		355
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	4,420
Escalation		606
Total Contract Costs	$	5,026
Contingencies (10.00%)		502
Project Management (10.00%)		502
Total Project Costs	$	6,030

********** END OF REPORT **********

Date 10/30/98
Time 10:25

ESTIMATE STATUS REPORT

Project:
BUILDING 9
Building 9
Cecil Field FL
RCL
10/29/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,501
Contractor Overhead and Profit	1	Cost	$700

Site:
BUILDING 9
Building 9
Single Site
RCL
10/29/98

RA MODELS:

Landfill Disposal	1	Cost	$800
User Defined Estimate	80	Cost	$500

TOTAL SITE BUILDING 9 DIRECT COST: $4,501

TOTAL PROJECT BUILDING 9 DIRECT COST: $4,501

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 9
Cecil Field FL
Building 9
RCL
10/29/98

Project Comments:

Site:
BUILDING 9
Building 9
RCL
10/29/98

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	Concrete Cleaning			
	5,000.00 SF	211.59	129.00	129.00
	Total Capital Costs	211.59	129.00	129.00
	Total Other	211.59	129.00	129.00
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	5.00 EA	4.06	3.05	0.00
	State HTW Disposal Tax/Fee (Drums)			
	5.00 DRM	0.00	0.00	500.00
	Total Capital Costs	4.06	3.05	791.00
	Total Landfill Disposal	4.06	3.05	791.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	215.65	132.05	920.00

PROJECT SUMMARY REPORT

BUILDING 11
Building 11
Cecil Field FL
RCL
10/28/98

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		11,313
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		477
General Conditions		8,238
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		1,174
Subtotal	$	21,202
Prime Contractor Profit - (Fee) (8.70%)		1,845
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	23,047
Escalation		3,157
Total Contract Costs	$	26,204
Contingencies (10.00%)		2,620
Project Management (10.00%)		2,620
Total Project Costs	$	31,444

********** END OF REPORT **********

Date 10/28/98
Time 10:42

ESTIMATE STATUS REPORT

Project:
BUILDING 11
Building 11
Cecil Field FL
RCL
10/28/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$8,245
Contractor Overhead and Profit	1	Cost	$3,500

Site:
BUILDING 11
Building 11
Single Site
RCL
10/28/98

RA MODELS:

Landfill Disposal	1	Cost	$800
User Defined Estimate	80	Cost	$432
User Defined Estimate	81	Cost	$4,000
UST Closure	1	Cost	$5,516
UST Closure	2	Cost	$615

ESTIMATE STATUS REPORT

Model	Seq #	Status	Direct Cost

TOTAL SITE BUILDING 11 DIRECT COST: $23,108

TOTAL PROJECT BUILDING 11 DIRECT COST: $23,108

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 11
Cecil Field FL
Building 11
RCL
10/28/98

Project Comments:

Site:
BUILDING 11
Building 11
RCL
10/28/98

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	3.00 EA	65.53	0.84	380.71
	Tank Inerting w/Dry Ice			
	45.00 KGAL	674.14	44.66	622.01
	Pump 501-3000 Gal Liquid From Tank			
	2,400.00 GAL	303.00	445.68	0.00
	3" Dia Contractor's Trash Pump, 150 GPM			
	1.00 DAY	8.33	0.11	38.58
	Decontaminate Tank By Steam Cleaning, 50 SF/Hr			
	3,310.00 SF	2,079.25	397.20	0.00
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	3.00 DAY	0.00	0.00	291.00
	Total Sequence 001 Underground Storage Tank Closure			
		3,273.46	910.27	1,332.30
33.10.95	Underground Storage Tank Closure			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	1.00 EA	21.84	0.28	126.90
	Tank Inerting w/Dry Ice			
	0.50 KGAL	7.49	0.50	6.91

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Pump <=220 Gal Liquid From Tank			
	75.00 GAL	28.75	4.81	0.00
	2" Dia Contractor's Trash Pump, 75 GPM			
	1.00 DAY	5.70	0.07	33.09
	Decontaminate Tank By Sandblasting, 40 SF/Hr			
	92.00 SF	61.28	8.03	8.70
	2 CY, Crawler Mounted, Hydraulic Excavator			
	23.00 CY	13.57	24.88	0.00
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	1.00 DAY	0.00	0.00	97.00
	Total Sequence 002 Underground Storage Tank Closure	281.84	60.35	272.60
	Total Capital Costs	3,555.30	970.62	1,604.90
	Total Underground Storage Tank Closure	3,555.30	970.62	1,604.90
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	Concrete Cleaning			
	5,000.00 SF	173.50	129.00	129.00
	Total Sequence 080 Other	173.50	129.00	129.00
33.17.99	Other			
	Steam clean tank			
	15,000.00 GAL	1,318.05	1,318.50	1,318.23
	Total Sequence 081 Other	1,318.05	1,318.50	1,318.23
	Total Capital Costs	1,491.55	1,447.50	1,447.23
	Total Other	1,491.55	1,447.50	1,447.23
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	5.00 EA	4.06	3.05	0.00
	State HTW Disposal Tax/Fee (Drums)			
	5.00 DRM	0.00	0.00	500.00
	Total Capital Costs	4.06	3.05	791.00
	Total Landfill Disposal	4.06	3.05	791.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	5,050.91	2,421.17	3,843.13

DETAIL COST REPORT

Project:
BUILDING 13
Cecil Field FL
Building 13
RCL
11/02/98

Project Comments:

Site:
BUILDING 13
Hangar 13
RCL
11/02/98

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

Date 11/02/98
Time 10:18

ESTIMATE STATUS REPORT

Project:
BUILDING 13
Building 13
Cecil Field FL
RCL
11/02/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 13
Hangar 13
Single Site
RCL
11/02/98

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 13 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 13 DIRECT COST: $2,439

********** END OF REPORT **********

PROJECT SUMMARY REPORT

BUILDING 13
Building 13
Cecil Field FL
RCL
11/02/98

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

PROJECT SUMMARY REPORT

67
Hangar 67
Cecil Field FL
RCL
10/15/98

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		1,476
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		84
General Conditions		2,518
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		241
Subtotal	$	4,319
Prime Contractor Profit - (Fee) (8.75%)		378
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	4,697
Escalation		643
Total Contract Costs	$	5,340
Contingencies (10.00%)		534
Project Management (10.00%)		534
Total Project Costs	$	6,408

********** END OF REPORT **********

Date 10/15/98
Time 12:12

ESTIMATE STATUS REPORT

Project:
67
Hangar 67
Cecil Field FL
RCL
10/15/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,525
Contractor Overhead and Profit	1	Cost	$703

Site:
HANGAR 67
NAS Cecil Field
Single Site
RCL
10/15/98

RA MODELS:

Concrete Cleaning	81	Cost	$518
Confined Space Entry Decon	82	Cost	$1,000

TOTAL SITE HANGAR 67 DIRECT COST: $4,746

TOTAL HANGER 67 DIRECT COST: $4,746

********** END OF REPORT **********

DETAIL COST REPORT

Project:
67
Cecil Field FL
Hangar 67
RCL
10/15/98

Project Comments:

Site:
HANGAR 67
NAS Cecil Field
RCL
10/15/98

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	Concrete Cleaning			
	6,000.00 SF	208.20	154.80	154.80
	Total Sequence 081 Other			
		208.20	154.80	154.80
33.17.99	Other			
	Confined Space Entry Decon			
	6,000.00 SF	363.66	298.20	297.60
	Total Sequence 082 Other			
		363.66	298.20	297.60
	Total Capital Costs	571.86	453.00	452.40
	Total Other			
		571.86	453.00	452.40
	TOTAL DIRECT COSTS REMEDIAL ACTION			
		571.86	453.00	452.40

PROJECT SUMMARY REPORT

BUILDING 72
Building 72
Cecil Field FL
RCL
11/16/98

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

Date 11/16/98
Time 17:12

ESTIMATE STATUS REPORT

Project:
BUILDING 72
Building 72
Cecil Field FL
RCL
11/16/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 72
Building 72
Single Site
RCL
11/16/98

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 72 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 72 DIRECT COST: $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 72
Cecil Field FL
Building 72
RCL
11/16/98

Project Comments:

Site:
BUILDING 72
Building 72
RCL
11/16/98

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 80
Building 80
Cecil Field FL
RCL
10/18/98

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		14,442
Site Work		430
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		641
General Conditions		8,323
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		1,393
Subtotal	$	25,229
Prime Contractor Profit - (Fee)	(8.64%)	2,182
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	27,411
Escalation		2,851
Total Contract Costs	$	30,262
Contingencies	(10.00%)	3,026
Project Management	(10.00%)	3,026
Total Project Costs	$	36,314

********** END OF REPORT **********

Date 10/27/98
Time 16:54

ESTIMATE STATUS REPORT

Project:
BUILDING 80
Building 80
Cecil Field FL
RCL
10/18/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$8,330
Contractor Overhead and Profit	1	Cost	$4,216

Site:
BUILDING 80
NAS Cecil Field
Single Site
RCL
10/18/98

RA MODELS:

Landfill Disposal	1	Cost	$800
UST Closure	1	Cost	$13,645
Load and Haul	1	Cost	$430

TOTAL SITE BUILDING 80 DIRECT COST: $27,421

TOTAL PROJECT BUILDING 80 DIRECT COST: $27,421

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 80
Cecil Field FL
Building 80
RCL
10/18/98

Project Comments:

Site:
BUILDING 80
NAS Cecil Field
RCL
10/18/98

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.03	Site Work			
33.03.87	Load and Haul			
33.03.87.01	Load and Haul - Capital Costs			
	Dump Charge			
	10.00 CY	0.00	0.00	260.00
	910, 1.25 CY, Wheel Loader			
	1.00 HR	16.13	16.24	0.00
	8 CY, Dump Truck			
	3.00 HR	35.03	102.63	0.00
	Total Capital Costs	51.16	118.87	260.00
	Total Load and Haul	51.16	118.87	260.00
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Demolish Reinf Concrete 7" To 24" Thk W/Power Equip			
	11.00 CY	686.79	305.13	0.00
	Drain/Flush Liquids In Pipes, 1 Pipe			
	9.00 EA	196.60	2.53	1,142.12
	Tank Inerting w/Dry Ice			
	4.50 KGAL	67.41	4.47	62.20

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Piping Demolition			
	90.00 LF	277.50	90.50	0.00
	Pump 501-3000 Gal Liquid From Tank			
	675.00 GAL	85.22	125.35	0.00
	3" Dia Contractor's Trash Pump, 150 GPM			
	1.00 DAY	8.33	0.11	38.58
	Decontaminate Tank By Steam Cleaning, 50 SF/Hr			
	828.00 SF	520.13	99.36	0.00
	2 CY, Crawler Mounted, Hydraulic Excavator			
	21.00 CY	12.39	22.72	0.00
	Remove Steel/Fiberglass UST			
	9.00 EA	2,167.18	4,769.01	0.00
	Backfill W/Excavated Material			
	21.00 CY	29.76	14.54	4.07
	Unclass Fill, 6" Lifts, On-Site			
	33.00 CY	35.09	93.44	6.40
	12" Structural Slab On Grade			
	290.00 SF	618.16	89.00	1,032.46
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	9.00 DAY	0.00	0.00	873.01
	Total Capital Costs	4,847.77	5,637.94	3,158.84
	Total Underground Storage Tank Closure	4,847.77	5,637.94	3,158.84
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	5.00 EA	4.06	3.05	0.00
	State HTW Disposal Tax/Fee (Drums)			
	5.00 DRM	0.00	0.00	500.00
	Total Capital Costs	4.06	3.05	791.00
	Total Landfill Disposal	4.06	3.05	791.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	4,902.99	5,759.86	4,209.84

PROJECT SUMMARY REPORT

BUILDING 81
Building 81
Cecil Field FL
RCL
11/11/98

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		662
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		52
General Conditions		2,376
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		183
Subtotal	$	3,273
Prime Contractor Profit - (Fee) (8.79%)		288
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	3,561
Escalation		488
Total Contract Costs	$	4,049
Contingencies (10.00%)		404
Project Management (10.00%)		404
Total Project Costs	$	4,857

********** END OF REPORT **********

Date 11/11/98
Time 15:37

ESTIMATE STATUS REPORT

Project:
BUILDING 81
Building 81
Cecil Field FL
RCL
11/11/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,400
Contractor Overhead and Profit	1	Cost	$523

Site:
BUILDING 81
Building 81
Single Site
RCL
11/11/98

RA MODELS:

Landfill Disposal	1	Cost	$400
User Defined Estimate	80	Cost	$300

TOTAL SITE BUILDING 81 DIRECT COST: $3,623

TOTAL PROJECT BUILDING 81 DIRECT COST: $3,623

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 81
Cecil Field FL
Building 81
RCL
11/11/98

Project Comments:

Site:
BUILDING 81
Building 81
RCL
11/11/98

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	Decontaminate Surface By Steam Cleaning, 137.5 SF/Hr			
	100.00 SF	18.18	4.00	0.00
	55 Gallon Drum of Liquid Soap			
	0.10 EA	0.00	0.00	13.10
	1800 PSI Steam Cleaner Rental			
	0.10 MO	0.00	0.00	95.35
	Operation of Steam Cleaner, Incl.Water,Soap,Elec,Labor			
	4.00 HR	63.64	0.75	75.18
	Total Capital Costs	81.82	4.75	183.63
	Total Other	81.82	4.75	183.63
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	82.63	5.36	574.63

PROJECT SUMMARY REPORT

BUILDING 91

Cecil Field FL
RCL
11/10/98

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		1,021
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		66
General Conditions		2,442
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		209
Subtotal	$	3,738
Prime Contractor Profit - (Fee) (8.77%)		328
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	4,066
Escalation		423
Total Contract Costs	$	4,489
Contingencies (10.00%)		448
Project Management (10.00%)		448
Total Project Costs	$	5,385

********** END OF REPORT **********

Date 11/10/98
Time 13:27

ESTIMATE STATUS REPORT

Project:
BUILDING 91

Cecil Field FL
RCL
11/10/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,449
Contractor Overhead and Profit	1	Cost	$603

Site:
BUILDING 91
Building 91
Single Site
RCL
11/10/98

RA MODELS:

Landfill Disposal	1	Cost	$400
UST Closure	1	Cost	$630

TOTAL SITE BUILDING 91 DIRECT COST: $4,082

TOTAL PROJECT BUILDING 91 DIRECT COST: $4,082

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 91
Cecil Field FL

RCL
11/10/98

Project Comments:

Site:
BUILDING 91
Building 91
RCL
11/10/98

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	1.00 EA	21.84	0.28	126.90
	Pump 501-3000 Gal Liquid From Tank			
	550.00 GAL	69.44	102.14	0.00
	3" Dia Contractor's Trash Pump, 150 GPM			
	1.00 DAY	8.33	0.11	38.58
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	1.00 DAY	0.00	0.00	97.00
	Total Capital Costs	242.82	124.31	262.48
	Total Underground Storage Tank Closure	242.82	124.31	262.48
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	243.63	124.92	653.48

PROJECT SUMMARY REPORT

BUILDING 101
Building 101
Cecil Field FL
RCL
11/10/98

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		438
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		19
General Conditions		1,677
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		128
Subtotal	$	2,262
Prime Contractor Profit - (Fee) (8.93%)		202
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,464
Escalation		256
Total Contract Costs	$	2,720
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,264

********** END OF REPORT **********

Date 11/10/98
Time 16:59

ESTIMATE STATUS REPORT

Project:
BUILDING 101
Building 101
Cecil Field FL
RCL
11/10/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$349

Site:
BUILDING 101
Building 101
Single Site
RCL
11/10/98

RA MODELS:

Landfill Disposal	1	Cost	$439

TOTAL SITE BUILDING 101 DIRECT COST: $2,488

TOTAL PROJECT BUILDING 101 DIRECT COST $2,488

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 101
Cecil Field FL
Building 101
RCL
11/10/98

Project Comments:

Site:
BUILDING 101
Building 101
RCL
11/10/98

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	DOT Steel Drum, 55 Gal			
	1.00 EA	0.00	0.00	41.56
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	Load Bulk Liq/Sludge Waste Into 55 Gal Drums, Drums Sep			
	1.00 EA	4.85	0.05	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	5.66	0.66	432.56
	Total Landfill Disposal	5.66	0.66	432.56
	TOTAL DIRECT COSTS REMEDIAL ACTION	5.66	0.66	432.56

PROJECT SUMMARY REPORT

BUILDING 216
Building 216
Cecil Field FL
RCL
11/13/98

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		1,891
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		101
General Conditions		2,602
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		271
Subtotal	$	4,865
Prime Contractor Profit - (Fee) (8.73%)		425
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	5,290
Escalation		725
Total Contract Costs	$	6,015
Contingencies (10.00%)		601
Project Management (10.00%)		601
Total Project Costs	$	7,217

********** END OF REPORT **********

Date 11/13/98
Time 10:55

ESTIMATE STATUS REPORT

Project:
BUILDING 216
Building 216
Cecil Field FL
RCL
11/13/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,609
Contractor Overhead and Profit	1	Cost	$800

Site:
BUILDING 216
Building 216
Single Site
RCL
11/13/98

RA MODELS:

Landfill Disposal	1	Cost	$400
User Defined Estimate	80	Cost	$630
User Defined Estimate	81	Cost	$900

TOTAL SITE BUILDING 216 DIRECT COST: $5,339

TOTAL PROJECT BUILDING 216 DIRECT COST $5,339

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 216
Cecil Field FL
Building 216
RCL
11/13/98

Project Comments:

Site:
BUILDING 216
Building 216
RCL
11/13/98
Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	3" Dia Contractor's Trash Pump, 150 GPM			
	1.00 DAY	8.33	0.11	38.58
	OVA Rental, Per Day			
	1.00 DAY	0.00	0.00	97.00
	Pump 501-3000 Gal Liquid From Tank			
	550.00 GAL	69.44	102.14	0.00
	Drain/Flush Liquids In Pipes, 1 Pipe			
	1.00 EA	21.84	0.28	126.90
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	Total Sequence 080 Other			
		242.82	124.31	262.48
33.17.99	Other			
	Decontaminate Surface By Steam Cleaning, 137.5 SF/Hr			
	1,000.00 SF	181.80	40.00	0.00
	55 Gallon Drum of Liquid Soap			
	1.00 EA	0.00	0.00	130.95
	1800 PSI Steam Cleaner Rental			
	0.25 MO	0.00	0.00	238.38
	Operation of Steam Cleaner, Incl.Water,Soap,Elec,Labor			
	8.00 HR	127.29	1.51	150.35
	Total Sequence 081 Other			
		309.09	41.51	519.68
	Total Capital Costs	551.91	165.82	782.16
	Total Other	551.91	165.82	782.16
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	552.72	166.43	1,173.16

PROJECT SUMMARY REPORT

BUILDING 280
Building 280
Cecil Field FL
RCL
10/30/98

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee)	(8.95%)	197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies	(10.00%)	272
Project Management	(10.00%)	272
Total Project Costs	$	3,269

********** END OF REPORT **********

Date 10/30/98
Time 14:25

ESTIMATE STATUS REPORT

Project:
BUILDING 280
Building 280
Cecil Field FL
RCL
10/30/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 280
Building 280
Single Site
RCL
10/30/98

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 280 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 280 DIRECT COST $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 280
Cecil Field FL
Building 280
RCL
10/30/98

Project Comments:

Site:
BUILDING 280
Building 280
RCL
10/30/98

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 338
Building 338
Cecil Field FL
RCL
11/06/98

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		2,496
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		125
General Conditions		2,732
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		315
Subtotal	$	5,668
Prime Contractor Profit - (Fee) (8.69%)		493
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	6,161
Escalation		844
Total Contract Costs	$	7,005
Contingencies (10.00%)		700
Project Management (10.00%)		700
Total Project Costs	$	8,405

********** END OF REPORT **********

Date 11/09/98
Time 11:18

ESTIMATE STATUS REPORT

Project:
BUILDING 338
Building 338
Cecil Field FL
RCL
11/06/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,739
Contractor Overhead and Profit	1	Cost	$933

Site:
BUILDING 338
Building 338
Single Site
RCL
11/06/98

RA MODELS:

Landfill Disposal	1	Cost	$500
User Defined Estimate	80	Cost	$1,000
UST Closure	1	Cost	$1,047

TOTAL SITE BUILDING 338 DIRECT COST: $6,219

TOTAL PROJECT BUILDING 338 DIRECT COST $6,219

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 338
Cecil Field FL
Building 338
RCL
11/06/98

Project Comments:

Site:
BUILDING 338
Building 338
RCL
11/06/98

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	2.00 EA	43.69	0.56	253.80
	Pump 501-3000 Gal Liquid From Tank			
	1,100.00 GAL	138.88	204.27	0.00
	3" Dia Contractor's Trash Pump, 150 GPM			
	1.00 DAY	8.33	0.11	38.58
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	2.00 DAY	0.00	0.00	194.00
	Total Capital Costs	334.11	226.72	486.38
	Total Underground Storage Tank Closure	334.11	226.72	486.38
33.17	Decontamination & Decommissioning (D&D)			
33.17.96	Piping Cleanout			
	55 Gallon Drum of Liquid Soap			
	1.00 EA	0.00	0.00	130.95
	1800 PSI Pressure Washer Rental			
	1.00 MO	0.00	0.00	502.46

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.96	Piping Cleanout			
	Operation of Pressure Washer,Incl.Water,Soap,Elec,Labor 8.00 HR	127.29	1.51	60.14
	Piping Cleanout 1,000.00 LF	44.64	44.70	44.62
	Total Capital Costs	171.93	46.21	738.17
	Total Piping Cleanout	171.93	46.21	738.17
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment 1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle 2.00 EA	1.63	1.22	0.00
	State HTW Disposal Tax/Fee (Drums) 2.00 DRM	0.00	0.00	200.00
	Total Capital Costs	1.63	1.22	491.00
	Total Landfill Disposal	1.63	1.22	491.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	507.67	274.15	1,715.55

PROJECT SUMMARY REPORT

BUILDING 397
Building 397
Cecil Field FL
RCL
11/13/98

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		1,021
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		66
General Conditions		2,442
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		209
Subtotal	$	3,738
Prime Contractor Profit - (Fee) (8.77%)		328
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	4,066
Escalation		557
Total Contract Costs	$	4,623
Contingencies (10.00%)		462
Project Management (10.00%)		462
Total Project Costs	$	5,547

********** END OF REPORT **********

Date 11/13/98
Time 16:24

ESTIMATE STATUS REPORT

Project:
BUILDING 397
Building 397
Cecil Field FL
RCL
11/13/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,449
Contractor Overhead and Profit	1	Cost	$603

Site:
BUILDING 397
Building 397
Single Site
RCL
11/13/98

RA MODELS:

Landfill Disposal	1	Cost	$400
User Defined Estimate	80	Cost	$630

TOTAL SITE BUILDING 397 DIRECT COST: $4,082

TOTAL PROJECT BUILDING 397 DIRECT COST $4,082

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 397
Cecil Field FL
Building 397
RCL
11/13/98

Project Comments:

Site:
BUILDING 397
Building 397
RCL
11/13/98

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	3" Dia Contractor's Trash Pump, 150 GPM			
	1.00 DAY	8.33	0.11	38.58
	OVA Rental, Per Day			
	1.00 DAY	0.00	0.00	97.00
	Pump 501-3000 Gal Liquid From Tank			
	550.00 GAL	69.44	102.14	0.00
	Drain/Flush Liquids In Pipes, 1 Pipe			
	1.00 EA	21.84	0.28	126.90
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	Total Capital Costs	242.82	124.31	262.48
	Total Other	242.82	124.31	262.48
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	State HTW Disposal Tax/Fee (Drums) 1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	243.63	124.92	653.48

PROJECT SUMMARY REPORT

BUILDING 814

Cecil Field FL
RCL
11/17/98

Category			Amount
PA/SI		$	0
Site Assessment		$	0
Studies			0
Remedial Design			0
RA Capital			438
Site Work			0
Sampling and Analysis			0
RA Professional Labor			0
Subcontractor Overhead & Profit			19
General Conditions			1,677
Studies/Professional Labor Overhead			0
Prime Contractor Home Office			128
Subtotal		$	2,262
Prime Contractor Profit - (Fee)	(8.93%)		202
RA Operations and Maintenance			0
O&M Service Contract Overhead, Tax & Profit			0
Subtotal		$	2,464
Escalation			338
Total Contract Costs		$	2,802
Contingencies	(10.00%)		280
Project Management	(10.00%)		280
Total Project Costs		$	3,362

********** END OF REPORT **********

Date 11/17/98
Time 12:47

ESTIMATE STATUS REPORT

Project:
BUILDING 814

Cecil Field FL
RCL
11/17/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$349

Site:
BUILDING 814
Building 814
Single Site
RCL
11/17/98

RA MODELS:

Landfill Disposal	1	Cost	$439

TOTAL SITE BUILDING 814 DIRECT COST: $2,488

TOTAL PROJECT BUILDING 814 DIRECT COST $2,488

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 814
Cecil Field FL

RCL
11/17/98

Project Comments:

Site:
BUILDING 814
Building 814
RCL
11/17/98

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	DOT Steel Drum, 55 Gal			
	1.00 EA	0.00	0.00	41.56
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	Load Bulk Liq/Sludge Waste Into 55 Gal Drums, Drums Sep			
	1.00 EA	4.85	0.05	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	5.66	0.66	432.56
	Total Landfill Disposal	5.66	0.66	432.56
	TOTAL DIRECT COSTS REMEDIAL ACTION	5.66	0.66	432.56

PROJECT SUMMARY REPORT

BUILDING 815
Building 815
Cecil Field FL
RCL
11/17/98

Category			Amount
PA/SI		$	0
Site Assessment		$	0
Studies			0
Remedial Design			0
RA Capital			392
Site Work			0
Sampling and Analysis			0
RA Professional Labor			0
Subcontractor Overhead & Profit			18
General Conditions			1,666
Studies/Professional Labor Overhead			0
Prime Contractor Home Office			124
Subtotal		$	2,200
Prime Contractor Profit - (Fee)	(8.95%)		197
RA Operations and Maintenance			0
O&M Service Contract Overhead, Tax & Profit			0
Subtotal		$	2,397
Escalation			328
Total Contract Costs		$	2,725
Contingencies	(10.00%)		272
Project Management	(10.00%)		272
Total Project Costs		$	3,269

********** END OF REPORT **********

Date 11/17/98
Time 11:08

ESTIMATE STATUS REPORT

Project:
BUILDING 815
Building 815
Cecil Field FL
RCL
11/17/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 815
Building 815
Single Site
RCL
11/17/98

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 815 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 815 DIRECT COST $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 815
Cecil Field FL
Building 815
RCL
11/17/98

Project Comments:

Site:
BUILDING 815
Building 815
RCL
11/17/98

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 817
Building 817
Cecil Field FL
RCL
11/18/98

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		438
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		19
General Conditions		1,677
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		128
Subtotal	$	2,262
Prime Contractor Profit - (Fee) (8.93%)		202
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,464
Escalation		338
Total Contract Costs	$	2,802
Contingencies (10.00%)		280
Project Management (10.00%)		280
Total Project Costs	$	3,362

********** END OF REPORT **********

Date 11/18/98
Time 10:43

ESTIMATE STATUS REPORT

Project:
BUILDING 817
Building 817
Cecil Field FL
RCL
11/18/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$349

Site:
BUILDING 817
Building 817
Single Site
RCL
11/18/98

RA MODELS:

Landfill Disposal	1	Cost	$439

TOTAL SITE BUILDING 817 DIRECT COST: $2,488

TOTAL PROJECT BUILDING 817 DIRECT COST $2,488

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 817
Cecil Field FL
Building 817
RCL
11/18/98

Project Comments:

Site:
BUILDING 817
Building 817
RCL
11/18/98

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	DOT Steel Drum, 55 Gal			
	1.00 EA	0.00	0.00	41.56
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	Load Bulk Liq/Sludge Waste Into 55 Gal Drums, Drums Sep			
	1.00 EA	4.85	0.05	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	5.66	0.66	432.56
	Total Landfill Disposal	5.66	0.66	432.56
	TOTAL DIRECT COSTS REMEDIAL ACTION	5.66	0.66	432.56

PROJECT SUMMARY REPORT

BUILDING 825
Building 825
Cecil Field FL
RCL
11/18/98

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		14,122
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		588
General Conditions		8,750
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		1,373
Subtotal	$	24,833
Prime Contractor Profit - (Fee) (8.68%)		2,156
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	26,989
Escalation		3,697
Total Contract Costs	$	30,686
Contingencies (10.00%)		3,068
Project Management (10.00%)		3,068
Total Project Costs	$	36,822

********** END OF REPORT **********

Date 11/18/98
Time 10:09

ESTIMATE STATUS REPORT

Project:
BUILDING 825
Building 825
Cecil Field FL
RCL
11/18/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$8,800
Contractor Overhead and Profit	1	Cost	$4,117

Site:
BUILDING 825
Building 825
Single Site
RCL
11/18/98

RA MODELS:

Commercial Disposal (Incineration)	1	Cost	$3,100
Landfill Disposal	1	Cost	$500
User Defined Estimate	80	Cost	$9,925
UST Closure	1	Cost	$645

TOTAL SITE BUILDING 825 DIRECT COST: $27,087

TOTAL PROJECT BUILDING 825 DIRECT COST $27,087

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 825
Cecil Field FL
Building 825
RCL
11/18/98

Project Comments:

Site:
BUILDING 825
Building 825
RCL
11/18/98

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	1.00 EA	21.84	0.28	126.90
	Tank Inerting w/Dry Ice			
	0.50 KGAL	7.49	0.50	6.91
	Pump 501-3000 Gal Liquid From Tank			
	550.00 GAL	69.44	102.14	0.00
	3" Dia Contractor's Trash Pump, 150 GPM			
	1.00 DAY	8.33	0.11	38.58
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	1.00 DAY	0.00	0.00	97.00
	Total Capital Costs	250.31	124.81	269.39
	Total Underground Storage Tank Closure	250.31	124.81	269.39
33.17	Decontamination & Decommissioning (D&D)			
33.17.02	Facility Shutdown Activities			
	Van or Pickup Rental			
	5.00 DAY	0.00	0.00	145.50

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.02	Facility Shutdown Activities			
	Per Diem			
	15.00 DAY	0.00	0.00	1,091.25
	Personal Low Flow Sampling Pump, Monthly Rental			
	1.00 MO	0.00	0.00	179.45
	Portable Ambient Air Analyzer, Monthly Rental			
	0.50 MO	0.00	0.00	894.83
	Decon Medium Equipment			
	2.00 EA	330.27	49.00	0.00
	Decontaminate Surface By Pressure Washing, 105 SF/Hr			
	1,000.00 SF	568.13	316.67	0.00
	1800 PSI Pressure Washer Rental			
	1.00 MO	0.00	0.00	502.46
	Operation of Pressure Washer,Incl.Water,Soap,Elec,Labor			
	24.00 HR	795.55	7.54	180.42
	Landfill Hazardous Solid Waste, > 55 Gal Drum			
	4.00 EA	0.00	0.00	655.72
	Safety Engineer - Average Cost			
	2.00 MWK	4,208.33	0.00	0.00
	Total Capital Costs	5,902.28	373.21	3,649.63
	Total Facility Shutdown Activities	5,902.28	373.21	3,649.63
33.19	Disposal (Commercial)			
33.19.95	Commercial Disposal (Incineration)			
33.19.95.01	Commercial Disp(Incineration)-Captl Cost			
	DOT Steel Drum, 55 Gal			
	2.00 EA	0.00	0.00	83.13
	Transp 55 Gal Drums Of Haz Waste, Max 80 (Per Mile)			
	1.00 MI	0.00	0.00	2.72
	PCB Hazardous Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	2,134.00
	Load Drums On Disposal Vehicle			
	2.00 EA	1.63	1.22	0.00
	Load Bulk Liq/Sludge Waste Into 55 Gal Drums, Drums Sep			
	2.00 EA	9.71	0.10	0.00
	Drummed PCB Liquids > 100,000 PPM Incin, 55 Gal			
	2.00 EA	0.00	0.00	727.50
	State HTW Disposal Tax/Fee (Drums)			
	2.00 DRM	0.00	0.00	100.00

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.95	Commercial Disposal (Incineration)			
33.19.95.01	Commercial Disp(Incineration)-Captl Cost			
	Total Capital Costs	11.34	1.32	3,047.35
	Total Commercial Disposal (Incineration)	11.34	1.32	3,047.35
33.19.96	Landfill Disposal			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	2.00 EA	1.63	1.22	0.00
	State HTW Disposal Tax/Fee (Drums)			
	2.00 DRM	0.00	0.00	200.00
	Total Capital Costs	1.63	1.22	491.00
	Total Landfill Disposal	1.63	1.22	491.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	6,165.56	500.56	7,457.37

PROJECT SUMMARY REPORT

BUILDING 832
Building 832
Cecil Field FL
RCL
11/10/98

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		4,679
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		214
General Conditions		3,216
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		475
Subtotal	$	8,584
Prime Contractor Profit - (Fee) (8.65%)		743
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	9,327
Escalation		1,278
Total Contract Costs	$	10,605
Contingencies (10.00%)		1,060
Project Management (10.00%)		1,060
Total Project Costs	$	12,725

********** END OF REPORT **********

Date 11/10/98
Time 9:51

ESTIMATE STATUS REPORT

Project:
BUILDING 832
Building 832
Cecil Field FL
RCL
11/10/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$3,223
Contractor Overhead and Profit	1	Cost	$1,432

Site:
BUILDING 832
Building 832
Single Site
RCL
11/10/98

RA MODELS:

Commercial Disposal (Incineration)	1	Cost	$4,000
Landfill Disposal	1	Cost	$700

TOTAL SITE BUILDING 832 DIRECT COST: $9,355

TOTAL PROJECT BUILDING 832 DIRECT COST $9,355

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 832
Cecil Field FL
Building 832
RCL
11/10/98

Project Comments:

Site:
BUILDING 832
Building 832
RCL
11/10/98

Site Comments:

			Labor	Equip	Material
33	REMEDIAL ACTION				
33.19	Disposal (Commercial)				
33.19.95	Commercial Disposal (Incineration)				
33.19.95.01	Commercial Disp(Incineration)-Captl Cost				
	DOT Steel Drum, 55 Gal				
	4.00	EA	0.00	0.00	166.26
	Transp 55 Gal Drums Of Haz Waste, Max 80 (Per Mile)				
	1.00	MI	0.00	0.00	2.72
	PCB Hazardous Waste, Minimum Charge For Shipment				
	1.00	EA	0.00	0.00	2,134.00
	Load Drums On Disposal Vehicle				
	4.00	EA	3.25	2.44	0.00
	Load Bulk Liq/Sludge Waste Into 55 Gal Drums, Drums Sep				
	4.00	EA	19.41	0.20	0.00
	Drummed PCB Liquids > 100,000 PPM Incin, 55 Gal				
	4.00	EA	0.00	0.00	1,455.00
	State HTW Disposal Tax/Fee (Drums)				
	4.00	DRM	0.00	0.00	200.00
	Total Capital Costs		22.66	2.64	3,957.98
	Total Commercial Disposal (Incineration)				
			22.66	2.64	3,957.98
33.19.96	Landfill Disposal				
	Drummed Waste, Minimum Charge For Shipment				
	1.00	EA	0.00	0.00	291.00

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Load Drums On Disposal Vehicle 4.00 EA	3.25	2.44	0.00
	State HTW Disposal Tax/Fee (Drums) 4.00 DRM	0.00	0.00	400.00
	Total Capital Costs	3.25	2.44	691.00
	Total Landfill Disposal	3.25	2.44	691.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	25.91	5.08	4,648.98

PROJECT SUMMARY REPORT

BUILDING 882
Building 882
Cecil Field FL

11/03/98

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee)	(8.95%)	197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies	(10.00%)	272
Project Management	(10.00%)	272
Total Project Costs	$	3,269

********** END OF REPORT **********

Date 11/03/98
Time 16:44

ESTIMATE STATUS REPORT

Project:
BUILDING 882
Building 882
Cecil Field FL

11/03/98

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 882
Building 882
Single Site
RCL
11/03/98

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 882 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 882 DIRECT COST $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 882
Cecil Field FL
Building 882

11/03/98

Project Comments:

Site:
BUILDING 882
Building 882
RCL
11/03/98

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PRIORITY 2

PRIORI. MATRIX
NAS CECIL FIELD
DECONTAMINATION AND CLOSURE
APRIL 1999

	Building No.	Name	No Action Required	Remove POL/Haz Waste	Concrete Cleaning	Decon AST	Decon O/W Separator	Decon/ Close Hydraulic Lifts	Removal/ Recycle Mercury Lamps	Piping Cleanout	Decon UST	Remove PCB Dielectric Fluid	Decon Beryllium Dust	Cost Estimate
1	16	Water Treatment Plant Number 1		x										$3,269
2	49	Transportation and Fuel Management Office	x											$0
5	71	Former Fuel Truck Unloading		x										$3,269
3	75	Aircraft Truck Fueling		x						x				$6,387
4	76	North Fuel Farm Tanks								x	x			$357,567
6	178	Refuel Vehicle Maintenance Shelter		x	x		x							$9,245
7	180	Old and New Filling Stations			x		x							$5,637
8	238	Golf Course Maintenance		x										$3,472
9	285	North Fuel Farm Office Building	x											$0
10	312	Corrosion Control Hangar		x	x		x	x						$15,066
11	313	Jet Engine Maintenance Building		x	x	x								$13,681
12	323	Battery Locker		x			x							$5,428
13	330	Liquid Oxygen Farm		x										$3,269
14	334	Jet Engine Test Cell			x		x							$5,671
15	339	Jet Engine Test Cell		x	x		x				x			$31,232
16	361	Water Treatment Plant Number 2		x										$3,269
17	370	Maintenance Shop		x										$3,269
18	371	Storage Shed		x										$3,269
19	384	Automotive Shop Building	x											$0
20	808	Dispensary/Dental Clinic		x					x					$4,064
21	809	Public Toilet	x											$0
22	810	Water Treatment Facilities Building	x											$0
23	824	Avionics and Aircraft Ground Support Shop		x	x									$5,426
24	860	Maintenance Hangar		x			x							$5,547
25	869	Hazardous and Flammable Storage Building	x											$0
26	870	Hazardous Flammable Storehouse		x										$3,472
27	928	Automotive Vehicle Shop		x										$3,269
28	1820	Aircraft Hangar		x	x									$5,070
29	1824	Radiographics Shop		x										$3,269
30	1848	Ground Support Issue and Receipt		x										$3,269
31	1850	Avionics Repair Shop		x										$3,472
32	HSR	High Speed Refuelers					x			x				$7,137
33	ST	Septic Tanks									x			$8,649
		TOTALS	6	22	8	1	7	1	1	2	2	0	0	$525,644

PROJECT SUMMARY REPORT

BUILDING 16
Building 16
Cecil Field FL
RCL
02/11/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

Date 02/11/99
Time 10:30

ESTIMATE STATUS REPORT

Project:
BUILDING 16
Building 16
Cecil Field FL
RCL
02/11/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 16
Building 16
Single Site
RCL
02/11/99

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 16 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 16 DIRECT COST: $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 16
Cecil Field FL
Building 16
RCL
02/11/99

Project Comments:

Site:
BUILDING 16
Building 16
RCL
02/11/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 71
Building 71
Cecil Field FL
RCL
02/10/99

Category			Amount
PA/SI		$	0
Site Assessment		$	0
Studies			0
Remedial Design			0
RA Capital			392
Site Work			0
Sampling and Analysis			0
RA Professional Labor			0
Subcontractor Overhead & Profit			18
General Conditions			1,666
Studies/Professional Labor Overhead			0
Prime Contractor Home Office			124
Subtotal		$	2,200
Prime Contractor Profit - (Fee)	(8.95%)		197
RA Operations and Maintenance			0
O&M Service Contract Overhead, Tax & Profit			0
Subtotal		$	2,397
Escalation			328
Total Contract Costs		$	2,725
Contingencies	(10.00%)		272
Project Management	(10.00%)		272
Total Project Costs		$	3,269

********** END OF REPORT **********

Date 02/10/99
Time 11:55

ESTIMATE STATUS REPORT

Project:
BUILDING 71
Building 71
Cecil Field FL
RCL
02/10/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 71
Building 71
Single Site
RCL
02/10/99

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 71 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 71 DIRECT COST: $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 71
Cecil Field FL
Building 71
RCL
02/10/99

Project Comments:

Site:
BUILDING 71
Building 71
RCL
02/10/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 75
Building 75
Cecil Field FL
RCL
02/10/99

Category			Amount
PA/SI		$	0
Site Assessment		$	0
Studies			0
Remedial Design			0
RA Capital			1,448
Site Work			0
Sampling and Analysis			0
RA Professional Labor			0
Subcontractor Overhead & Profit			84
General Conditions			2,534
Studies/Professional Labor Overhead			0
Prime Contractor Home Office			240
Subtotal		$	4,306
Prime Contractor Profit - (Fee)	(8.73%)		376
RA Operations and Maintenance			0
O&M Service Contract Overhead, Tax & Profit			0
Subtotal		$	4,682
Escalation			641
Total Contract Costs		$	5,323
Contingencies	(10.00%)		532
Project Management	(10.00%)		532
Total Project Costs		$	6,387

********** END OF REPORT **********

Date 02/10/99
Time 13:44

ESTIMATE STATUS REPORT

Project:
BUILDING 75
Building 75
Cecil Field FL
RCL
02/10/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,541
Contractor Overhead and Profit	1	Cost	$700

Site:
BUILDING 75
Building 75
Single Site
RCL
02/10/99

RA MODELS:

Landfill Disposal	1	Cost	$500
User Defined Estimate	80	Cost	$1,000

TOTAL SITE BUILDING 75 DIRECT COST: $4,741

TOTAL PROJECT BUILDING 75 DIRECT COST: $4,741

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 75
Cecil Field FL
Building 75
RCL
02/10/99

Project Comments:

Site:
BUILDING 75
Building 75
RCL
02/10/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	55 Gallon Drum of Liquid Soap			
	1.00 EA	0.00	0.00	130.95
	1800 PSI Pressure Washer Rental			
	1.00 MO	0.00	0.00	502.46
	Operation of Pressure Washer,Incl.Water,Soap,Elec,Labor			
	8.00 HR	127.29	1.51	60.14
	Piping Cleanout			
	1,000.00 LF	44.64	44.70	44.62
	Total Capital Costs	171.93	46.21	738.17
	Total Other	171.93	46.21	738.17
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	DOT Steel Salvage Drum, 85 Gal, 16 Gauge			
	1.00 EA	0.00	0.00	68.19
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Recontainerize Drums, Not Incl Salvage Drums			
	1.00 EA	13.38	18.71	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	14.19	19.32	459.19
	Total Landfill Disposal	14.19	19.32	459.19
	TOTAL DIRECT COSTS REMEDIAL ACTION	186.12	65.53	1,197.36

PROJECT SUMMARY REPORT

TANKS 76
Tanks 76
Cecil Field FL
RCL
02/18/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		139,540
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		5,862
General Conditions		84,003
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		11,178
Subtotal	$	240,583
Prime Contractor Profit - (Fee) (8.64%)		20,797
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	261,380
Escalation		36,593
Total Contract Costs	$	297,973
Contingencies (10.00%)		29,797
Project Management (10.00%)		29,797
Total Project Costs	$	357,567

********** END OF REPORT **********

Date 02/19/99
Time 10:30

ESTIMATE STATUS REPORT

Project:
TANKS 76
Tanks 76
Cecil Field FL
RCL
02/18/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$84,015
Contractor Overhead and Profit	1	Cost	$37,837

Site:
TANKS 76
Tanks 76
Single Site
RCL
02/18/99

RA MODELS:

UST Closure	1	Cost	$139,540

TOTAL SITE TANKS 76 DIRECT COST: $261,392

TOTAL PROJECT TANKS 76 DIRECT COST: $261,392

********** END OF REPORT **********

DETAIL COST REPORT

Project:
TANKS 76
Cecil Field FL
Tanks 76
RCL
02/18/99

Project Comments:

Site:
TANKS 76
Tanks 76
RCL
02/18/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	12.00 EA	262.14	3.37	1,522.82
	Tank Inerting w/Dry Ice			
	1,800.00 KGAL	26,965.60	1,786.50	24,880.50
	Pump >3000 Gal Liquid From Tank			
	90,600.00 GAL	4,128.93	10,926.36	0.00
	4" Dia Contractor's Trash Pump, 300 GPM			
	1.00 DAY	10.82	0.14	47.77
	Decontaminate Tank By Steam Cleaning, 50 SF/Hr			
	82,935.00 SF	52,097.34	9,952.20	0.00
	4 CY, Crawler Mounted, Hydraulic Excavator			
	5,446.00 CY	1,719.23	3,907.51	0.00
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	12.00 DAY	0.00	0.00	1,164.01
	Total Capital Costs	85,327.27	26,597.86	27,615.10
	Total Underground Storage Tank Closure	85,327.27	26,597.86	27,615.10
	TOTAL DIRECT COSTS REMEDIAL ACTION	85,327.27	26,597.86	27,615.10

PROJECT SUMMARY REPORT

BUILDING 178
Building 178
Cecil Field FL
RCL
01/11/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		2,925
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		142
General Conditions		2,822
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		346
Subtotal	$	6,235
Prime Contractor Profit - (Fee) (8.69%)		542
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	6,777
Escalation		928
Total Contract Costs	$	7,705
Contingencies (10.00%)		770
Project Management (10.00%)		770
Total Project Costs	$	9,245

********** END OF REPORT **********

Date 01/11/99
Time 17:55

ESTIMATE STATUS REPORT

Project:
BUILDING 178
Building 178
Cecil Field FL
RCL
01/11/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,829
Contractor Overhead and Profit	1	Cost	$1,030

Site:
BUILDING 178
Building 178
Single Site
RCL
01/11/99

RA MODELS:

Landfill Disposal	1	Cost	$1,812
User Defined Estimate	80	Cost	$500
UST Closure	1	Cost	$645

TOTAL SITE BUILDING 178 DIRECT COST: $6,816

TOTAL PROJECT BUILDING 178 DIRECT COST $6,816

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 178
Cecil Field FL
Building 178
RCL
01/11/99

Project Comments:

Site:
BUILDING 178
Building 178
RCL
01/11/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	1.00 EA	21.84	0.28	126.90
	Tank Inerting w/Dry Ice			
	0.50 KGAL	7.49	0.50	6.91
	Pump 501-3000 Gal Liquid From Tank			
	550.00 GAL	69.44	102.14	0.00
	3" Dia Contractor's Trash Pump, 150 GPM			
	1.00 DAY	8.33	0.11	38.58
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	1.00 DAY	0.00	0.00	97.00
	Total Capital Costs	250.31	124.81	269.39
	Total Underground Storage Tank Closure	250.31	124.81	269.39
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	Concrete Cleaning			
	5,000.00 SF	211.59	129.00	129.00

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	Total Capital Costs	211.59	129.00	129.00
	Total Other	211.59	129.00	129.00
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment 1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle 15.00 EA	12.19	9.15	0.00
	State HTW Disposal Tax/Fee (Drums) 15.00 DRM	0.00	0.00	1,500.00
	Total Capital Costs	12.19	9.15	1,791.00
	Total Landfill Disposal	12.19	9.15	1,791.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	474.09	262.96	2,189.39

PROJECT SUMMARY REPORT

BUILDING 180
Building 180
Cecil Field FL
RCL
01/14/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		1,077
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		69
General Conditions		2,442
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		212
Subtotal	$	3,800
Prime Contractor Profit - (Fee) (8.76%)		333
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	4,133
Escalation		566
Total Contract Costs	$	4,699
Contingencies (10.00%)		469
Project Management (10.00%)		469
Total Project Costs	$	5,637

********** END OF REPORT **********

Date 01/14/99
Time 15:28

ESTIMATE STATUS REPORT

Project:
BUILDING 180
Building 180
Cecil Field FL
RCL
01/14/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,449
Contractor Overhead and Profit	1	Cost	$614

Site:
BUILDING 180
Building 180
Single Site
RCL
01/14/99

RA MODELS:

User Defined Estimate	80	Cost	$300
UST Closure	1	Cost	$800

TOTAL SITE BUILDING 180 DIRECT COST: $4,163

TOTAL PROJECT BUILDING 180 DIRECT COST $4,163

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 180
Cecil Field FL
Building 180
RCL
01/14/99

Project Comments:

Site:
BUILDING 180
Building 180
RCL
01/14/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	1.00 EA	21.84	0.28	126.90
	Tank Inerting w/Dry Ice			
	0.50 KGAL	7.49	0.50	6.91
	Pump 501-3000 Gal Liquid From Tank			
	550.00 GAL	69.44	102.14	0.00
	3" Dia Contractor's Trash Pump, 150 GPM			
	1.00 DAY	8.33	0.11	38.58
	Fill Tank/Vault With Sand			
	500.00 GAL	24.63	35.00	12.13
	Decontaminate Tank By Steam Cleaning, 50 SF/Hr			
	92.00 SF	57.79	11.04	0.00
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	1.00 DAY	0.00	0.00	97.00
	Total Capital Costs	332.73	170.85	281.52
	Total Underground Storage Tank Closure	332.73	170.85	281.52
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	Decontaminate Surface By Steam Cleaning, 137.5 SF/Hr			
	200.00 SF	36.36	8.00	0.00
	55 Gallon Drum of Liquid Soap			
	0.10 EA	0.00	0.00	13.10
	1800 PSI Steam Cleaner Rental			
	0.10 MO	0.00	0.00	95.35
	Operation of Steam Cleaner, Incl.Water,Soap,Elec,Labor			
	4.00 HR	63.64	0.75	75.18
	Total Capital Costs	100.00	8.75	183.63
	Total Other	100.00	8.75	183.63
	TOTAL DIRECT COSTS REMEDIAL ACTION	432.73	179.60	465.15

PROJECT SUMMARY REPORT

BUILDING 238
Building 238
Cecil Field FL
RCL
02/11/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		493
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		22
General Conditions		1,689
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		132
Subtotal	$	2,336
Prime Contractor Profit - (Fee) (8.94%)		209
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,545
Escalation		349
Total Contract Costs	$	2,894
Contingencies (10.00%)		289
Project Management (10.00%)		289
Total Project Costs	$	3,472

********** END OF REPORT **********

Date 02/11/99
Time 10:02

ESTIMATE STATUS REPORT

Project:
BUILDING 238
Building 238
Cecil Field FL
RCL
02/11/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$400

Site:
BUILDING 238
Building 238
Single Site
RCL
02/11/99

RA MODELS:

Landfill Disposal	1	Cost	$500

TOTAL SITE BUILDING 238 DIRECT COST: $2,600

TOTAL PROJECT BUILDING 238 DIRECT COST $2,600

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 238
Cecil Field FL
Building 238
RCL
02/11/99

Project Comments:

Site:
BUILDING 238
Building 238
RCL
02/11/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	2.00 EA	1.63	1.22	0.00
	State HTW Disposal Tax/Fee (Drums)			
	2.00 DRM	0.00	0.00	200.00
	Total Capital Costs	1.63	1.22	491.00
	Total Landfill Disposal	1.63	1.22	491.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	1.63	1.22	491.00

PROJECT SUMMARY REPORT

BUILDING 312
Building 312
Cecil Field FL
RCL
02/16/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		4,409
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		201
General Conditions		4,981
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		564
Subtotal	$	10,155
Prime Contractor Profit - (Fee) (8.74%)		888
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	11,043
Escalation		1,513
Total Contract Costs	$	12,556
Contingencies (10.00%)		1,255
Project Management (10.00%)		1,255
Total Project Costs	$	15,066

********** END OF REPORT **********

Date 02/16/99
Time 15:50

ESTIMATE STATUS REPORT

Project:
BUILDING 312
Building 312
Cecil Field FL
RCL
02/16/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$5,000
Contractor Overhead and Profit	1	Cost	$1,700

Site:
BUILDING 312
Building 312
Single Site
RCL
02/16/99

RA MODELS:

Landfill Disposal	1	Cost	$400
User Defined Estimate	80	Cost	$315
UST Closure	1	Cost	$800
UST Closure	2	Cost	$3,000

TOTAL SITE BUILDING 312 DIRECT COST: $11,215

TOTAL PROJECT BUILDING 312 DIRECT COST $11,215

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 312
Cecil Field FL
Building 312
RCL
02/16/99

Project Comments:

Site:
BUILDING 312
Building 312
RCL
02/16/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	1.00 EA	21.84	0.28	126.90
	Pump 501-3000 Gal Liquid From Tank			
	950.00 GAL	119.94	176.42	0.00
	3" Dia Contractor's Trash Pump, 150 GPM			
	1.00 DAY	8.33	0.11	38.58
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	1.00 DAY	0.00	0.00	97.00
	Total Sequence 001 Underground Storage Tank Closure	293.32	198.59	262.48
33.10.95	Underground Storage Tank Closure			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	1.00 EA	21.84	0.28	126.90
	Tank Inerting w/Dry Ice			
	0.50 KGAL	7.49	0.50	6.91
	Piping Demolition			
	200.00 LF	616.67	201.10	0.00
	Pump <=220 Gal Liquid From Tank			
	75.00 GAL	28.75	4.81	0.00

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	2" Dia Contractor's Trash Pump, 75 GPM			
	1.00 DAY	5.70	0.07	33.09
	Decontaminate Tank By Steam Cleaning, 50 SF/Hr			
	92.00 SF	57.79	11.04	0.00
	2 CY, Crawler Mounted, Hydraulic Excavator			
	24.00 CY	14.16	25.96	0.00
	Remove Steel/Fiberglass UST			
	1.00 EA	240.80	529.89	0.00
	Backfill W/Excavated Material			
	24.00 CY	34.01	16.62	4.66
	Unclass Fill, 6" Lifts, Off-Site			
	10.00 CY	5.76	14.58	38.41
	6" Mesh Reinforced Slab On Grade			
	222.00 SF	277.57	31.26	331.24
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	1.00 DAY	0.00	0.00	97.00
	Total Sequence 002 Underground Storage Tank Closure	1,453.75	857.89	638.21
	Total Capital Costs	1,747.07	1,056.48	900.69
	Total Underground Storage Tank Closure	1,747.07	1,056.48	900.69
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	Decontaminate Surface By Steam Cleaning, 137.5 SF/Hr			
	300.00 SF	54.54	12.00	0.00
	55 Gallon Drum of Liquid Soap			
	0.10 EA	0.00	0.00	13.10
	1800 PSI Steam Cleaner Rental			
	0.10 MO	0.00	0.00	95.35
	Operation of Steam Cleaner, Incl.Water,Soap,Elec,Labor			
	4.00 HR	63.64	0.75	75.18
	Total Capital Costs	118.18	12.75	183.63
	Total Other	118.18	12.75	183.63
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			

Date 02/16/99

Time 15:51

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	1,866.06	1,069.84	1,475.32

Date 02/17/99
Time 16:49

PROJECT SUMMARY REPORT

BUILDING 313
Building 313
Cecil Field FL
RCL
02/17/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		3,659
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		172
General Conditions		4,876
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		513
Subtotal	$	9,220
Prime Contractor Profit - (Fee) (8.75%)		807
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	10,027
Escalation		1,374
Total Contract Costs	$	11,401
Contingencies (10.00%)		1,140
Project Management (10.00%)		1,140
Total Project Costs	$	13,681

********** END OF REPORT **********

Date 02/17/99
Time 16:49

ESTIMATE STATUS REPORT

Project:
BUILDING 313
Building 313
Cecil Field FL
RCL
02/17/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$4,900
Contractor Overhead and Profit	1	Cost	$1,500

Site:
BUILDING 313
Building 313
Single Site
RCL
02/17/99

RA MODELS:

Landfill Disposal	1	Cost	$400
User Defined Estimate	80	Cost	$500
UST Closure	1	Cost	$2,800

TOTAL SITE BUILDING 313 DIRECT COST: $10,100

TOTAL PROJECT BUILDING 313 DIRECT COST $10,100

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 313
Cecil Field FL
Building 313
RCL
02/17/99

Project Comments:

Site:
BUILDING 313
Building 313
RCL
02/17/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	7.00 EA	152.91	1.97	888.31
	Pump 501-3000 Gal Liquid From Tank			
	1,225.00 GAL	154.66	227.48	0.00
	3" Dia Contractor's Trash Pump, 150 GPM			
	1.00 DAY	8.33	0.11	38.58
	Decontaminate Tank By Steam Cleaning, 50 SF/Hr			
	644.00 SF	404.54	77.28	0.00
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	7.00 DAY	0.00	0.00	679.00
	Total Capital Costs	863.65	328.62	1,605.89
	Total Underground Storage Tank Closure	863.65	328.62	1,605.89
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	Decontaminate Surface By Steam Cleaning, 137.5 SF/Hr			
	1,000.00 SF	181.80	40.00	0.00

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	55 Gallon Drum of Liquid Soap			
	0.10 EA	0.00	0.00	13.10
	1800 PSI Steam Cleaner Rental			
	0.10 MO	0.00	0.00	95.35
	Operation of Steam Cleaner, Incl.Water,Soap,Elec,Labor			
	4.00 HR	63.64	0.75	75.18
	Total Capital Costs	245.44	40.75	183.63
	Total Other	245.44	40.75	183.63
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	1,109.90	369.98	2,180.52

PROJECT SUMMARY REPORT

BUILDING 323
Building 323
Cecil Field FL
RCL
02/11/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		961
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		64
General Conditions		2,429
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		204
Subtotal	$	3,658
Prime Contractor Profit - (Fee) (8.77%)		321
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	3,979
Escalation		545
Total Contract Costs	$	4,524
Contingencies (10.00%)		452
Project Management (10.00%)		452
Total Project Costs	$	5,428

********** END OF REPORT **********

Date 02/11/99
Time 17:07

ESTIMATE STATUS REPORT

Project:
BUILDING 323
Building 323
Cecil Field FL
RCL
02/11/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,436
Contractor Overhead and Profit	1	Cost	$600

Site:
BUILDING 323
Building 323
Single Site
RCL
02/11/99

RA MODELS:

Landfill Disposal	1	Cost	$400
UST Closure	1	Cost	$600

TOTAL SITE BUILDING 323 DIRECT COST: $4,036

TOTAL PROJECT BUILDING 323 DIRECT COST $4,036

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 323
Cecil Field FL
Building 323
RCL
02/11/99

Project Comments:

Site:
BUILDING 323
Building 323
RCL
02/11/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	2.00 EA	43.69	0.56	253.80
	Pump <=220 Gal Liquid From Tank			
	150.00 GAL	57.50	9.62	0.00
	2" Dia Contractor's Trash Pump, 75 GPM			
	1.00 DAY	5.70	0.07	33.09
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	Total Capital Costs	250.10	32.03	286.89
	Total Underground Storage Tank Closure	250.10	32.03	286.89
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	State HTW Disposal Tax/Fee (Drums) 1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	250.91	32.64	677.89

PROJECT SUMMARY REPORT

BUILDING 330
Building 330
Cecil Field FL
RCL
02/10/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

Date 02/10/99
Time 11:09

ESTIMATE STATUS REPORT

Project:
BUILDING 330
Building 330
Cecil Field FL
RCL
02/10/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions			
	1	Cost	$1,700
Contractor Overhead and Profit			
	1	Cost	$339

Site:
BUILDING 330
Building 330
Single Site
RCL
02/10/99

RA MODELS:

Landfill Disposal			
	1	Cost	$400

TOTAL SITE BUILDING 330 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 330 DIRECT COST $2,439

********** END OF REPORT **********

Date 02/10/99
Time 11:09

DETAIL COST REPORT

Project:
BUILDING 330
Cecil Field FL
Building 330
RCL
02/10/99

Project Comments:

Site:
BUILDING 330
Building 330
RCL
02/10/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

Date 02/10/99
Time 9:48

PROJECT SUMMARY REPORT

BUILDING 334
Building 334
Cecil Field FL
RCL
02/10/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		1,098
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		69
General Conditions		2,442
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		213
Subtotal	$	3,822
Prime Contractor Profit - (Fee) (8.76%)		335
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	4,157
Escalation		570
Total Contract Costs	$	4,727
Contingencies (10.00%)		472
Project Management (10.00%)		472
Total Project Costs	$	5,671

********** END OF REPORT **********

Date 02/10/99
Time 9:48

ESTIMATE STATUS REPORT

Project:
BUILDING 334
Building 334
Cecil Field FL
RCL
02/10/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,449
Contractor Overhead and Profit	1	Cost	$617

Site:
BUILDING 334
Building 334
Single Site
RCL
02/10/99

RA MODELS:

User Defined Estimate	80	Cost	$500
UST Closure	1	Cost	$630

TOTAL SITE BUILDING 334 DIRECT COST: $4,196

TOTAL PROJECT BUILDING 334 DIRECT COST $4,196

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 334
Cecil Field FL
Building 334
RCL
02/10/99

Project Comments:

Site:
BUILDING 334
Building 334
RCL
02/10/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	1.00 EA	21.84	0.28	126.90
	Pump 501-3000 Gal Liquid From Tank			
	550.00 GAL	69.44	102.14	0.00
	3" Dia Contractor's Trash Pump, 150 GPM			
	1.00 DAY	8.33	0.11	38.58
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	1.00 DAY	0.00	0.00	97.00
	Total Capital Costs	242.82	124.31	262.48
	Total Underground Storage Tank Closure	242.82	124.31	262.48
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	Decontaminate Surface By Steam Cleaning, 137.5 SF/Hr			
	1,000.00 SF	181.80	40.00	0.00
	55 Gallon Drum of Liquid Soap			
	0.10 EA	0.00	0.00	13.10

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	1800 PSI Steam Cleaner Rental			
	0.10 MO	0.00	0.00	95.35
	Operation of Steam Cleaner, Incl.Water,Soap,Elec,Labor			
	4.00 HR	63.64	0.75	75.18
	Total Capital Costs	245.44	40.75	183.63
	Total Other	245.44	40.75	183.63
	TOTAL DIRECT COSTS REMEDIAL ACTION	488.26	165.06	446.11

PROJECT SUMMARY REPORT

BUILDING 339
Building 339
Cecil Field FL
RCL
02/09/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		10,623
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		473
General Conditions		8,799
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		1,166
Subtotal	$	21,061
Prime Contractor Profit - (Fee) (8.69%)		1,831
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	22,892
Escalation		3,136
Total Contract Costs	$	26,028
Contingencies (10.00%)		2,602
Project Management (10.00%)		2,602
Total Project Costs	$	31,232

********** END OF REPORT **********

ESTIMATE STATUS REPORT

Project:
BUILDING 339
Building 339
Cecil Field FL
RCL
02/09/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$8,806
Contractor Overhead and Profit	1	Cost	$3,500

Site:
BUILDING 339
Building 339
Single Site
RCL
02/09/99

RA MODELS:

Landfill Disposal	1	Cost	$800
User Defined Estimate	80	Cost	$500
UST Closure	1	Cost	$8,600
UST Closure	2	Cost	$800

TOTAL SITE BUILDING 339 DIRECT COST: $23,006

TOTAL PROJECT BUILDING 339 DIRECT COST $23,006

********** END OF REPORT **********

Date 02/09/99
Time 15:02

DETAIL COST REPORT

Project:
BUILDING 339
Cecil Field FL
Building 339
RCL
02/09/99

Project Comments:

Site:
BUILDING 339
Building 339
RCL
02/09/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	2.00 EA	43.69	0.56	253.80
	Tank Inerting w/Dry Ice			
	40.00 KGAL	599.24	39.70	552.90
	Pump >3000 Gal Liquid From Tank			
	40,100.00 GAL	1,827.48	4,836.06	0.00
	4" Dia Contractor's Trash Pump, 300 GPM			
	1.00 DAY	10.82	0.14	47.77
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	2.00 DAY	0.00	0.00	194.00
	Total Sequence 001 Underground Storage Tank Closure	2,624.44	4,898.24	1,048.47
33.10.95	Underground Storage Tank Closure			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	1.00 EA	21.84	0.28	126.90
	Pump 501-3000 Gal Liquid From Tank			
	1,050.00 GAL	132.56	194.99	0.00
	3" Dia Contractor's Trash Pump, 150 GPM			
	1.00 DAY	8.33	0.11	38.58

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	1.00 DAY	0.00	0.00	97.00
	Total Sequence 002 Underground Storage Tank Closure	305.94	217.16	262.48
	Total Capital Costs	2,930.38	5,115.40	1,310.95
	Total Underground Storage Tank Closure	2,930.38	5,115.40	1,310.95
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	Decontaminate Surface By Steam Cleaning, 137.5 SF/Hr			
	1,000.00 SF	181.80	40.00	0.00
	55 Gallon Drum of Liquid Soap			
	0.10 EA	0.00	0.00	13.10
	1800 PSI Steam Cleaner Rental			
	0.10 MO	0.00	0.00	95.35
	Operation of Steam Cleaner, Incl.Water,Soap,Elec,Labor			
	4.00 HR	63.64	0.75	75.18
	Total Capital Costs	245.44	40.75	183.63
	Total Other	245.44	40.75	183.63
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	5.00 EA	4.06	3.05	0.00
	State HTW Disposal Tax/Fee (Drums)			
	5.00 DRM	0.00	0.00	500.00

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Total Capital Costs	4.06	3.05	791.00
	Total Landfill Disposal	4.06	3.05	791.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	3,179.88	5,159.20	2,285.58

PROJECT SUMMARY REPORT

BUILDING 361
Building 361
Cecil Field FL
RCL
02/11/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

ESTIMATE STATUS REPORT

Project:
BUILDING 361
Building 361
Cecil Field FL
RCL
02/11/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 361
Building 361
Single Site
RCL
02/11/99

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 361 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 361 DIRECT COST $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 361
Cecil Field FL
Building 361
RCL
02/11/99

Project Comments:

Site:
BUILDING 361
Building 361
RCL
02/11/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 370
Building 370
Cecil Field FL
RCL
02/10/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

ESTIMATE STATUS REPORT

Project:
BUILDING 370
Building 370
Cecil Field FL
RCL
02/10/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 370
Building 370
Single Site
RCL
02/10/99

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 370 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 370 DIRECT COST $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 370
Cecil Field FL
Building 370
RCL
02/10/99

Project Comments:

Site:
BUILDING 370
Building 370
RCL
02/10/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 371
Building 371
Cecil Field FL
RCL
02/10/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

ESTIMATE STATUS REPORT

Project:
BUILDING 371
Building 371
Cecil Field FL
RCL
02/10/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions			
	1	Cost	$1,700
Contractor Overhead and Profit			
	1	Cost	$339

Site:
BUILDING 371
Building 371
Single Site
RCL
02/10/99

RA MODELS:

Landfill Disposal			
	1	Cost	$400

TOTAL SITE BUILDING 371 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 371 DIRECT COST $2,439

********** END OF REPORT **********

Date 02/10/99
Time 14:47

DETAIL COST REPORT

Project:
BUILDING 371
Cecil Field FL
Building 371
RCL
02/10/99

Project Comments:

Site:
BUILDING 371
Building 371
RCL
02/10/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 808
Building 808
Cecil Field FL
RCL
02/18/99

Category			Amount
PA/SI		$	0
Site Assessment		$	0
Studies			0
Remedial Design			0
RA Capital			798
Site Work			0
Sampling and Analysis			0
RA Professional Labor			0
Subcontractor Overhead & Profit			34
General Conditions			1,751
Studies/Professional Labor Overhead			0
Prime Contractor Home Office			154
Subtotal		$	2,737
Prime Contractor Profit - (Fee)	(8.87%)		243
RA Operations and Maintenance			0
O&M Service Contract Overhead, Tax & Profit			0
Subtotal		$	2,980
Escalation			408
Total Contract Costs		$	3,388
Contingencies	(10.00%)		338
Project Management	(10.00%)		338
Total Project Costs		$	4,064

********** END OF REPORT **********

ESTIMATE STATUS REPORT

Project:
BUILDING 808
Building 808
Cecil Field FL
RCL
02/18/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,800
Contractor Overhead and Profit	1	Cost	$431

Site:
BUILDING 808
Building 808
Single Site
RCL
02/18/99

RA MODELS:

Landfill Disposal	1	Cost	$800

TOTAL SITE BUILDING 808 DIRECT COST: $3,031

TOTAL PROJECT BUILDING 808 DIRECT COST $3,031

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 808
Cecil Field FL
Building 808
RCL
02/18/99

Project Comments:

Site:
BUILDING 808
Building 808
RCL
02/18/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	5.00 EA	4.06	3.05	0.00
	State HTW Disposal Tax/Fee (Drums)			
	5.00 DRM	0.00	0.00	500.00
	Total Capital Costs	4.06	3.05	791.00
	Total Landfill Disposal	4.06	3.05	791.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	4.06	3.05	791.00

Date 02/17/99
Time 10:30

PROJECT SUMMARY REPORT

BUILDING 824
Buidling 824
Cecil Field FL
RCL
02/16/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		953
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		64
General Conditions		2,435
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		204
Subtotal	$	3,656
Prime Contractor Profit - (Fee) (8.78%)		321
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	3,977
Escalation		545
Total Contract Costs	$	4,522
Contingencies (10.00%)		452
Project Management (10.00%)		452
Total Project Costs	$	5,426

********** END OF REPORT **********

ESTIMATE STATUS REPORT

Project:
BUILDING 824
Buidling 824
Cecil Field FL
RCL
02/16/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,442
Contractor Overhead and Profit	1	Cost	$600

Site:
BUILDING 824
Building 824
Single Site
RCL
02/16/99

RA MODELS:

Landfill Disposal	1	Cost	$600
User Defined Estimate	80	Cost	$400

TOTAL SITE BUILDING 824 DIRECT COST: $4,042

TOTAL PROJECT BUILDING 824 DIRECT COST $4,042

********** END OF REPORT **********

Date 02/17/99
Time 10:30

DETAIL COST REPORT

Project:
BUILDING 824
Cecil Field FL
Buidling 824
RCL
02/16/99

Project Comments:

Site:
BUILDING 824
Building 824
RCL
02/16/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	Decontaminate Surface By Steam Cleaning, 137.5 SF/Hr			
	500.00 SF	90.90	20.00	0.00
	55 Gallon Drum of Liquid Soap			
	0.10 EA	0.00	0.00	13.10
	1800 PSI Steam Cleaner Rental			
	0.10 MO	0.00	0.00	95.35
	Operation of Steam Cleaner, Incl.Water,Soap,Elec,Labor			
	4.00 HR	63.64	0.75	75.18
	Total Capital Costs	154.54	20.75	183.63
	Total Other	154.54	20.75	183.63
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	3.00 EA	2.44	1.83	0.00
	State HTW Disposal Tax/Fee (Drums)			
	3.00 DRM	0.00	0.00	300.00

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Total Capital Costs	2.44	1.83	591.00
	Total Landfill Disposal	2.44	1.83	591.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	156.98	22.58	774.63

PROJECT SUMMARY REPORT

BUILDING 860
Building 860
Cecil Field FL
RCL
02/11/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		1,021
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		66
General Conditions		2,442
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		209
Subtotal	$	3,738
Prime Contractor Profit - (Fee) (8.77%)		328
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	4,066
Escalation		557
Total Contract Costs	$	4,623
Contingencies (10.00%)		462
Project Management (10.00%)		462
Total Project Costs	$	5,547

********** END OF REPORT **********

ESTIMATE STATUS REPORT

Project:
BUILDING 860
Building 860
Cecil Field FL
RCL
02/11/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,449
Contractor Overhead and Profit	1	Cost	$603

Site:
BUILDING 860
Building 860
Single Site
RCL
02/11/99

RA MODELS:

Landfill Disposal	1	Cost	$400
UST Closure	1	Cost	$630

TOTAL SITE BUILDING 860 DIRECT COST: $4,082

TOTAL PROJECT BUILDING 860 DIRECT COST $4,082

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 860
Cecil Field FL
Building 860
RCL
02/11/99

Project Comments:

Site:
BUILDING 860
Building 860
RCL
02/11/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	1.00 EA	21.84	0.28	126.90
	Pump 501-3000 Gal Liquid From Tank			
	550.00 GAL	69.44	102.14	0.00
	3" Dia Contractor's Trash Pump, 150 GPM			
	1.00 DAY	8.33	0.11	38.58
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	1.00 DAY	0.00	0.00	97.00
	Total Capital Costs	242.82	124.31	262.48
	Total Underground Storage Tank Closure	242.82	124.31	262.48
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	243.63	124.92	653.48

PROJECT SUMMARY REPORT

BUILDING 870
Building 870
Cecil Field FL
RCL
02/16/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		493
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		22
General Conditions		1,689
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		132
Subtotal	$	2,336
Prime Contractor Profit - (Fee) (8.94%)		209
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,545
Escalation		349
Total Contract Costs	$	2,894
Contingencies (10.00%)		289
Project Management (10.00%)		289
Total Project Costs	$	3,472

********** END OF REPORT **********

ESTIMATE STATUS REPORT

Project:
BUILDING 870
Building 870
Cecil Field FL
RCL
02/16/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$400

Site:
BUILDING 870
Building 870
Single Site
RCL
02/16/99

RA MODELS:

Landfill Disposal	1	Cost	$500

TOTAL SITE BUILDING 870 DIRECT COST: $2,600

TOTAL PROJECT BUILDING 870 DIRECT COST $2,600

********** END OF REPORT **********

Date 02/16/99
Time 17:04

DETAIL COST REPORT

Project:
BUILDING 870
Cecil Field FL
Building 870
RCL
02/16/99

Project Comments:

Site:
BUILDING 870
Building 870
RCL
02/16/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	2.00 EA	1.63	1.22	0.00
	State HTW Disposal Tax/Fee (Drums)			
	2.00 DRM	0.00	0.00	200.00
	Total Capital Costs	1.63	1.22	491.00
	Total Landfill Disposal	1.63	1.22	491.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	1.63	1.22	491.00

PROJECT SUMMARY REPORT

BUILDING 928
Building 928
Cecil Field FL
RCL
01/14/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

ESTIMATE STATUS REPORT

Project:
BUILDING 928
Building 928
Cecil Field FL
RCL
01/14/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions			
	1	Cost	$1,700
Contractor Overhead and Profit			
	1	Cost	$339

Site:
BUILDING 928
Building 928
Single Site
RCL
01/14/99

RA MODELS:

Landfill Disposal			
	1	Cost	$400

TOTAL SITE BUILDING 928 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 928 DIRECT COST $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 928
Cecil Field FL
Building 928
RCL
01/14/99

Project Comments:

Site:
BUILDING 928
Building 928
RCL
01/14/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 1820
Building 1820
Cecil Field FL
RCL
02/17/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		773
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		57
General Conditions		2,396
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		191
Subtotal	$	3,417
Prime Contractor Profit - (Fee) (8.77%)		300
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	3,717
Escalation		509
Total Contract Costs	$	4,226
Contingencies (10.00%)		422
Project Management (10.00%)		422
Total Project Costs	$	5,070

********** END OF REPORT **********

ESTIMATE STATUS REPORT

Project:
BUILDING 1820
Building 1820
Cecil Field FL
RCL
02/17/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions			
	1	Cost	$2,403
Contractor Overhead and Profit			
	1	Cost	$548

Site:
BUILDING 1820
Building 1820
Single Site
RCL
02/17/99

RA MODELS:

Landfill Disposal			
	1	Cost	$400
User Defined Estimate			
	80	Cost	$400

TOTAL SITE BUILDING 1820 DIRECT COST: $3,751

TOTAL PROJECT BUILDING 1820 DIRECT COS $3,751

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 1820
Cecil Field FL
Building 1820
RCL
02/17/99

Project Comments:

Site:
BUILDING 1820
Building 1820
RCL
02/17/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	Decontaminate Surface By Steam Cleaning, 137.5 SF/Hr			
	600.00 SF	109.08	24.00	0.00
	55 Gallon Drum of Liquid Soap			
	0.10 EA	0.00	0.00	13.10
	1800 PSI Steam Cleaner Rental			
	0.10 MO	0.00	0.00	95.35
	Operation of Steam Cleaner, Incl.Water,Soap,Elec,Labor			
	4.00 HR	63.64	0.75	75.18
	Total Capital Costs	172.72	24.75	183.63
	Total Other	172.72	24.75	183.63
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	173.53	25.36	574.63

PROJECT SUMMARY REPORT

BUILDING 1824
Building 1824
Cecil Field FL
RCL
02/18/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

ESTIMATE STATUS REPORT

Project:
BUILDING 1824
Building 1824
Cecil Field FL
RCL
02/18/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions			
	1	Cost	$1,700
Contractor Overhead and Profit			
	1	Cost	$339

Site:
BUILDING 1824
Building 1824
Single Site
RCL
02/18/99

RA MODELS:

Landfill Disposal			
	1	Cost	$400

TOTAL SITE BUILDING 1824 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 1824 DIRECT COS $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 1824
Cecil Field FL
Building 1824
RCL
02/18/99

Project Comments:

Site:
BUILDING 1824
Building 1824
RCL
02/18/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 1848
Building 1848
Cecil Field FL
RCL
02/17/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

ESTIMATE STATUS REPORT

Project:
BUILDING 1848
Building 1848
Cecil Field FL
RCL
02/17/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions			
	1	Cost	$1,700
Contractor Overhead and Profit			
	1	Cost	$339

Site:
BUILDING 1848
Building 1848
Single Site
RCL
02/17/99

RA MODELS:

Landfill Disposal			
	1	Cost	$400

TOTAL SITE BUILDING 1848 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 1848 DIRECT COS $2,439

********** END OF REPORT **********

Date 02/17/99
Time 11:09

DETAIL COST REPORT

Project:
BUILDING 1848
Cecil Field FL
Building 1848
RCL
02/17/99

Project Comments:

Site:
BUILDING 1848
Building 1848
RCL
02/17/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 1850
Building 1850
Cecil Field FL
RCL
02/11/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		493
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		22
General Conditions		1,689
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		132
Subtotal	$	2,336
Prime Contractor Profit - (Fee) (8.94%)		209
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,545
Escalation		349
Total Contract Costs	$	2,894
Contingencies (10.00%)		289
Project Management (10.00%)		289
Total Project Costs	$	3,472

********** END OF REPORT **********

ESTIMATE STATUS REPORT

Project:
BUILDING 1850
Building 1850
Cecil Field FL
RCL
02/11/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions			
	1	Cost	$1,700
Contractor Overhead and Profit			
	1	Cost	$400

Site:
BUILDING 1850
Building 1850
Single Site
RCL
02/11/99

RA MODELS:

Landfill Disposal			
	1	Cost	$500

TOTAL SITE BUILDING 1850 DIRECT COST: $2,600

TOTAL PROJECT BUILDING 1850 DIRECT COS $2,600

********** END OF REPORT **********

Date 02/11/99
Time 13:28

DETAIL COST REPORT

Project:
BUILDING 1850
Cecil Field FL
Building 1850
RCL
02/11/99

Project Comments:

Site:
BUILDING 1850
Building 1850
RCL
02/11/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	2.00 EA	1.63	1.22	0.00
	State HTW Disposal Tax/Fee (Drums)			
	2.00 DRM	0.00	0.00	200.00
	Total Capital Costs	1.63	1.22	491.00
	Total Landfill Disposal	1.63	1.22	491.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	1.63	1.22	491.00

PROJECT SUMMARY REPORT

BUILDING HSR
High Speed Refuelers
Cecil Field FL
RCL
02/12/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		1,847
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		99
General Conditions		2,598
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		268
Subtotal	$	4,812
Prime Contractor Profit - (Fee) (8.72%)		420
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	5,232
Escalation		717
Total Contract Costs	$	5,949
Contingencies (10.00%)		594
Project Management (10.00%)		594
Total Project Costs	$	7,137

********** END OF REPORT **********

ESTIMATE STATUS REPORT

Project:
BUILDING HSR
High Speed Refuelers
Cecil Field FL
RCL
02/12/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions			
	1	Cost	$2,605
Contractor Overhead and Profit			
	1	Cost	$800

Site:
BUILDING HSR
High Speed Refuelers
Single Site
RCL
02/12/99

RA MODELS:

User Defined Estimate			
	80	Cost	$1,000
UST Closure			
	1	Cost	$900

TOTAL SITE BUILDING HSR DIRECT COST: $5,305

TOTAL PROJECT BUILDING HSR DIRECT COST $5,305

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING HSR
Cecil Field FL
High Speed Refuelers
RCL
02/12/99

Project Comments:

Site:
BUILDING HSR
High Speed Refuelers
RCL
02/12/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	2.00 EA	43.69	0.56	253.80
	Pump 501-3000 Gal Liquid From Tank			
	600.00 GAL	75.75	111.42	0.00
	3" Dia Contractor's Trash Pump, 150 GPM			
	1.00 DAY	8.33	0.11	38.58
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	2.00 DAY	0.00	0.00	194.00
	Total Capital Costs	270.98	133.87	486.38
	Total Underground Storage Tank Closure	270.98	133.87	486.38
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	55 Gallon Drum of Liquid Soap			
	1.00 EA	0.00	0.00	130.95
	1800 PSI Pressure Washer Rental			
	1.00 MO	0.00	0.00	502.46

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	Operation of Pressure Washer,Incl.Water,Soap,Elec,Labor			
	8.00 HR	127.29	1.51	60.14
	Piping Cleanout			
	1,000.00 LF	44.64	44.70	44.62
	Total Capital Costs	171.93	46.21	738.17
	Total Other	171.93	46.21	738.17
	TOTAL DIRECT COSTS REMEDIAL ACTION	442.91	180.08	1,224.55

PROJECT SUMMARY REPORT

SEPTIC TANKS
Septic Tanks
Cecil Field FL
RCL
02/19/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		3,095
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		148
General Conditions		2,825
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		356
Subtotal	$	6,424
Prime Contractor Profit - (Fee) (8.68%)		558
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	6,982
Escalation		957
Total Contract Costs	$	7,939
Contingencies (10.00%)		793
Project Management (10.00%)		793
Total Project Costs	$	9,525

********** END OF REPORT **********

ESTIMATE STATUS REPORT

Project:
SEPTIC TANKS
Septic Tanks
Cecil Field FL
RCL
02/19/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions			
	1	Cost	$2,832
Contractor Overhead and Profit			
	1	Cost	$1,100

Site:
SEPTIC TANKS
Septic Tanks
Single Site
RCL
02/19/99

RA MODELS:

UST Closure			
	1	Cost	$3,100

TOTAL SITE SEPTIC TANKS DIRECT COST: $7,032

TOTAL PROJECT SEPTIC TANKS DIRECT COST $7,032

********** END OF REPORT **********

DETAIL COST REPORT

Project:
SEPTIC TANKS
Cecil Field FL
Septic Tanks
RCL
02/19/99

Project Comments:

Site:
SEPTIC TANKS
Septic Tanks
RCL
02/19/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Pump >3000 Gal Liquid From Tank			
	17,050.00 GAL	777.02	2,056.23	0.00
	4" Dia Contractor's Trash Pump, 300 GPM			
	1.00 DAY	10.82	0.14	47.77
	4 CY, Crawler Mounted, Hydraulic Excavator			
	37.00 CY	11.68	26.55	0.00
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	Total Capital Costs	942.73	2,104.70	47.77
	Total Underground Storage Tank Closure	942.73	2,104.70	47.77
	TOTAL DIRECT COSTS REMEDIAL ACTION	942.73	2,104.70	47.77

PRIORITY 3

PRIOF MATRIX
NAS CECIL FIELD
DECONTAMINATION AND CLOSURE
APRIL 1999

	Building No.	Name	No Action Required	Remove POL/Haz Waste	Concrete Cleaning	Decon AST	Decon O/W Separator	Decon/ Close Hydraulic Lifts	Removal/ Recycle Mercury Lamps	Piping Cleanout	Decon UST	Remove PCB Dielectric Fluid	Decon Beryllium Dust	Cost Estimate
1	15	Wastewater Treatment Control Building		x							x			$8,381
2	78	FD Main Service		x										$3,269
3	80C	Battery Shop		x	x		x							$8,439
4	100	FD Services Storage Building		x					x					$3,269
5	103	Self Help Warehouse		x										$3,472
6	105	Shop		x										$3,269
7	108	Grounds Maintenance Equipment Shed	x											$0
8	110	Lake Fretwell Boathouse	x											$0
9	120	Self Help Administration Building	x											$0
10	177	Arresting Gear Building		x										$3,472
11	179	DRMO Storage Area	x											$0
12	185	Aviation Ordnance Nitrogen Facility	x											$0
13	201	Hazmat Shed		x										$4,064
14	241	Air Compressor Building		x	x									$6,678
15	314	Flightline Ordnance Building	x											$0
16	316	Flammable Materials Storage		x										$3,269
17	325	Hazardous Material Warehouse/Storage Area		x										$7,557
18	369	Hazardous Materials Storage		x										$3,269
19	560	Golf Cart Storage Building	x											$0
20	597	General Storage Shed		x										$3,269
21	608	Sewage Pump Station	x											$0
22	609	Yellow Water Weapons Water Plant		x										$3,269
23	632	Flammable Storage	x											$0
24	646	Hazardous Waste Storage Building		x										$3,269
25	810	Water Treatment Facilities Building	x											$0
26	818	Aircraft Acoustical Enclosure			x		x							$6,434
27	852	Flammable Materials Warehouse		x										$3,269
28	853	Hazardous/Flammable Materials Warehouse		x										$3,269
29	862	Miscellaneous Utilities Plant		x	x									$4,983
30	1822	F/A-18 Simulator		x	x									$6,892
31	1846	F18 Simulator		x										$3,269
32	1847	Fire Pump House		x										$3,269
33	3043	Yellow Water Housing Water Treatment Plant		x					x					$3,269
34	ASTs	Aboveground Storage Tanks				x								$131,676
35	PCBs	PCB Containing Equipment										x		$8,847
		TOTALS	10	22	5	1	2	0	2	0	1	1	**TOTAL**	$243,392
													P1	$168,094
													P2	$525,644
													P3	$243,392
													TOTAL	$937,130

PROJECT SUMMARY REPORT

BUILDING 15
Building 15
Cecil Field FL
RCL
03/03/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		2,506
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		125
General Conditions		2,706
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		314
Subtotal	$	5,651
Prime Contractor Profit - (Fee) (8.70%)		492
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	6,143
Escalation		842
Total Contract Costs	$	6,985
Contingencies (10.00%)		698
Project Management (10.00%)		698
Total Project Costs	$	8,381

********** END OF REPORT **********

Date 03/03/99
Time 14:25

ESTIMATE STATUS REPORT

Project:
BUILDING 15
Building 15
Cecil Field FL
RCL
03/03/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,713
Contractor Overhead and Profit	1	Cost	$931

Site:
BUILDING 15
Building 15
Single Site
RCL
03/03/99

RA MODELS:

Landfill Disposal	1	Cost	$500
UST Closure	1	Cost	$2,014

TOTAL SITE BUILDING 15 DIRECT COST: $6,158

TOTAL PROJECT BUILDING 15 DIRECT COST: $6,158

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 15
Cecil Field FL
Building 15
RCL
03/03/99

Project Comments:

Site:
BUILDING 15
Building 15
RCL
03/03/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	2.00 EA	43.69	0.56	253.80
	Tank Inerting w/Dry Ice			
	4.00 KGAL	59.92	3.97	55.29
	Pump 501-3000 Gal Liquid From Tank			
	2,100.00 GAL	265.13	389.97	0.00
	3" Dia Contractor's Trash Pump, 150 GPM			
	1.00 DAY	8.33	0.11	38.58
	Decontaminate Tank By Steam Cleaning, 50 SF/Hr			
	507.00 SF	318.48	60.84	0.00
	2 CY, Crawler Mounted, Hydraulic Excavator			
	31.00 CY	18.29	33.53	0.00
	Backfill W/Excavated Material			
	31.00 CY	43.93	21.46	6.01
	Unclass Fill, 6" Lifts, On-Site			
	8.00 CY	8.51	22.65	1.55
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	2.00 DAY	0.00	0.00	194.00
	Total Capital Costs	909.49	554.87	549.23
	Total Underground Storage Tank Closure			
		909.49	554.87	549.23
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			

Time 14:25

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	2.00 EA	1.63	1.22	0.00
	State HTW Disposal Tax/Fee (Drums)			
	2.00 DRM	0.00	0.00	200.00
	Total Capital Costs	1.63	1.22	491.00
	Total Landfill Disposal	1.63	1.22	491.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	911.12	556.09	1,040.23

PROJECT SUMMARY REPORT

BUILDING 78
Building 78
Cecil Field FL
RCL
03/04/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

Date 03/04/99
Time 10:07

ESTIMATE STATUS REPORT

Project:
BUILDING 78
Building 78
Cecil Field FL
RCL
03/04/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 78
Building 78
Single Site
RCL
03/04/99

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 78 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 78 DIRECT COST: $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 78
Cecil Field FL
Building 78
RCL
03/04/99

Project Comments:

Site:
BUILDING 78
Building 78
RCL
03/04/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 80C
Building 80C
Cecil Field FL
RCL
01/14/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		2,518
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		127
General Conditions		2,729
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		316
Subtotal	$	5,690
Prime Contractor Profit - (Fee) (8.71%)		496
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	6,186
Escalation		847
Total Contract Costs	$	7,033
Contingencies (10.00)		703
Project Management (10.00)		703
Total Project Costs	$	8,439

********** END OF REPORT **********

Date 01/15/99
Time 11:15

ESTIMATE STATUS REPORT

Project:
BUILDING 80C
Building 80C
Cecil Field FL
RCL
01/14/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,736
Contractor Overhead and Profit	1	Cost	$939

Site:
BUILDING 80C
Building 80C
Single Site
RCL
01/14/99

RA MODELS:

Landfill Disposal	1	Cost	$700
User Defined Estimate	82	Cost	$400
UST Closure	1	Cost	$1,500

TOTAL SITE BUILDING 80C DIRECT COST: $6,275

TOTAL PROJECT BUILDING 80C DIRECT COST $6,275

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 80C
Cecil Field FL
Building 80C
RCL
01/14/99

Project Comments:

Site:
BUILDING 80C
Building 80C
RCL
01/14/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	3.00 EA	65.53	0.84	380.71
	Pump 501-3000 Gal Liquid From Tank			
	1,650.00 GAL	208.31	306.41	0.00
	3" Dia Contractor's Trash Pump, 150 GPM			
	1.00 DAY	8.33	0.11	38.58
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	3.00 DAY	0.00	0.00	291.00
	Total Capital Costs	425.38	329.14	710.29
	Total Underground Storage Tank Closure	425.38	329.14	710.29
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	Decontaminate Surface By Steam Cleaning, 137.5 SF/Hr			
	500.00 SF	90.90	20.00	0.00
	55 Gallon Drum of Liquid Soap			
	0.10 EA	0.00	0.00	13.10

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	1800 PSI Steam Cleaner Rental			
	0.10 MO	0.00	0.00	95.35
	Operation of Steam Cleaner, Incl.Water,Soap,Elec,Labor			
	4.00 HR	63.64	0.75	75.18
	Total Capital Costs	154.54	20.75	183.63
	Total Other	154.54	20.75	183.63
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	4.00 EA	3.25	2.44	0.00
	State HTW Disposal Tax/Fee (Drums)			
	4.00 DRM	0.00	0.00	400.00
	Total Capital Costs	3.25	2.44	691.00
	Total Landfill Disposal	3.25	2.44	691.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	583.17	352.33	1,584.92

PROJECT SUMMARY REPORT

BUILDING 100
Building 100
Cecil Field FL
RCL
03/04/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

Date 03/04/99
Time 12:47

ESTIMATE STATUS REPORT

Project:
BUILDING 100
Building 100
Cecil Field FL
RCL
03/04/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 100
Building 100
Single Site
RCL
03/04/99

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 100 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 100 DIRECT COST $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 100
Cecil Field FL
Building 100
RCL
03/04/99

Project Comments:

Site:
BUILDING 100
Building 100
RCL
03/04/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 103
Building 103
Cecil Field FL
RCL
03/04/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		493
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		22
General Conditions		1,689
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		132
Subtotal	$	2,336
Prime Contractor Profit - (Fee) (8.94%)		209
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,545
Escalation		349
Total Contract Costs	$	2,894
Contingencies (10.00%)		289
Project Management (10.00%)		289
Total Project Costs	$	3,472

********** END OF REPORT **********

Date 03/04/99
Time 12:26

ESTIMATE STATUS REPORT

Project:
BUILDING 103
Building 103
Cecil Field FL
RCL
03/04/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$400

Site:
BUILDING 103
Building 103
Single Site
RCL
03/04/99

RA MODELS:

Landfill Disposal	1	Cost	$500

TOTAL SITE BUILDING 103 DIRECT COST: $2,600

TOTAL PROJECT BUILDING 103 DIRECT COST $2,600

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 103
Cecil Field FL
Building 103
RCL
03/04/99

Project Comments:

Site:
BUILDING 103
Building 103
RCL
03/04/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	2.00 EA	1.63	1.22	0.00
	State HTW Disposal Tax/Fee (Drums)			
	2.00 DRM	0.00	0.00	200.00
	Total Capital Costs	1.63	1.22	491.00
	Total Landfill Disposal	1.63	1.22	491.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	1.63	1.22	491.00

PROJECT SUMMARY REPORT

BUILDING 105
Building 105
Cecil Field FL
RCL
03/04/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

Date 03/04/99
Time 10:40

ESTIMATE STATUS REPORT

Project:
BUILDING 105
Building 105
Cecil Field FL
RCL
03/04/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 105
Building 105
Single Site
RCL
03/04/99

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 105 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 105 DIRECT COST $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 105
Cecil Field FL
Building 105
RCL
03/04/99

Project Comments:

Site:
BUILDING 105
Building 105
RCL
03/04/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 177
Building 177
Cecil Field FL
RCL
03/04/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		493
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		22
General Conditions		1,689
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		132
Subtotal	$	2,336
Prime Contractor Profit - (Fee) (8.94%)		209
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,545
Escalation		349
Total Contract Costs	$	2,894
Contingencies (10.00%)		289
Project Management (10.00%)		289
Total Project Costs	$	3,472

********** END OF REPORT **********

Date 03/04/99
Time 16:10

ESTIMATE STATUS REPORT

Project:
BUILDING 177
Building 177
Cecil Field FL
RCL
03/04/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$400

Site:
BUILDING 177
Building 177
Single Site
RCL
03/04/99

RA MODELS:

Landfill Disposal	1	Cost	$500

TOTAL SITE BUILDING 177 DIRECT COST: $2,600

TOTAL PROJECT BUILDING 177 DIRECT COST $2,600

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 177
Cecil Field FL
Building 177
RCL
03/04/99

Project Comments:

Site:
BUILDING 177
Building 177
RCL
03/04/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	2.00 EA	1.63	1.22	0.00
	State HTW Disposal Tax/Fee (Drums)			
	2.00 DRM	0.00	0.00	200.00
	Total Capital Costs	1.63	1.22	491.00
	Total Landfill Disposal	1.63	1.22	491.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	1.63	1.22	491.00

PROJECT SUMMARY REPORT

BUILDING 201
Building 201
Cecil Field FL
RCL
03/15/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		798
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		34
General Conditions		1,751
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		154
Subtotal	$	2,737
Prime Contractor Profit - (Fee) (8.87%)		243
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,980
Escalation		408
Total Contract Costs	$	3,388
Contingencies (10.00%)		338
Project Management (10.00%)		338
Total Project Costs	$	4,064

********** END OF REPORT **********

Date 03/15/99
Time 11:11

ESTIMATE STATUS REPORT

Project:
BUILDING 201
Building 201
Cecil Field FL
RCL
03/15/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,800
Contractor Overhead and Profit	1	Cost	$431

Site:
BUILDING 201
Building 201
Single Site
RCL
03/15/99

RA MODELS:

Landfill Disposal	1	Cost	$800

TOTAL SITE BUILDING 201 DIRECT COST: $3,031

TOTAL PROJECT BUILDING 201 DIRECT COST $3,031

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 201
Cecil Field FL
Building 201
RCL
03/15/99

Project Comments:

Site:
BUILDING 201
Building 201
RCL
03/15/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	5.00 EA	4.06	3.05	0.00
	State HTW Disposal Tax/Fee (Drums)			
	5.00 DRM	0.00	0.00	500.00
	Total Capital Costs	4.06	3.05	791.00
	Total Landfill Disposal	4.06	3.05	791.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	4.06	3.05	791.00

PROJECT SUMMARY REPORT

BUILDING 241
Building 241
Cecil Field FL
RCL
03/05/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		1,628
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		90
General Conditions		2,533
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		251
Subtotal	$	4,502
Prime Contractor Profit - (Fee) (8.72%)		393
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	4,895
Escalation		671
Total Contract Costs	$	5,566
Contingencies (10.00)		556
Project Management (10.00)		556
Total Project Costs	$	6,678

********** END OF REPORT **********

Date 03/05/99
Time 11:47

ESTIMATE STATUS REPORT

Project:
BUILDING 241
Building 241
Cecil Field FL
RCL
03/05/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,540
Contractor Overhead and Profit	1	Cost	$734

Site:
BUILDING 241
Building 241
Single Site
RCL
03/05/99

RA MODELS:

Landfill Disposal	1	Cost	$500
User Defined Estimate	80	Cost	$1,135

TOTAL SITE BUILDING 241 DIRECT COST: $4,909

TOTAL PROJECT BUILDING 241 DIRECT COST $4,909

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 241
Cecil Field FL
Building 241
RCL
03/05/99

Project Comments:

Site:
BUILDING 241
Building 241
RCL
03/05/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	Decontaminate Surface By Steam Cleaning, 137.5 SF/Hr			
	4,000.00 SF	727.20	160.00	0.00
	55 Gallon Drum of Liquid Soap			
	0.10 EA	0.00	0.00	13.10
	1800 PSI Steam Cleaner Rental			
	0.10 MO	0.00	0.00	95.35
	Operation of Steam Cleaner, Incl.Water,Soap,Elec,Labor			
	4.00 HR	63.64	0.75	75.18
	Total Capital Costs	790.84	160.75	183.63
	Total Other	790.84	160.75	183.63
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	2.00 EA	1.63	1.22	0.00
	State HTW Disposal Tax/Fee (Drums)			
	2.00 DRM	0.00	0.00	200.00

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Total Capital Costs	1.63	1.22	491.00
	Total Landfill Disposal	1.63	1.22	491.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	792.47	161.97	674.63

PROJECT SUMMARY REPORT

BUILDING 316
Building 316
Cecil Field FL
RCL
03/05/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

Date 03/05/99
Time 14:40

ESTIMATE STATUS REPORT

Project:
BUILDING 316
Building 316
Cecil Field FL
RCL
03/05/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 316
Building 316
Single Site
RCL
03/05/99

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 316 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 316 DIRECT COST $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 316
Cecil Field FL
Building 316
RCL
03/05/99

Project Comments:

Site:
BUILDING 316
Building 316
RCL
03/05/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 325
Building 325
Cecil Field FL
RCL
03/11/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		2,319
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		95
General Conditions		2,394
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		284
Subtotal	$	5,092
Prime Contractor Profit - (Fee) (8.79%)		448
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	5,540
Escalation		759
Total Contract Costs	$	6,299
Contingencies (10.00)		629
Project Management (10.00)		629
Total Project Costs	$	7,557

********** END OF REPORT **********

Date 03/11/99
Time 14:02

ESTIMATE STATUS REPORT

Project:
BUILDING 325
Building 325
Cecil Field FL
RCL
03/11/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,400
Contractor Overhead and Profit	1	Cost	$827

Site:
BUILDING 325
Building 325
Single Site
RCL
03/11/99

RA MODELS:

Landfill Disposal	1	Cost	$2,319

TOTAL SITE BUILDING 325 DIRECT COST: $5,546

TOTAL PROJECT BUILDING 325 DIRECT COST $5,546

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 325
Cecil Field FL
Building 325
RCL
03/11/99

Project Comments:

Site:
BUILDING 325
Building 325
RCL
03/11/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	20.00 EA	16.26	12.20	0.00
	State HTW Disposal Tax/Fee (Drums)			
	20.00 DRM	0.00	0.00	2,000.00
	Total Capital Costs	16.26	12.20	2,291.00
	Total Landfill Disposal	16.26	12.20	2,291.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	16.26	12.20	2,291.00

PROJECT SUMMARY REPORT

BUILDING 369
Building 369
Cecil Field FL
RCL
03/09/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

Date 03/09/99
Time 16:55

ESTIMATE STATUS REPORT

Project:
BUILDING 369
Building 369
Cecil Field FL
RCL
03/09/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 369
Building 369
Single Site
RCL
03/09/99

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 369 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 369 DIRECT COST $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 369
Cecil Field FL
Building 369
RCL
03/09/99

Project Comments:

Site:
BUILDING 369
Building 369
RCL
03/09/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 597
Building 597
Cecil Field FL
RCL
03/09/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

Date 03/09/99
Time 14:48

ESTIMATE STATUS REPORT

Project:
BUILDING 597
Building 597
Cecil Field FL
RCL
03/09/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 597
Building 597
Single Site
RCL
03/09/99

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 597 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 597 DIRECT COST $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 597
Cecil Field FL
Building 597
RCL
03/09/99

Project Comments:

Site:
BUILDING 597
Building 597
RCL
03/09/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 609
Building 609
Cecil Field FL
RCL
02/25/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

Date 02/25/99
Time 10:19

ESTIMATE STATUS REPORT

Project:
BUILDING 609
Building 609
Cecil Field FL
RCL
02/25/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 609
Building 609
Single Site
RCL
02/25/99

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 609 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 609 DIRECT COST $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 609
Cecil Field FL
Building 609
RCL
02/25/99

Project Comments:

Site:
BUILDING 609
Building 609
RCL
02/25/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 646
Building 646
Cecil Field FL
RCL
04/01/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

Date 04/01/99
Time 8:59

ESTIMATE STATUS REPORT

Project:
BUILDING 646
Building 646
Cecil Field FL
RCL
04/01/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 646
Building 646
Single Site
RCL
04/01/99

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 646 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 646 DIRECT COST $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 646
Cecil Field FL
Building 646
RCL
04/01/99

Project Comments:

Site:
BUILDING 646
Building 646
RCL
04/01/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 818
Building 818
Cecil Field FL
RCL
03/09/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		1,490
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		85
General Conditions		2,520
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		242
Subtotal	$	4,337
Prime Contractor Profit - (Fee) (8.73%)		379
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	4,716
Escalation		646
Total Contract Costs	$	5,362
Contingencies (10.00%)		536
Project Management (10.00%)		536
Total Project Costs	$	6,434

********** END OF REPORT **********

Date 03/09/99
Time 13:52

ESTIMATE STATUS REPORT

Project:
BUILDING 818
Building 818
Cecil Field FL
RCL
03/09/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,527
Contractor Overhead and Profit	1	Cost	$706

Site:
BUILDING 818
Building 818
Single Site
RCL
03/09/99

RA MODELS:

User Defined Estimate	80	Cost	$300
UST Closure	1	Cost	$1,231

TOTAL SITE BUILDING 818 DIRECT COST: $4,764

TOTAL PROJECT BUILDING 818 DIRECT COST $4,764

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 818
Cecil Field FL
Building 818
RCL
03/09/99

Project Comments:

Site:
BUILDING 818
Building 818
RCL
03/09/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	2.00 EA	43.69	0.56	253.80
	Tank Inerting w/Dry Ice			
	1.00 KGAL	14.98	0.99	13.82
	Pump 501-3000 Gal Liquid From Tank			
	1,100.00 GAL	138.88	204.27	0.00
	3" Dia Contractor's Trash Pump, 150 GPM			
	1.00 DAY	8.33	0.11	38.58
	Decontaminate Tank By Steam Cleaning, 50 SF/Hr			
	184.00 SF	115.58	22.08	0.00
	2 CY, Crawler Mounted, Hydraulic Excavator			
	10.00 CY	5.90	10.82	0.00
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	2.00 DAY	0.00	0.00	194.00
	Total Capital Costs	470.57	260.61	500.20
	Total Underground Storage Tank Closure	470.57	260.61	500.20
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	Decontaminate Surface By Steam Cleaning, 137.5 SF/Hr			
	50.00 SF	9.09	2.00	0.00
	55 Gallon Drum of Liquid Soap			
	0.10 EA	0.00	0.00	13.10
	1800 PSI Steam Cleaner Rental			
	0.10 MO	0.00	0.00	95.35
	Operation of Steam Cleaner, Incl.Water,Soap,Elec,Labor			
	4.00 HR	63.64	0.75	75.18
	Total Capital Costs	72.73	2.75	183.63
	Total Other	72.73	2.75	183.63
	TOTAL DIRECT COSTS REMEDIAL ACTION	543.30	263.36	683.83

PROJECT SUMMARY REPORT

BUILDING 852
Building 852
Cecil Field FL
RCL
03/05/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

Date 03/05/99
Time 14:58

ESTIMATE STATUS REPORT

Project:
BUILDING 852
Building 852
Cecil Field FL
RCL
03/05/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 852
Building 852
Single Site
RCL
03/05/99

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 852 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 852 DIRECT COST $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 852
Cecil Field FL
Building 852
RCL
03/05/99

Project Comments:

Site:
BUILDING 852
Building 852
RCL
03/05/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 853
Building 853
Cecil Field FL
RCL
03/05/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

Date 03/05/99
Time 15:08

ESTIMATE STATUS REPORT

Project:
BUILDING 853
Building 853
Cecil Field FL
RCL
03/05/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 853
Building 853
Single Site
RCL
03/05/99

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 853 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 853 DIRECT COST $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 853
Cecil Field FL
Building 853
RCL
03/05/99

Project Comments:

Site:
BUILDING 853
Building 853
RCL
03/05/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 862
Building 862
Cecil Field FL
RCL
02/11/99

Category			Amount
PA/SI		$	0
Site Assessment		$	0
Studies			0
Remedial Design			0
RA Capital			728
Site Work			0
Sampling and Analysis			0
RA Professional Labor			0
Subcontractor Overhead & Profit			55
General Conditions			2,387
Studies/Professional Labor Overhead			0
Prime Contractor Home Office			188
Subtotal		$	3,358
Prime Contractor Profit - (Fee)	(8.78%)		295
RA Operations and Maintenance			0
O&M Service Contract Overhead, Tax & Profit			0
Subtotal		$	3,653
Escalation			500
Total Contract Costs		$	4,153
Contingencies	(10.00%)		415
Project Management	(10.00%)		415
Total Project Costs		$	4,983

********** END OF REPORT **********

Date 02/11/99
Time 16:33

ESTIMATE STATUS REPORT

Project:
BUILDING 862
Building 862
Cecil Field FL
RCL
02/11/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,400
Contractor Overhead and Profit	1	Cost	$538

Site:
BUILDING 862
Building 862
Single Site
RCL
02/11/99

RA MODELS:

Landfill Disposal	1	Cost	$400
User Defined Estimate	80	Cost	$337

TOTAL SITE BUILDING 862 DIRECT COST: $3,675

TOTAL PROJECT BUILDING 862 DIRECT COST $3,675

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 862
Cecil Field FL
Building 862
RCL
02/11/99

Project Comments:

Site:
BUILDING 862
Building 862
RCL
02/11/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	Decontaminate Surface By Steam Cleaning, 137.5 SF/Hr			
	400.00 SF	72.72	16.00	0.00
	55 Gallon Drum of Liquid Soap			
	0.10 EA	0.00	0.00	13.10
	1800 PSI Steam Cleaner Rental			
	0.10 MO	0.00	0.00	95.35
	Operation of Steam Cleaner, Incl.Water,Soap,Elec,Labor			
	4.00 HR	63.64	0.75	75.18
	Total Capital Costs	136.36	16.75	183.63
	Total Other	136.36	16.75	183.63
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00

Date 02/11/99

Time 16:34

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	137.17	17.36	574.63

PROJECT SUMMARY REPORT

BUILDING 1822
Building 1822
Cecil Field FL
RCL
03/12/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		1,749
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		95
General Conditions		2,544
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		259
Subtotal	$	4,647
Prime Contractor Profit - (Fee) (8.71%)		405
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	5,052
Escalation		692
Total Contract Costs	$	5,744
Contingencies (10.00%)		574
Project Management (10.00%)		574
Total Project Costs	$	6,892

********** END OF REPORT **********

ESTIMATE STATUS REPORT

Project:
BUILDING 1822
Building 1822
Cecil Field FL
RCL
03/12/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,600
Contractor Overhead and Profit	1	Cost	$800

Site:
BUILDING 1822
Building 1822
Single Site
RCL
03/12/99

RA MODELS:

Landfill Disposal	1	Cost	$400
User Defined Estimate	80	Cost	$1,400

TOTAL SITE BUILDING 1822 DIRECT COST: $5,200

TOTAL PROJECT BUILDING 1822 DIRECT COS $5,200

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 1822
Cecil Field FL
Building 1822
RCL
03/12/99

Project Comments:

Site:
BUILDING 1822
Building 1822
RCL
03/12/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.17	Decontamination & Decommissioning (D&D)			
33.17.99	Other			
	Decontaminate Surface By Steam Cleaning, 137.5 SF/Hr			
	5,000.00 SF	909.00	200.00	0.00
	55 Gallon Drum of Liquid Soap			
	0.10 EA	0.00	0.00	13.10
	1800 PSI Steam Cleaner Rental			
	0.10 MO	0.00	0.00	95.35
	Operation of Steam Cleaner, Incl.Water,Soap,Elec,Labor			
	4.00 HR	63.64	0.75	75.18
	Total Capital Costs	972.64	200.75	183.63
	Total Other	972.64	200.75	183.63
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	973.45	201.36	574.63

PROJECT SUMMARY REPORT

BUILDING 1846
Building 1846
Cecil Field FL
RCL
03/12/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

ESTIMATE STATUS REPORT

Project:
BUILDING 1846
Building 1846
Cecil Field FL
RCL
03/12/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 1846
Building 1846
Single Site
RCL
03/12/99

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 1846 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 1846 DIRECT COS $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 1846
Cecil Field FL
Building 1846
RCL
03/12/99

Project Comments:

Site:
BUILDING 1846
Building 1846
RCL
03/12/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 1847
Building 1847
Cecil Field FL
RCL
03/10/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00)		272
Project Management (10.00)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

Date 03/10/99
Time 16:47

ESTIMATE STATUS REPORT

Project:
BUILDING 1847
Building 1847
Cecil Field FL
RCL
03/10/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions			
	1	Cost	$1,700
Contractor Overhead and Profit			
	1	Cost	$339

Site:
BUILDING 1847
Building 1847
Single Site
RCL
03/10/99

RA MODELS:

Landfill Disposal			
	1	Cost	$400

TOTAL SITE BUILDING 1847 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 1847 DIRECT COS $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 1847
Cecil Field FL
Building 1847
RCL
03/10/99

Project Comments:

Site:
BUILDING 1847
Building 1847
RCL
03/10/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

PROJECT SUMMARY REPORT

BUILDING 3043
Building 3043
Cecil Field FL
RCL
02/25/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		392
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		18
General Conditions		1,666
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		124
Subtotal	$	2,200
Prime Contractor Profit - (Fee) (8.95%)		197
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	2,397
Escalation		328
Total Contract Costs	$	2,725
Contingencies (10.00%)		272
Project Management (10.00%)		272
Total Project Costs	$	3,269

********** END OF REPORT **********

Date 02/25/99
Time 15:00

ESTIMATE STATUS REPORT

Project:
BUILDING 3043
Building 3043
Cecil Field FL
RCL
02/25/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$1,700
Contractor Overhead and Profit	1	Cost	$339

Site:
BUILDING 3043
Building 3043
Single Site
RCL
02/25/99

RA MODELS:

Landfill Disposal	1	Cost	$400

TOTAL SITE BUILDING 3043 DIRECT COST: $2,439

TOTAL PROJECT BUILDING 3043 DIRECT COS $2,439

********** END OF REPORT **********

DETAIL COST REPORT

Project:
BUILDING 3043
Cecil Field FL
Building 3043
RCL
02/25/99

Project Comments:

Site:
BUILDING 3043
Building 3043
RCL
02/25/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.96	Landfill Disposal			
33.19.96.01	Landfill Disposal - Capital Costs			
	Drummed Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	291.00
	Load Drums On Disposal Vehicle			
	1.00 EA	0.81	0.61	0.00
	State HTW Disposal Tax/Fee (Drums)			
	1.00 DRM	0.00	0.00	100.00
	Total Capital Costs	0.81	0.61	391.00
	Total Landfill Disposal	0.81	0.61	391.00
	TOTAL DIRECT COSTS REMEDIAL ACTION	0.81	0.61	391.00

Date 03/16/99
Time 18:16

PROJECT SUMMARY REPORT

ASTS
ASTs
Cecil Field FL
RCL
03/15/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		56,225
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		2,540
General Conditions		25,226
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		4,888
Subtotal	$	88,879
Prime Contractor Profit - (Fee) (8.58%)		7,629
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	96,508
Escalation		13,222
Total Contract Costs	$	109,730
Contingencies (10.00)		10,973
Project Management (10.00)		10,973
Total Project Costs	$	131,676

********** END OF REPORT **********

Date 03/16/99
Time 18:16

ESTIMATE STATUS REPORT

Project:
ASTS
ASTs
Cecil Field FL
RCL
03/15/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions			
	1	Cost	$25,231
Contractor Overhead and Profit			
	1	Cost	$15,100

Site:
ASTS
ASTs
Single Site
RCL
03/15/99

PA MODELS:

UST Closure			
	1	Cost	$26,400
UST Closure			
	3	Cost	$3,723
UST Closure			
	4	Cost	$5,600
UST Closure			
	5	Cost	$12,007
UST Closure			
	6	Cost	$8,543

TOTAL SITE ASTS DIRECT COST: $96,604

TOTAL PROJECT ASTS DIRECT COST: $96,604

********** END OF REPORT **********

DETAIL COST REPORT

Project:
ASTS
Cecil Field FL
ASTs
RCL
03/15/99

Project Comments:

Site:
ASTS
ASTs
RCL
03/15/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	13.00 EA	283.98	3.65	1,649.72
	Tank Inerting w/Dry Ice			
	130.00 KGAL	1,947.52	129.03	1,796.93
	Pump >3000 Gal Liquid From Tank			
	65,650.00 GAL	2,991.88	7,917.39	0.00
	4" Dia Contractor's Trash Pump, 300 GPM			
	1.00 DAY	10.82	0.14	47.77
	Decontaminate Tank By Steam Cleaning, 50 SF/Hr			
	10,933.00 SF	6,867.79	1,311.96	0.00
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	13.00 DAY	0.00	0.00	1,261.01
	Total Sequence 001 Underground Storage Tank Closure	12,245.20	9,383.95	4,755.43
33.10.95	Underground Storage Tank Closure			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	5.00 EA	109.22	1.41	634.51
	Tank Inerting w/Dry Ice			
	10.00 KGAL	149.81	9.93	138.23

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	Pump >3000 Gal Liquid From Tank			
	5,250.00 GAL	239.26	633.15	0.00
	4" Dia Contractor's Trash Pump, 300 GPM			
	1.00 DAY	10.82	0.14	47.77
	Decontaminate Tank By Steam Cleaning, 50 SF/Hr			
	1,266.00 SF	795.26	151.92	0.00
	3 CY, Crawler Mounted, Hydraulic Excavator			
	121.00 CY	50.93	101.12	0.00
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	5.00 DAY	0.00	0.00	485.00
	Total Sequence 003 Underground Storage Tank Closure	1,498.51	919.45	1,305.51
33.10.95	Underground Storage Tank Closure			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	11.00 EA	240.29	3.09	1,395.92
	Tank Inerting w/Dry Ice			
	11.00 KGAL	164.79	10.92	152.05
	Pump >3000 Gal Liquid From Tank			
	6,050.00 GAL	275.72	729.63	0.00
	4" Dia Contractor's Trash Pump, 300 GPM			
	1.00 DAY	10.82	0.14	47.77
	Decontaminate Tank By Steam Cleaning, 50 SF/Hr			
	1,748.00 SF	1,098.04	209.76	0.00
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	11.00 DAY	0.00	0.00	1,067.01
	Total Sequence 004 Underground Storage Tank Closure	1,932.87	975.32	2,662.75
33.10.95	Underground Storage Tank Closure			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	30.00 EA	655.34	8.43	3,807.06
	Tank Inerting w/Dry Ice			
	15.00 KGAL	224.71	14.89	207.34
	Pump >3000 Gal Liquid From Tank			

	9,000.00 GAL	410.16	1,085.40	0.00

DETAIL COST REPORT

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.10	Drums/Tanks/Structures/Misc Demo/Removal			
33.10.95	Underground Storage Tank Closure			
33.10.95.01	UST Closure - Capital Costs			
	4" Dia Contractor's Trash Pump, 300 GPM			
	1.00 DAY	10.82	0.14	47.77
	Decontaminate Tank By Steam Cleaning, 50 SF/Hr			
	2,760.00 SF	1,733.75	331.20	0.00
	3 CY, Crawler Mounted, Hydraulic Excavator			
	314.00 CY	132.15	262.41	0.00
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	30.00 DAY	0.00	0.00	2,910.02
	Total Sequence 005 Underground Storage Tank Closure	3,310.14	1,724.25	6,972.19
33.10.95	Underground Storage Tank Closure			
	Drain/Flush Liquids In Pipes, 1 Pipe			
	3.00 EA	65.53	0.84	380.71
	Tank Inerting w/Dry Ice			
	45.00 KGAL	674.14	44.66	622.01
	Pump >3000 Gal Liquid From Tank			
	22,650.00 GAL	1,032.23	2,731.59	0.00
	4" Dia Contractor's Trash Pump, 300 GPM			
	1.00 DAY	10.82	0.14	47.77
	Decontaminate Tank By Steam Cleaning, 50 SF/Hr			
	3,310.00 SF	2,079.25	397.20	0.00
	Decon Heavy Equipment			
	1.00 EA	143.21	21.78	0.00
	OVA Rental, Per Day			
	3.00 DAY	0.00	0.00	291.00
	Total Sequence 006 Underground Storage Tank Closure	4,005.18	3,196.21	1,341.49
	Total Capital Costs	22,991.90	16,199.18	17,037.37
	Total Underground Storage Tank Closure	22,991.90	16,199.18	17,037.37
	TOTAL DIRECT COSTS REMEDIAL ACTION	22,991.90	16,199.18	17,037.37

PROJECT SUMMARY REPORT

PCBS
PCBs
Cecil Field FL
RCL
03/15/99

Category		Amount
PA/SI	$	0
Site Assessment	$	0
Studies		0
Remedial Design		0
RA Capital		2,977
Site Work		0
Sampling and Analysis		0
RA Professional Labor		0
Subcontractor Overhead & Profit		122
General Conditions		2,532
Studies/Professional Labor Overhead		0
Prime Contractor Home Office		331
Subtotal	$	5,962
Prime Contractor Profit - (Fee) (8.77%)		523
RA Operations and Maintenance		0
O&M Service Contract Overhead, Tax & Profit		0
Subtotal	$	6,485
Escalation		888
Total Contract Costs	$	7,373
Contingencies (10.00%)		737
Project Management (10.00%)		737
Total Project Costs	$	8,847

********** END OF REPORT **********

Date 03/15/99
Time 13:21

ESTIMATE STATUS REPORT

Project:
PCBS
PCBs
Cecil Field FL
RCL
03/15/99

Project Comments:

Model	Seq #	Status	Direct Cost
Contractor General Conditions	1	Cost	$2,537
Contractor Overhead and Profit	1	Cost	$1,000

Site:
PCBS
PCBs
Single Site
RCL
03/15/99

RA MODELS:

Commercial Disposal (Incineration)	1	Cost	$3,000

TOTAL SITE PCBS DIRECT COST: $6,537

TOTAL PROJECT PCBS DIRECT COST: $6,537

********** END OF REPORT **********

DETAIL COST REPORT

Project:
PCBS
Cecil Field FL
PCBs
RCL
03/15/99

Project Comments:

Site:
PCBS
PCBs
RCL
03/15/99

Site Comments:

		Labor	Equip	Material
33	REMEDIAL ACTION			
33.19	Disposal (Commercial)			
33.19.95	Commercial Disposal (Incineration)			
33.19.95.01	Commercial Disp(Incineration)-Captl Cost			
	DOT Steel Drum, 55 Gal			
	2.00 EA	0.00	0.00	83.13
	PCB Hazardous Waste, Minimum Charge For Shipment			
	1.00 EA	0.00	0.00	2,134.00
	Load Drums On Disposal Vehicle			
	2.00 EA	1.63	1.22	0.00
	Load Bulk Liq/Sludge Waste Into 55 Gal Drums, Drums Sep			
	2.00 EA	9.71	0.10	0.00
	Drummed PCB Liquids > 100,000 PPM Incin, 55 Gal			
	2.00 EA	0.00	0.00	727.50
	State HTW Disposal Tax/Fee (Drums)			
	2.00 DRM	0.00	0.00	20.00
	Total Capital Costs	11.34	1.32	2,964.63
	Total Commercial Disposal (Incineration)	11.34	1.32	2,964.63
	TOTAL DIRECT COSTS REMEDIAL ACTION	11.34	1.32	2,964.63