EG&G MOUND-30-04-01---9707070041

Environmental Restoration Program

ACTION MEMORANDUM
ENGINEERING EVALUATION/COST ANALYSIS

POTENTIAL RELEASE SITE 266
RELEASE BLOCK F
THORIUM CONTAMINATED SOIL (AREA 8)

MOUND PLANT
MIAMISBURG, OHIO

June 1997

FINAL

(Revision 1)

Department of Energy
Ohio Field Office

Environmental Restoration Program
EG&G Mound Applied Technologies

#21140

The Mound Core Team
P.O. Box 66
Miamisburg, Ohio 45343-0066

300401 9707070041

June 16, 1998

Reference: Core Team Letter Concerning PRS 266

Dear Stakeholder:

The Core Team recognizes that the Action Memo for the Removal Action for PRS 266 issued in June of 1997 indicated that field work would begin in October, 1997. At the time this information was placed in the Public Reading Room, the new site contractor had already submitted a plan for the site that would complete this removal in FY2002. Currently, the site contractor is revising its plan for the site and, in the process, attempting to accelerate the removal at PRS 266. The results of the rescheduling effort will be available to the Core Team on June 25, 1998. There will be much discussion and some revision of the submitted schedule. Late this summer, the Core Team will be able to provide the schedule for the removal action of PRS 266.

Sincerely,

DOE/MEMP: Arthur W. Kleinrath
Arthur W. Kleinrath, Remedial Project Manager

USEPA: Timothy J. Fischer
Timothy J. Fischer, Remedial Project Manager

OHIO EPA: Brian K. Nickel
Brian K. Nickel, Project Manager

ENVIRONMENTAL RESTORATION PROGRAM

PROPOSED

ACTION MEMORANDUM
ENGINEERING EVALUATION/COST ANALYSIS

POTENTIAL RELEASE SITE 266
RELEASE BLOCK F
THORIUM CONTAMINATED SOIL (AREA 8)

MOUND PLANT
MIAMISBURG, OHIO

JUNE 1997

PREPARED BY:

EG&G Mound Applied Technologies
P.O. Box 3000
Miamisburg, Ohio 45343-3000

for the

U.S. DEPARTMENT OF ENERGY

FINAL
(REVISION ~~1~~ 2)

REVISION LOG

Item	Revision	Description of Change	Date
1.	Final rev 1	Page 2-2, Current Actions, removal has been delayed until FY98 due to limited funding in FY97.	June 1997
2.	Final rev 1	Page 5-4, Description of Alternative Technologies, consideration of Segmented Gate technology.	June 1997
3.	Final rev 1	Page 5-6, Engineering Evaluation/ Cost Analysis (EE/CA), this Action Memo serves as the EE/CA.	June 1997
4.	Final rev 1	Page 5-6, added Section 5.1.3.3, Segmented Gate Technology.	June 1997
5.	Final rev 1	Page 5-8, Project Schedule, schedule was deferred to indicate mobilization and site work to begin in FY98.	June 1997
6.	Final rev 1	Page 5-8, Estimated Cost, cost was revised to reflect most current cost and escalation.	June 1997

CONTENTS

CONTENTS (Cont.)

TABLES

ACRONYMS

AEC	Atomic Energy Commission
AM	Action Memorandum
ARARs	Applicable or Relevant and Appropriate Requirements
BGS	Below Ground Surface
BVA	Buried Valley Aquifer
CERCLA	Comprehensive Environmental- Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
D&D	Decontamination and Decommissioning
DOE	Department of Energy
EE/CA	Engineering Evaluation/Cost Analysis
EPA	U.S. Environmental Protection Agency
ER	Environmental Restoration
FFA	Federal Facilities Agreement
FSP	Field Sampling Plan
ID	Identification
LSA	Low Specific Activity
mrem	millirem
MSL	Mean Sea Level
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NTS	Nevada Test Site
OAC	Ohio Administrative Code
OEPA	Ohio environmental Protection Agency
EU	Operable Unit
OSC	On-Scene Coordinator
OSHA	Occupational Safety and Health Administration
pci/g	picocuries per grain
PRS	Potential Release Site
RCRA	Resource Conservation and Recovery Act
RESRAD	Residual Radioactive Material Program

ACRONYMS (cont.)

RI/FS	Remedial Investigation/Feasibility Study
RSE	Removal Site Evaluation
SARA	Superfund Amendments and Reauthorization Act
SW	Semi-Works
TRU	Transuranic

1. PURPOSE

The U.S. Department of Energy (DOE) is the designated lead agency under the Comprehensive, Environmental Response, Compensation, and Liability Act (CERCLA) and removal actions at the Mound Plant are implemented as non-Superfund, federal-lead actions. DOE provides the On-Scene Coordinator (OSC). Non-Superfund, federal-lead removal actions are not subject to United States Environmental Protection Agency (USEPA) limitations on the OSC ($50,000 authority) and are not subject to National Oil and Hazardous Substances Pollution Contingency Plan (NCP) limitations on removal actions (i.e., $2,000,000 in cost and 12 months in duration).

This Action memorandum (AM) has been completed to document the evaluation of site conditions and to propose the removal action described herein for the Potential Release Site (PRS) 266, Release Block F, Thorium Contaminated Soil (Area 8).

2. SITE CONDITIONS AND BACKGROUND

2.1 SITE DESCRIPTION

This section describes the physical site location, site characteristics, release of contaminants into the environment and the site's National Priorities List (NPL) status.

2.1.1. Physical Location

The Mound Plant is a 306-acre site on the south border of the city of Miamisburg in Montgomery County, Ohio. The site is approximately 10 miles south-southwest of Dayton and 45 miles north of Cincinnati. The specific location of the contamination area is defined in the Potential Release Site (PRS) 266 data package, Release Block F, dated August 14, 1995.

2.1.2. Site Characteristics

The specific site characteristics are described in the PRS 266 data package, Release Block F, dated August 14, 1995.

2.1.3. Release or Threatened Release into the Environment

The release of Thorium in soil greater than the site standard of 5 pCi/g at the surface and 15 pCi/g 15 cm below the surface prompted this removal action.

2.1.4. National Priorities List Status

The EPA placed the Mound Plant in Miamisburg, Ohio on the NPL by publication in the Federal Register on November 21, 1989.

2.2 OTHER ACTIONS TO DATE

The Mound Plant initiated a CERCLA program in 1989, now guided by the agreement between the DOE, Ohio Environmental Protection Agency (OEPA), and EPA. A Federal Facilities Agreement (FFA) under CERCLA Section 120 was executed between DOE, EPA Region V, and OEPA on

October 12, 1990, and was revised on July 15, 1993 (EPA Administrative Docket No. OH 890-008984). The general purposes of this agreement are to:

- Ensure that the environmental impacts associated with past and present activities at the site are thoroughly investigated and appropriate remedial action taken as necessary to protect the public health, welfare, and the environment.

- Establish a procedural framework and- schedule for developing, implementing, maintaining, and monitoring appropriate response actions at the site in accordance with CERCLA, Superfund Amendments and Reauthorization Act (SARA), the NCP, Superfund guidance and policy, and Resource Conservation and Recovery Act (RCRA) guidance and policy.

- Facilitate cooperation, exchange of information, and participation of the parties in such actions.

2.2.1. Previous Removal Actions

No previous removal actions at PRS 266 are known.

2.2.2. Current Actions

This removal action was deferred until FY98 due to limited funding in FY97. Actions to implement this revised schedule for the removal of contaminants associated with PRS 266 are documented in this document.

2.3. STATE AND LOCAL AUTHORITIES' ROLES

2.3.1. State and Local Action to Date

In 1989, as a result of Mound Plant's placement onto the N.L., DOE and USEPA entered into a FFA which specified the manner in which the Mound CERCLA-based Environmental Restoration (ER) program was to be implemented. In 1993, the FFA was amended to include the OEPA. Under the ER program, DOE remains the lead agency.

2.3.2. Potential for Continued State and Local Response

Eventual release of this area for other commercial (non-DOE) use is planned. Periodic environmental monitoring of the area may be required until a final Record of Decision is implemented for the entire Mound site. This monitoring would need to be coordinated with local, state, and federal authorities§.

Current plant-wide environmental monitoring programs will continue until such time as remediation is complete in this and adjacent areas.

3. THREAT TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT

3.1. THREATS TO PUBLIC HEALTH OR WELFARE

The disposal or placement of Thorium in the area has created a potential threat to the public health or welfare.

3.2. THREATS TO THE ENVIRONMENT

The disposal or placement of Thorium in the area has created a potential threat to the environment.

3.2.1. Removal Site Evaluation

The RSE requirements, as outlined under EPA's NCP regulations in 40 CFR 300.415, are, presented throughout this AM/EECA. The source and nature of the release are described in PRS 266 data package. An evaluation by public health agencies has not been performed for this area, and, therefore, is not included in this AM/EECA. The determination of the need for a removal action is outlined in this section, in Table III.1.

As regards to that determination, the NCP includes eight factors that must be considered in determining the appropriateness of a removal action [40 CFR 300.415(b)(2)]. These criteria, as applied for the contamination, are evaluated in Table III. 1.

Table III.1 Evaluation of Removal Action Appropriateness Criteria [40 CFR 300.415(b)(2)]

Criteria	Evaluation
(I) "...potential exposure to nearby human populations, animals, or the food chain..."	The disposal or placement of Thorium in the area has created a potential threat to the public health or welfare by future excavated surface contamination.
(ii) "Actual or potential contamination of drinking water supplies..."	Potential for erosion into water supplies does exist.
(iii) "Hazardous substances or pollutants of contaminants in drums, barrels, tanks, or other bulk storage containers, that may. pose a threat of release;"	None
(iv) "High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;"	The presence of Th-232 down gradient indicates that surface soil erosion is a likely pathway for the potential migration of Th-232
(v) "Weather conditions that may cause hazardous substances to migrate or be released;"	Wind and surface water erosion may cause migration of contaminated soils.
(vi) "Threat of fire or explosion;"	None
(vii) "'The availability of other appropriate federal or state response mechanisms to respond to the release;" and	There are no state mechanisms, no other federal mechanisms (DOE is the designated lead agency at Mound under CERCLA), and no other DOE programs to provide an appropriate response.
(viii) "Other situations or factors that may pose threats to public health or welfare or the environment."	None

4. ENDANGERMENT DETERMINATION

Actual or threatened releases of pollutants and contaminants from this site, if not addressed by implementing the response action selected in this AM/EECA, may present an imminent and substantial endangerment to public health or welfare or the environment.

5. PROPOSED ACTION AND ESTIMATED COSTS

5.1. PROPOSED ACTION

The proposed action, in an effort to mitigate contamination, is the removal, storage, and disposal of contaminated soils consisting of approximately 6,000 cubic yards. The removal will use on-site interim storage and future off-site permanent disposal.

5.1.1. Proposed Action Description

- Removal of approximately 6-8 inches of soil and gravel covering the contaminated soil.
- Sloped excavation of contaminated soil until surface level of Thorium-232 is at 15 pCi/g or less.
- Filling, interim storage, and shipment of Low Specific Activity (LSA) containers.
- Monitoring the soils during excavation
- Disposal of clean soil in the Mound spoils disposal area or placed back into the excavated area.
- Off-site disposal of Thorium contaminated soil (>15 pCi/g).
- Verification sampling to verify that cleanup levels have been met.
- Backfilling and site restoration.

The excavated soils will be loaded into Low Specific Activity (LSA) containers, stored in a Mound Plant interim storage location and disposed of based on analytical results and waste characterization. Soil that is characterized to not have Thorium-232 above 5 pCi/g or hazardous chemicals will be considered "clean" and may be disposed of in the Mound spoils disposal area. Soil that is characterized to have Thorium-232 between 5 pCi/g and 15 pCi/g may be placed back into the excavated area. All soil in the excavated area that remains in the top 15 cm will be less than 5 pCi/g. The contaminated soil (>15 pCi/g) will be transported to Envirocare, in Utah, for disposal.

Groundwater is not expected to be encountered during this removal. The upper 6-8 inches is believed to consist of gravel and soil which was placed over the contaminated soil as a cap.

The soils below the upper 6-8 inches are considered contaminated with Thorium-232. Each bucket of soil will be scanned using field instrumentation per the Mound Manual MD-80036 and the approved Sampling Plan. The sides of the excavation will be vertically shored or laid back to acceptable slips for worker protection. The excavation will be performed using a toothless bucket on a suitable excavator. The excavator will load the soils directly into the storage/disposal containers. The containers will be moved to a temporary staging area located near the area.

Monitoring, consisting of only FIDLER screening, and excavation will proceed to the expected depth of 10-14 BGS. At this level the footprint of the excavation is planned to be approximately 150 by 150 feet (22,500 sq. ft).

Migration of the contamination from its original disposal configuration may have occurred, both vertically and laterally. Modification of the excavation to enable pursuit of a limited amount of migrated contaminated has been allowed for in the selected sloping and excavation methods, and in the number of storage/disposal boxes available for this removal. However, extensive migration of the contamination can only be removed within the available budget, physical constraints of the site, safety considerations, and excavation equipment limitations.

The excavation will be backfilled with clean soils, where necessary. The backfilled soils will be compacted to the extent practical and safe. The area will be restored by seeding/sodding.

Soils encountered in the excavation will be removed until the surface levels of Thorium-232 are at or below 15 pCi/g. This surface will then be covered by placing a minimum of 15 cm of clean soil which contains less than 5 pCi/g Thorium.

5.1.1.1. Rationale, Technical Feasibility, and Effectiveness

The removal action chosen for PRS 266 is necessary for the removal of know contamination and to ensure that migration of the contamination does not occur. The soil placed in the area of PRS 266 represents a volume of high levels of Thorium-232 that can serve as a continuing source of migrating contamination.

5.1.1.2. Monitoring

Health and safety monitoring will be performed throughout the removal action according to standard Mound procedures. Sampling and analysis of excavated soil will be described in more detail in the PRS 266 Removal Action Work Plan.

5.1.1.3. Uncertainties

The major uncertainties at the site are the original quantity and contamination levels of Thorium-232 contaminated soil and the lateral extent of migration. The minor uncertainties include location of abandoned utilities and possible unknown utilities that may exist in the area of excavation.

5.1.1.4. Institutional Controls

DOE will remain in control of the subject area over the near term. However, portions of the Mound Plant may be released to non-DOE uses in the foreseeable future. Enforceable deed restrictions will be in place at the time of transfer in order to ensure future protection of human health and the environment.

5.1.1.5. Soil Treatment/Disposal

The treatment of excavated soils from this removal is not being considered. The contaminated materials from the excavation will be disposed of off-site. All requirements of the disposal site and any other regulations governing the transportation and disposal of contaminated material will be met.

5.1.1.6. Post-Removal Site Control

Post removal site control will be provided by DOE/Mound. See Institutional Controls above.

5.1.1.7. Cross-Media Relationships and Potential Adverse Impacts

The potential cross-media impact associated with the removal action is the potential for unintended release of contaminated materials down gradient and into nearby drainage ditches. Careful monitoring and erosion control will be implemented during the removal action and for the on-site storage of the LSA containers. In addition, potential soil resuspension may cause increased exposure through inhalation. To minimize this impact, dust control techniques will be utilized (e.g., misting, shutdown operations on windy days).

No potential adverse impacts of the removal action have been identified.

5.1.2. Contribution to Future Remedial Actions

To facilitate further assessments in or near the site of the removal action, the exact dimensions of the excavation and the levels of contamination identified and removed will be documented. The excavation will be documented by photographs, record drawings, the OSC report, and other information collected during the removal action to further delineate the limits of the excavation.

Because the Mound Plant is anticipated to be cleaned up by removal actions, this clean-up will be a final remedy for this defined problem. The information obtained, as a result of this removal, will be used in determining the availability for final disposition of the release block and will be subject to review in the release block risk evaluation.

5.1.3. Description of Alternative Technologies

Several alternative technologies were identified and screened for their ability to meet specific criteria for the removal action. Criteria used to screen alternatives include timely response, protection of human health and the environment, effectiveness, implementability, and cost.

Alternative technologies frequently evaluated for CERCLA remediation include institutional controls, containment, collection, treatment, and disposal. Based on the prevailing conditions, the following alternatives (in addition to the proposed alternative of excavation) were developed.

1. No Action
2. Institutional Controls
3. Minimize Disposal Cost utilizing "Segmented Gate" Technology.

The performance capabilities of each alternative with respect to the specific criteria is discussed below.

5.1.3.1. No Action

The "No Action" approach was eliminated from consideration because the need for action has been demonstrated, as necessary, based on the PRS 266 data package.

5.1.3.2. Institutional Controls

Existing Mound Plant institutional controls effectively minimize the potential for contact of the subject contamination with the general public. Implementation of additional institutional controls to minimize the potential for human contact with the existing contamination may not prevent further migration of the contaminants from the source. Also, institutional controls will be difficult to implement, when commercial use of adjacent areas is permitted. Thus, institutional controls were eliminated from further consideration.

5.1.3.3. Segmented Gate Technology

A technology that could result with reduced disposal costs of soil offsite is being considered for this removal. The technology, known as Segmented Gate, has been developed by Thermo Nuclean located in Albuquerque, NM. The Segmented Gate System (SGS) is a combination of sophisticated conveyor systems, computer operated radiation detectors, and segmented gates that precisely remove contamination from feed material that is moving on a conveyor belt. The system works by conveying radioactive contaminated soil under arrays of sensitive radiation detectors. Material on the conveyor belt is 100% assayed and radioactivity content is logged by computer. A minimum amount of "clean" soil is removed with the radioactive contamination, significantly reducing the overall amount of material that requires disposal. The estimated amount of soil that can be diverted, for this removal, is approximately 2400 cubic yards. This would translate to a savings of 40% of the disposal costs or approximately $2,000,000. The system costs for operation for the duration of the removal is estimated at $400,000 which would result with a net savings of approximately $1,600,000.

This technology will be tested on soils from PRS 266. If the results are positive, the segmented gate system will be utilized during this removal. This alternative is not included in the schedule or cost estimate.

5.1.4. Engineering Evaluation/Cost Analysis (EE/CA)

Because this Removal has been deferred until FY98, and that additional alternatives have been addressed, this Action Memorandum contains information to also address the EE/CA.

5.1.5. Applicable, or Relevant and Appropriate Requirements (ARARs)

Mound ARARs for the ER Program have been identified (DOE 1993b). CERCLA regulations require that removal actions comply with ARARs only to the extent practicable.
The following areas have been identified as applicable, or relevant and appropriate to this removal action:

- 49 C.F.R. 172, 173: DOT hazardous material transportation and employee training requirements.

5.1.5.1. Air Quality

- 40 C.F.R. Part 61 Subpart H: National Emissions Standards for Emissions of Radionuclides other than Radon from Department of Energy Facilities.

- Ohio Administrative Code (O.A.C.) 3745-15-07(A): Air Pollution Nuisances Prohibited.

- O.A.C. 3745-17-02 (A,B,C): Particulate Ambient Air Quality Standards

- O.A.C. 3745-17-05: Particulate Non-Degradation Policy

- O.A.C. 3745-17-08: (A)(1), (A)(2), (B),(D): Emission Restrictions for Fugitive Dust

5.1.5.2. To Be Considered

- DOE 5400.5: Radiation protection of the public and environment.

- EPA/540/2-88/002: Technological Approaches to the Cleanup of Radiologically Contaminated Superfund Sites.

- EPA/230/02-89/042: Methods for Evaluating the Attainment of Cleanup Standards.

5.1.5.3. Worker Safety

- 29 C.F.R. Part 1910: Occupational Safety and Health Act OSHA) - General Industry Standards

- 29 C.F.R. Part 1926: OSHA - Safety and Health Standards

- 29 C.F.R. Part 1904: OSHA - Record keeping, Reporting, and Related Regulations

5.1.6. Other Standards and Requirements

Other standards or requirements related to the actual implementation of the response action may be identified subsequently during the design phase and will be incorporated into the Design Work Plan Document.

5.1.7. Project Schedule

The schedule established for planning and implementing the removal action is shown in Figure 5.1.

5.2. ESTIMATED COSTS

The cost estimate to perform the removal action is shown in Table V.I. Costs include the construction activities, all engineering and construction management, waste disposal, and site restoration. The estimate is based on the removal of approximately 6,000 cubic yards of soil. The cost to perform this removal is presented using Envirocare, as the preferred choice for soil disposal.

5FHC266010	PRS 266 Response Action Activities (Hammock)	1,075*	01AUG95A	10JUL98
5FMC266255	NCP Deadline - Final OSC Report	0		26APR99
5FMC266260	Site Considered Releasable	0		10JUL98
5FWC266020	Prepre&Sub PRS/RSE Doc to DOE/EPA(inclds dryrun)	30	01AUG95A	14AUG95A
5FWC266030	PRS Decision Meeting	1	28AUG95A	28AUG95A
5FWC266040	Prepare Summary Recommendation	7	29AUG95A	04SEP95A
5FWC266050	Core Team Concurrence Signatures	1	05SEP95A	05SEP95A
5FWC266060	Stakeholder Review	30	06SEP95A	31OCT95A
5FWC266070	Respond to Stakeholder Comments	20	01NOV95A	30NOV95A
5FWC266080	Prep & Sub Cost Benefit Analysis of Alternatives	30	01DEC95A	18DEC95A
5FWC266090	Prepare & Sub Draft Action Mem (Response Action)	7	18DEC95A	22DEC95A
5FWC266100	Publish Notice of Action	10	02JAN96A	17JAN96A
5FWC266110	DOE/Core Team Review of Draft AM	7	02JAN96A	17JAN96A
5FWC266120	Revision of Draft AM	7	18JAN96A	19FEB96A
5FWC266130	Stakeholder Review (AM)	30	11MAR96A	30APR96
5FWC266140	Prepare & Submit Final Action Memorandum	14	01MAY96	14MAY96
5FWC266150	DOE Final Review of AM	5	15MAY96	19MAY96
5FWC266160	Procurement	45	12FEB96A	19FEB96A
5FWC266170	Prepare & Submit Work Plan (Inc. H&S, QAPP)	75	19FEB96A	05MAY96
5FWC266180	Review Work Plan - Core Team	32	06MAY96	06JUN96
5FWC266190	Respond to Work Plan Comments	30	07JUN96	06JUL96
5FWC266192	Core Team Work Plan Approval	0		06JUL96
5FWC266200	Mobilization, Site Work, & Response Action	208	01OCT97*	26APR98
5FWC266205	Transportation & Disposal	200	08NOV97	26MAY98
5FWC266206	Verification SAP Preparation	7	27APR98	03MAY98
5FWC266207	Verification SAP EG&G/DOE Review & Approve	7	04MAY98	10MAY98
5FWC266208	Verification SAP EPA Review & Approve	14	11MAY98	24MAY98
5FWC266209	Verification Sampling	7	25MAY98	31MAY98
5FWC266210	Prep/Submit OSC & Admin Record Closeout Report	5	27APR98	01MAY98
5FWC266220	DOE/EPA Review OSC Site Closeout Report	20	01JUN98	26JUN98
5FWC266230	Respond to Comments and Distribute - OSC	5	21JUN98	25JUN98
5FWC266240	PRS Decision Meeting	1	30JUN98	30JUN98
5FWC266250	Public Notification of Closeout	10	01JUL98	10JUL98
5FWC266270	PM/Tech Support	1,075*	01AUG95A	10JUL98

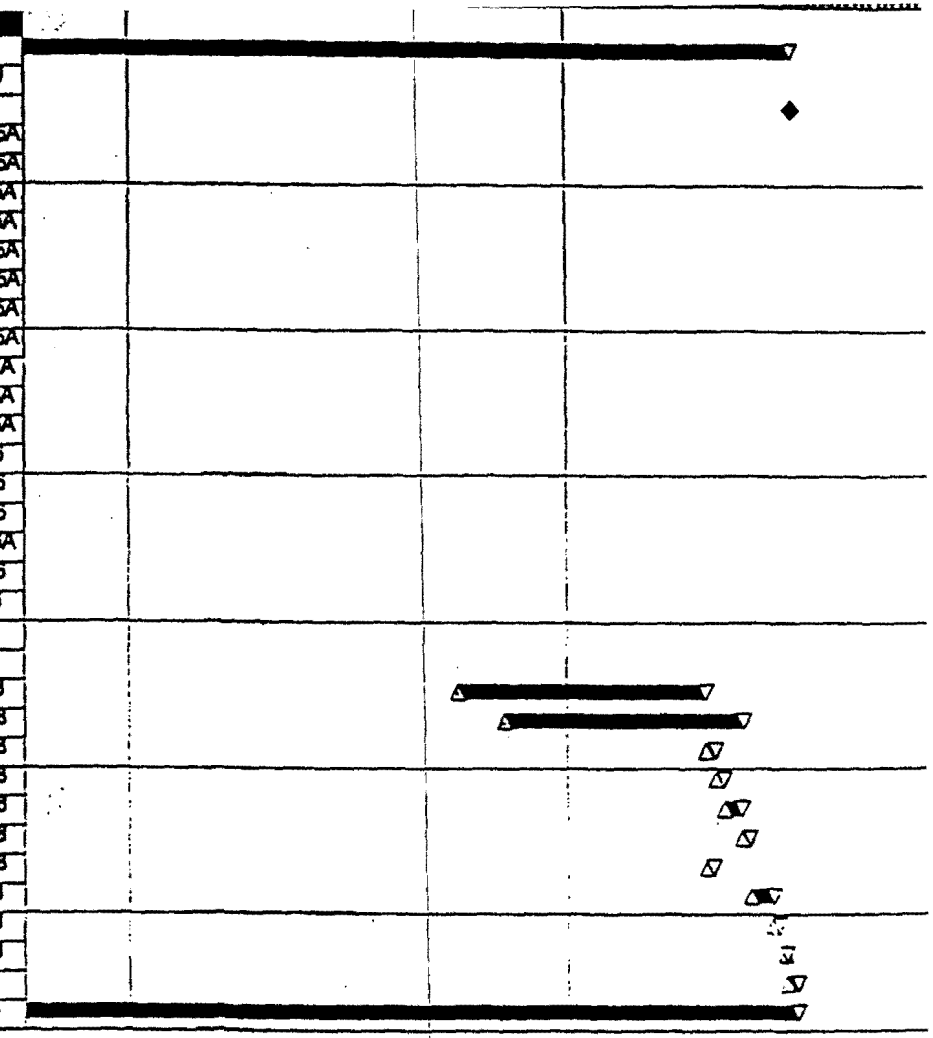

Figure 5.1 Planning and Implementing Schedule.

Project Start 01OCT91
Project Finish 30SEP18
Data Date 25MAR98
Print Date 09DEC98
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Early Bar
Progress Bar
Critical Activity

ERDT

EG&G Mound
Mound ER Program
PRS 266

Sheet 1 of 1

Date | Revision | Checked Approved

TABLE V.1 REMOVAL ACTION COST ESTIMATE

EG&G Mound Applied Tech | Estimating Ext Work Package Estimate C266 | 12-09-96 5:13 pm | Page

WP ID	DESCRIPTION	SEQ	LOCATION	WP QTY	TOTAL COST	COST/UNIT
wc???02	PRS/RSE Document Preparation and Signoff	1			3,383	
wc???04	Prepare Summary Recommendations	55			1,037	
wc???06	Prepare and Submit Closeout Package	106			1,037	
wc???10	Prepare & Submit Draft Action Memorandum	264			4,051	
wc???12	Revise Action Memorandum	315			1,596	
wc???14	Prepare and Submit Final Action	366			4,942	
wc???18	PRS/RSE Document Prep/Mtg (Add'l Assmt)	157			893	
wc???18	PRS/RSE Document Prep/Mtg (Add'l Assmt)	677			893	
wc???30	Cost Benefit Analysis	206			77,576	
wc???32	Work Plans (Inc. H&S and QA Chapters)	417			94,483	
wc???34	Work Plans (Internal Review/Rewrite)	468			18,884	
wc???42	Remove Related Soils	519		11.29 mth	1,841,656	163,122.767/mth
wc???46	Transportation and Disposal (Envirocare)	728			5,057,534	
wc???56	Response Action Close-out Report	575			40,628	
wc???58	Site Close-out Rpt. Respond to Comments	626			8,198	
						7,156,790

ESTIMATE TOTALS

2,494,777	Labor	41,809.022 hrs
581,089	Material	
174,640	Equipment	
3,906,284	Other	
7,156,790		
249,466	Escalation	
7.406,256	TOTAL ESTIMATE	

6. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Contamination in the subject area poses a potential threat to public health and welfare and the environment because (see Table III.1): Erosion of soil from the area may migrate into surface waters. Soil conditions will remain with concentration levels exceeding regulatory limits of 5 pCi/g at the surface and 15 pCi/g cm below the surface.

7. OUTSTANDING POLICY ISSUES

There are currently no outstanding policy issues affecting performance of this removal action.

8. ENFORCEMENT

The core team consisting of DOE, USEPA, and OEPA has agreed on the need to perform the removal. The work described in this document does not create a waiver of any rights under the Federal Facility Agreement, nor is it intended to create a waiver of any rights under the Federal Facility Agreement. The DOE is the sole party responsible for implementing this clean-up. Therefore, DOE is undertaking the role of lead agency, per the CERCLA and NCP, for the performance of this removal action. The funding for this removal action will be through DOE budget authorization and no Superfund monies will be required.

9. RECOMMENDATION

This decision document represents the selected removal action for PRS 266, developed in accordance with CERCLA as amended by SARA, and consistent with the NCP. This decision is based on the administrative record for the site.

Conditions at the site meet the NCP Section 300.415 (b)(2) criteria for a removal and we recommend initiation of the response action.

Approved:

Arthur W. Kleinrath, DOE/MB, Remedial Project Manager — Date: 6/24/97

Brian K. Nickel, Project Manager — OEPA — Date: 6/24/97

Timothy J. Fischer, Remedial Project Manager — USEPA — Date: 6/24/97

10. REFERENCES

USEPA 1990. Superfund Removal Procedures Action memorandum Guidance. Office of Emergency and Remedial Response. U.S. Environmental Protection Agency. December 1990.

Potential Release Site 266 data package, Release Block F, dated August 14, 1995.