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PROJECT EXECUTION PACKAGE FOR TANK CLEANING PIPING REMOVAL AND CONTAMINATED SOIL REMOVAL MILLINGTON SUPPACT TN

12/06/1996

ENVIRONMENTAL DETACHMENT CHARLESTON

PROJECT EXECUTION PACKAGE FOR TANK CLEANING, PIPING REMOVAL AND CONTAMINATED SOIL REMOVAL NAVAL SUPPORT ACTIVITY MEMPHIS, TN

Prepared for:

DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
CHARLESTON SC

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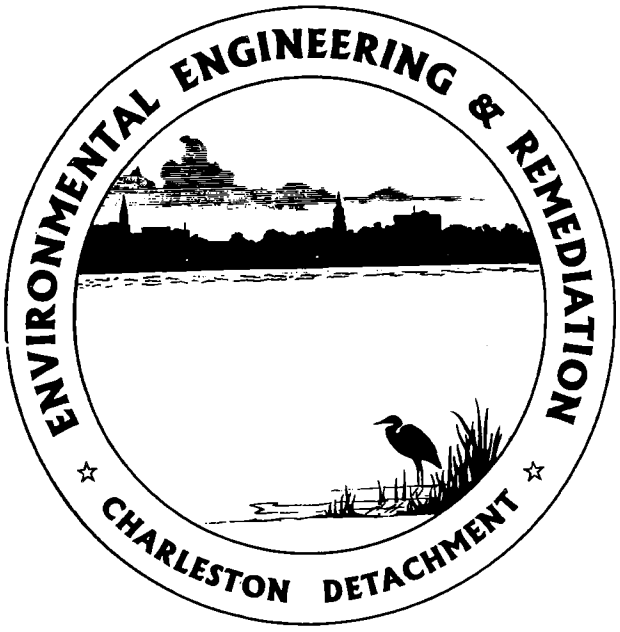
December 6, 1996

PROJECT EXECUTION PACKAGE

NSA MEMPHIS

TANK CLEANING, PIPING REMOVAL, AND CONTAMINATED SOIL REMOVAL



December 6, 1996

Cog Engineer _____ Date 12/6/96

Cog Technical Authority _____ Date 12/6/96

(Approval)

PROJECT EXECUTION PACKAGE - NAVAL SUPPORT ACTIVITY, MEMPHIS

1.0 INTRODUCTION

The Charleston Environmental Engineering and Remediation Detachment (DET) has been tasked by Southern Division Naval Facilities Engineering Command (SOUTHDIV) to provide a Project Execution Package (PEP) for cleaning eight petroleum storage tanks, removal of ancillary piping at two underground storage tanks (UST), and removal of contaminated soil associated with the UST's at the Naval Support Activity (NSA) in Memphis, Tennessee. The work will be performed in two phases. Phase I will clean tanks 1716, 1717, 1719, 1720, 1722, and 1754. Phase II will clean tanks 336 and 337, remove the associated piping, and excavate contaminated soil around the tanks and piping. Also included in this PEP is a trip back to NSA, Memphis to dispose of contaminated soil once a permit has been issued. Enclosure (1) to this package is a detailed cost estimate for Phase I and Phase II work and Enclosure (2) is the Project Schedule for Phase I and II. A Project Execution Plan for Phase I and II is included in the following paragraphs of this document.

2.0 PROJECT EXECUTION PLAN

Project execution will begin with preplanning. This includes preparation of all software, letting all necessary contracts, and mobilization of all equipment and materials. The second part of project execution will be the actual work performed at NSA, Memphis. The final part of project execution will include demobilization of equipment and materials once back at Charleston and evaluation of the work performed.

2.1 Preplanning

The DET will prepare a work plan for all work to be performed at NSA, Memphis. The work plan will be broken down into Phase I work and Phase II work. The work plan will contain a Site Specific Health and Safety Plan (SSHSP). A Comprehensive Health and Safety Plan has been prepared by the DET. Each of these documents will be onsite during performance of all work. The Confined Space Manager for NSA, Memphis will issue the permits for the DET to enter into confined spaces. The DET will provide their own gas free technicians for monitoring the atmospheres in the tanks being worked. The NSA, Memphis Industrial Hygienist will monitor personnel working inside confined spaces.

All equipment and materials required to perform the assigned work will be obtained and mobilized for transport to NSA, Memphis. Any necessary contracts for material and equipment to be provided in the Memphis area will be put in place prior to arrival at NSA, Memphis.

2.2 Phase I

Phase I will include the cleaning of tanks 1716, 1717, 1719, 1720, 1722, and 1754.

2.2.1 Lift Station 1716

1716 is a lift station that collects drainage from a nearby burning pad. The station is 17 feet by 33 feet by 13 feet deep. It is constructed of concrete and is below ground level. The sludge will be pumped out of the station and the walls will be cleaned to the maximum extent possible. This will include removal of all staining on the walls. It may be necessary to sandblast the walls to remove the staining. Oily water will be disposed of by running the system and using the oil water separator.

2.2.2 AST 1717

AST 1717 is a 10,000 gallon above ground storage tank used for storing JP-5 fuel. The manway will be removed, the sludge removed and drummed, the tank cleaned and inspected, and the manway will be reinstalled. This oily water will also be disposed of by running the system.

2.2.3 AST 1720

AST 1720 is a 2,000 gallon above ground storage tank used for storing JP-5 fuel. The manway will be removed, the sludge removed and drummed, the tank cleaned and inspected, and the manway will be reinstalled. This oily water will also be disposed of by running the system.

2.2.4 AST 1754

AST 1754 is a 2,000 gallon above ground storage tank used for storing JP-5 fuel. Since this tank is not at the Carrier deck and it's location does not have services readily available this tank will be disconnected, put on the back of a flatbed truck and cleaned at the NSA oil water separator. The manway will be removed, the sludge removed and drummed, the tank cleaned and inspected, and the manway will be reinstalled. The tank will either be returned to its original location or turned over to the state as determined by NSA Memphis.

2.2.5 AST 1719

AST 1719 is a 50,000 gallon above ground storage tank used for storing JP-5 fuel. The manway will be removed, the sludge removed and drummed, the tank cleaned and inspected, and the manway will be reinstalled. This oily water will also be disposed of by running the system.

2.2.6 Oil Water Separator 1722

1722 is an oil water separator. It is 35 feet by 10 feet by 8 feet deep. It is constructed of concrete and is divided into three compartments. The sludge will be pumped out of the separator and the walls will be cleaned to the maximum extent possible. This will

include removal of all staining on the walls. It may be necessary to sandblast the walls to remove the staining. The outside of the separator will also require cleaning. The oily water will be pumped out and disposed of in another oil water separator.

2.3 Phase II

Phase II will include cleaning and inspecting tanks 336 and 337. It will also include removal of all ancillary piping and removal of contaminated soil.

2.3.1 Tank 336

Tank 336 is a 420,000 gallon underground storage tank used to store JP-5 fuel. The tank is 76 feet in diameter and 13 feet high. There is approximately 7 feet of soil on top of the tank. The sludge will be pumped out of the tank and drummed. There will be an estimated 5000 gallons of sludge in this tank. The sludge will be transported to DRMO and turned over to them for disposal. The DET will not incur any of the disposal cost for the sludge with the exception of the cost of the drums and transportation from the tank site to DRMO. Once all sludge is removed the tank will be cleaned with a degreasing agent and a hot water pressure washer. The oily water will be pumped out of the tank and dumped into the NSA oil water separator. Once clean the tank will be inspected for damage. NSA Memphis will do the final inspection on the tank.

2.3.2 Tank 337

Tank 337 is a 420,000 gallon underground storage tank used to store JP-8 fuel. The tank is 76 feet in diameter and 13 feet high. There is approximately 7 feet of soil on top of the tank. The sludge will be pumped out of the tank and drummed. There will be an estimated 5000 gallons of sludge in this tank. The sludge will be transported to DRMO and turned over to them for disposal. The DET will not incur any of the disposal cost for the sludge with the exception of the cost of the drums and transportation from the tank site to DRMO. Once all sludge is removed the tank will be cleaned with a degreasing agent and a hot water pressure washer. The oily water will be pumped out of the tank and dumped into the NSA oil water separator. Once clean the tank will be inspected for damage. NSA Memphis will do the final inspection on the tank.

2.3.3 Ancillary Equipment

There is approximately 2000 feet of 2 inch piping to remove along with about 600 feet of 10 inch piping. This piping is approximately 3 feet below ground level. The soil will be removed , the pipe cut and removed, and the soil put back in the trench. The soil will not be bermed (except where already determined to be contaminated. See 2.3.4). Along with the underground piping removal the Tank Truck Loading Facility (338) and the Tank Car Unloading and Receiving Facility (349) will have to be dismantled and disposed of. There is also a filter station between the two tanks that will have to be removed. Approximately 100 feet of the piping is located below either concrete or

asphalt. The concrete will have to be removed and at completion of piping/equipment removal the new concrete will be poured.

2.3.4 Excavated Soil

Soil will be excavated from the contaminated sites as indicated in the statement of work. Clean soil will be segregated from contaminated soil based on field screening. Ensafe will pull composite samples of the bermed dirt and once the results have been obtained the contaminated soil will be disposed of and the clean dirt will be returned to the excavation. The amount of dirt removed at these contaminated sites will be based on Ensafe sampling performed at the time of excavation. Satisfactory confirmatory samples will be received prior to backfilling the excavation. The estimate in this PEP is based on 1800 tons of contaminated soil, the amount agreed on at the meeting held in NSA, Memphis on 25 November 1996. The DET will be responsible for disposing of all contaminated soil once NSA obtains the permit. This will entail the DET returning to NSA, Memphis around 60 days after sample results are received and once the permit is issued.

2.4 Evaluation and Tank Cleaning Report

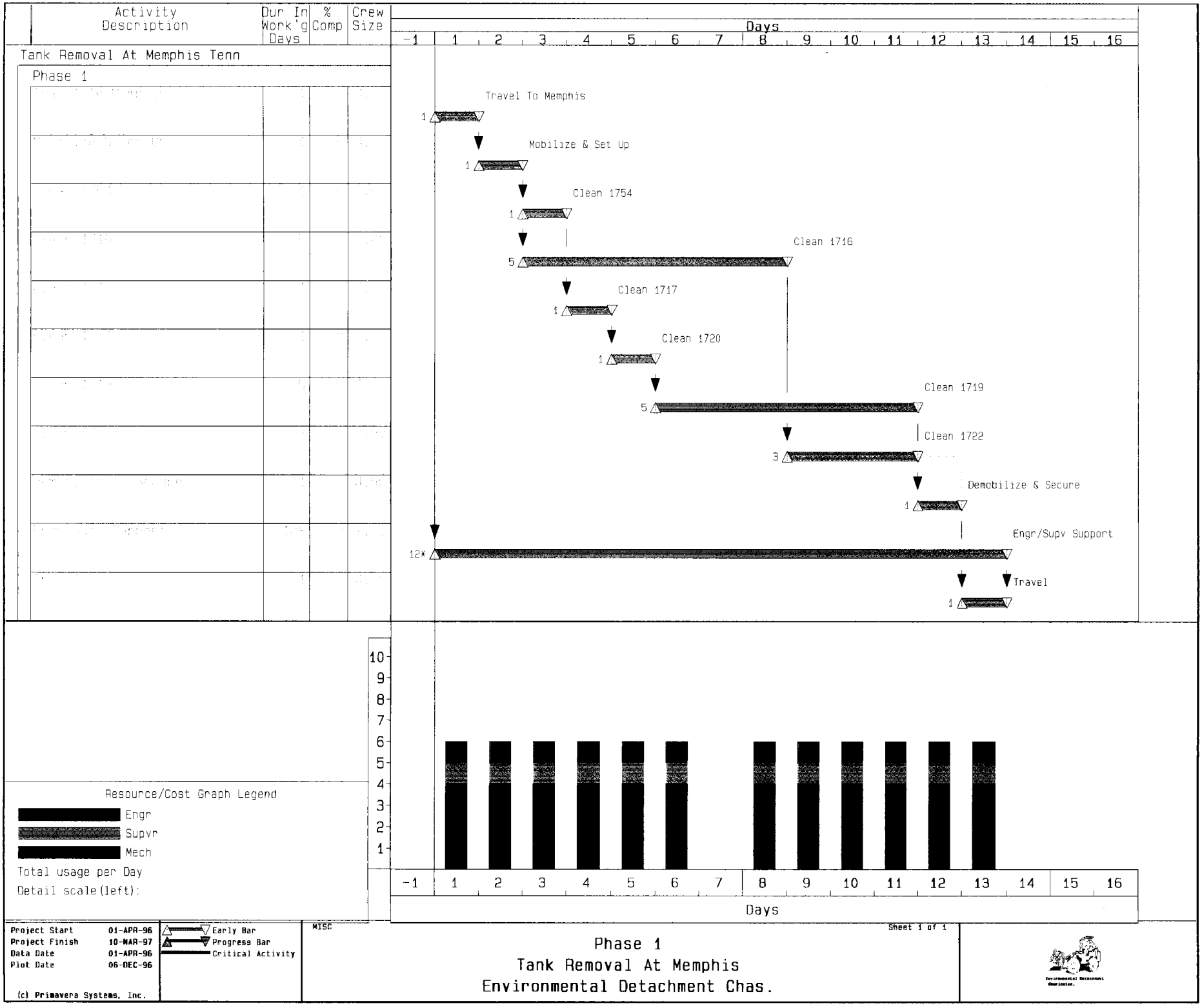
Ensafe will prepare all Closure Reports for this work. The DET will prepare a Tank Cleaning Report for each tank that includes methods of cleaning, cleaning agents used, and results of the inspection. It is noted that the inspection performed by the DET is only to document any obvious damage and not to verify the structural integrity of the tanks. The DET will give NSA, Memphis a daily update on the work being performed.

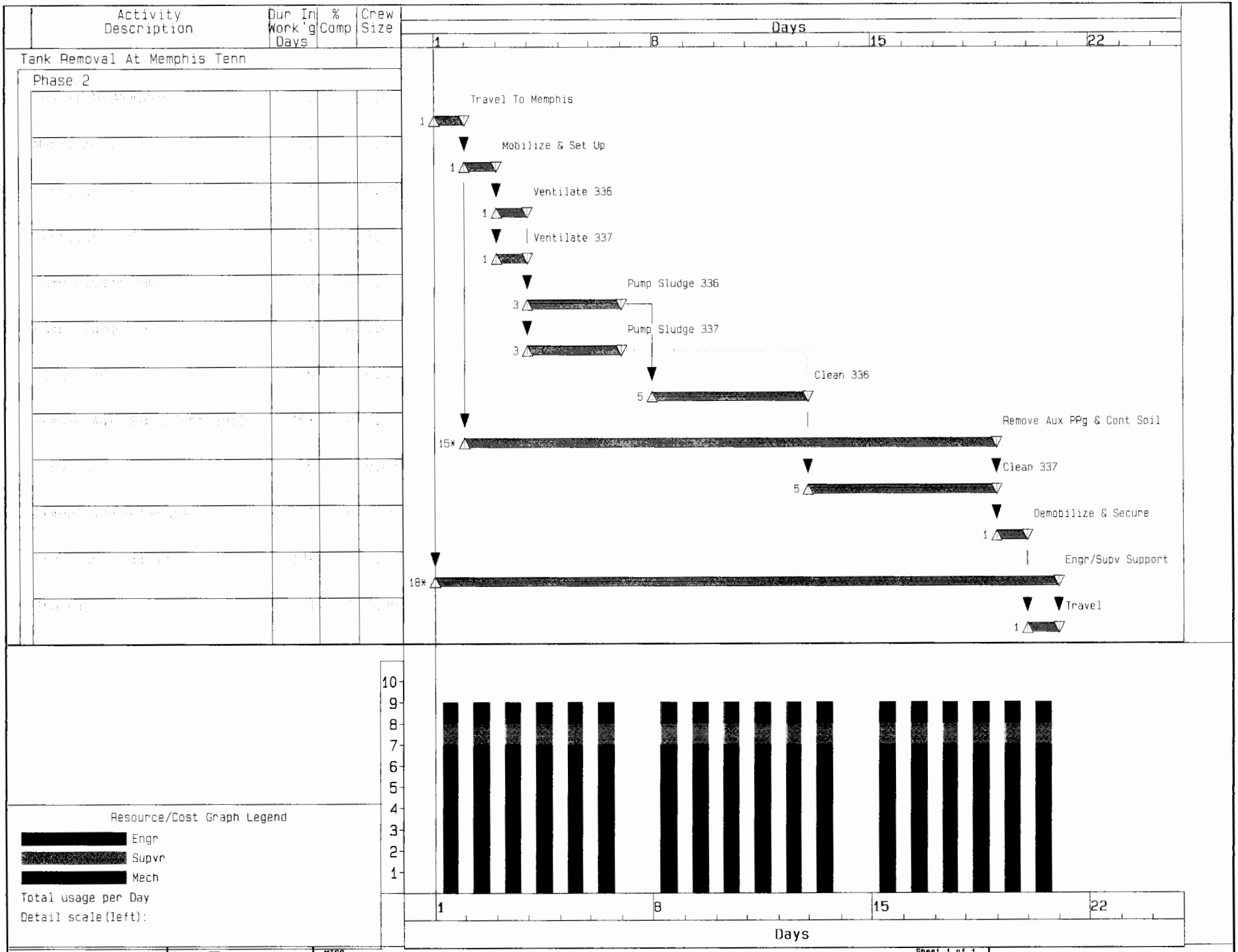
Conclusion

This work will be performed in two phases. Phase I will take an estimated 12 days to complete, Phase II will take an estimated 18 days, and the return trip to dispose of contaminated soil will take approximately 5 days. The total estimated cost for all this work is $233,365.96. This is broken down as follows:

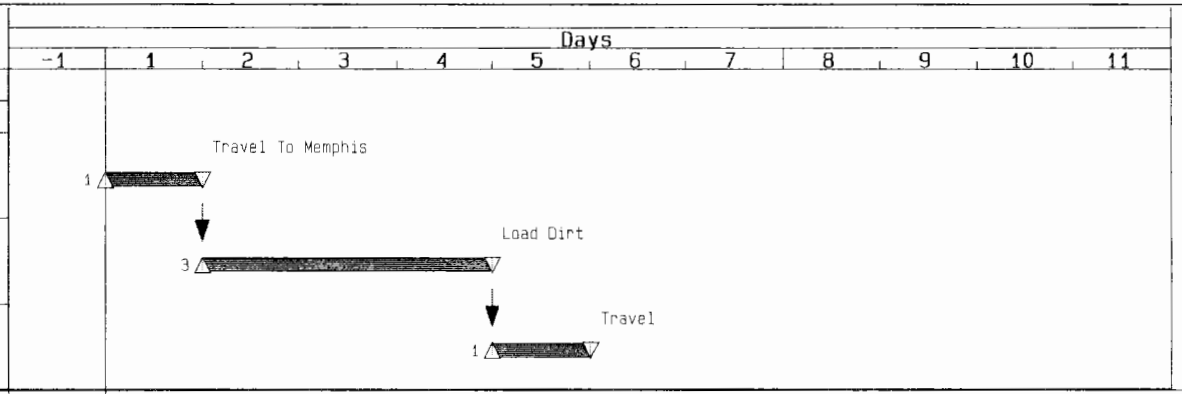
Labor	$103,193.60
Travel/PerDiem	$34,962.00
Materials/Leasing	$46,610.36
Soil Disposal	$48,600.00

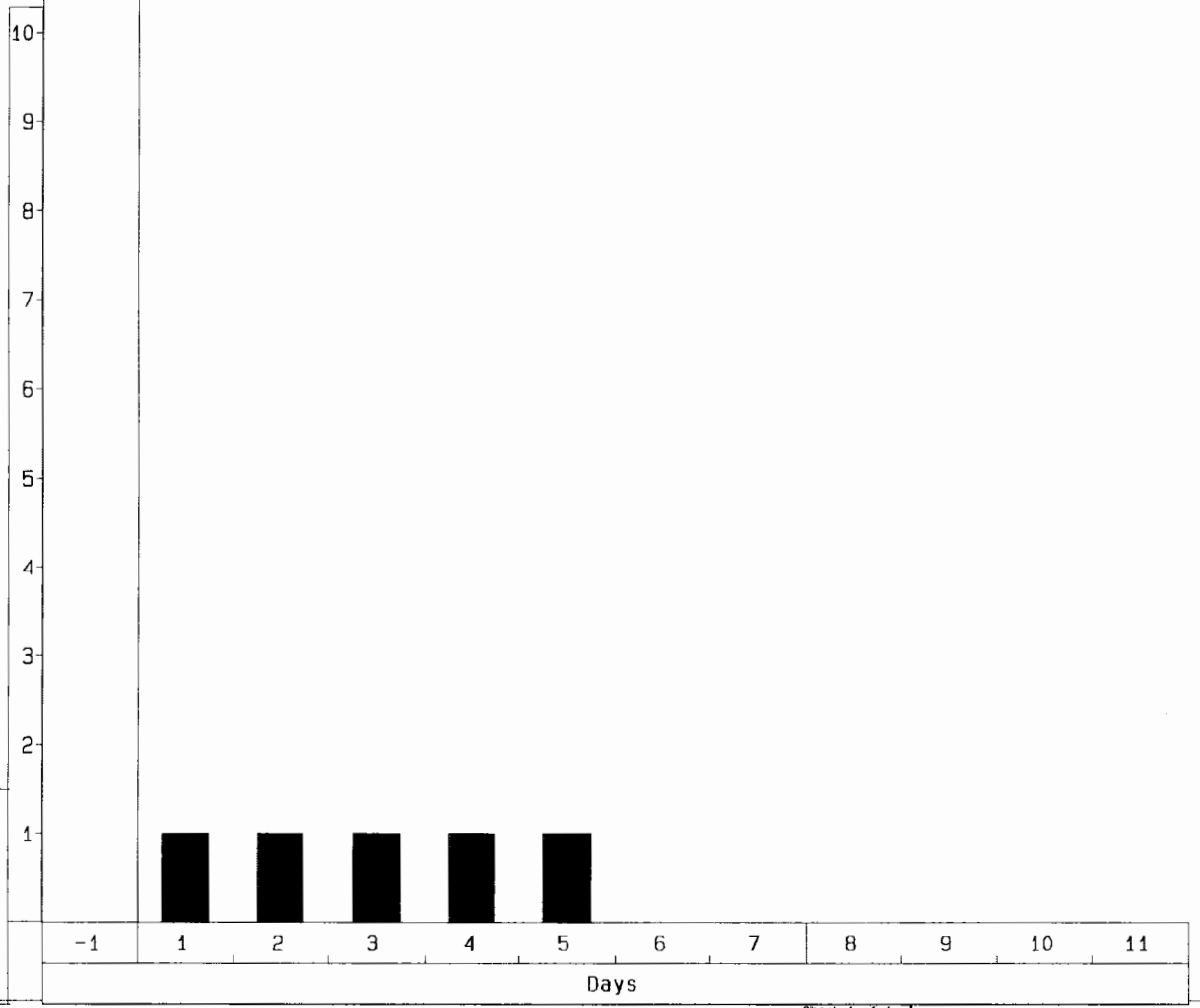
Enclosures (1) and (2) are included as a cost breakdown and schedule for all work to be performed.


Activity Description
Dur In Work'g Days
% Comp
Crew Size
Tank Removal At Memphis Tenn
Phase 1
Days
-1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Travel To Memphis
1
Mobilize & Set Up
1
Clean 1754
1
Clean 1716
5
Clean 1717
1
Clean 1720
1
Clean 1719
5
Clean 1722
3
Demobilize & Secure
1
Engr/Supv Support
12*
Travel
1
Resource/Cost Graph Legend
Engr
Supvr
Mech
Total usage per Day
Detail scale(left):
10 9 8 7 6 5 4 3 2 1
-1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Days
Project Start 01-APR-96
Project Finish 10-MAR-97
Data Date 01-APR-96
Plot Date 06-DEC-96
(c) Primavera Systems, Inc.
Early Bar
Progress Bar
Critical Activity
MISC
Sheet 1 of 1
Phase 1
Tank Removal At Memphis
Environmental Detachment Chas.


Activity Description
Dur In Work'g Days
% Comp
Crew Size
Days
1
8
15
22
Tank Removal At Memphis Tenn
Phase 2
Travel To Memphis
1
Mobilize & Set Up
1
Ventilate 336
1
Ventilate 337
1
Pump Sludge 336
3
Pump Sludge 337
3
Clean 336
5
Remove Aux PPg & Cont Soil
15*
Clean 337
5
Demobilize & Secure
1
Engr/Supv Support
18*
Travel
1
10
9
8
7
6
5
4
3
2
1
Resource/Cost Graph Legend
Engr
Supvr
Mech
Total usage per Day
Detail scale(left):
Project Start 01-APR-96
Project Finish 10-MAR-97
Data Date 01-APR-96
Plot Date 06-DEC-96
(c) Primavera Systems, Inc.
Early Bar
Progress Bar
Critical Activity
MISC
Sheet 1 of 1
Phase 2
Tank Removal At Memphis
Environmental Detachment Chas.

Activity Description	Dur In Work'g Days	% Comp	Crew Size
Tank Removal At Memphis Tenn			
Phase 2A			





Resource/Cost Graph Legend

Engr

Supvr

Mech

Total usage per Day

Detail scale(left):

Project Start	01-APR-96
Project Finish	10-MAR-97
Data Date	01-APR-96
Plot Date	06-DEC-96

Early Bar

Progress Bar

Critical Activity

MISC

Sheet 1 of 1

Phase 2A

Tank Removal At Memphis

Environmental Detachment Chas.