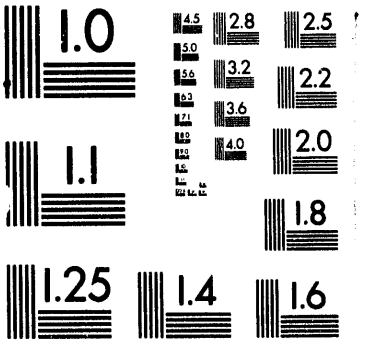
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DOE/RL-92-63
Revision 1

Hanford Site Environmental Restoration Program 1994 Fiscal Year Work Plan

Work Breakdown Structure 2.0

Date Published
December 1993

United States
Department of Energy
P.O. Box 550
Richland, Washington 99352

Approved for Public Release

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DISCLM-2.CHP (1-91)

DOE/RL-92-63, Rev. 1

12/28/93

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GLOSSARY

AAMS	aggregate area management study
AAP	affirmative action plan
ACM	asbestos containing material
Admin	Administration
ADS	activity data sheet
AIP	agreement in principal
AIU	agreement in understanding
ALE	Arid Lands Ecology (Reserve)
ARAR	applicable or relevant and appropriate requirements
ASI	Advanced Sciences, Incorporated
ATSDR	Agency for Toxic Substances and Disease Registry
BAM	baseline analysis matrix
BDAT	best demonstrated available technology
BOP	balance of plant
CAMU	corrective action management unit
CDR	conceptual design report
CERCLA	*Comprehensive Environmental Response, Compensation, and Liability Act of 1980*
CFR	Code of Federal Regulations
CLP	contract laboratory program
CMP	configuration management plan
CRADA	Cooperative Research and Development Agreement
CY	calendar year
D&D	decontamination and decommissioning
DCP	document control plan
DF	disposal facilities
DOE	U.S. Department of Energy
DOE-HQ	U.S. Department of Energy, Headquarters
DOE-RL	U.S. Department of Energy, Richland Operations Office
DOW	description of work
Ecology	Washington State Department of Ecology
EE/CA	engineering evaluation/cost analysis
EGW	200 East Area groundwater
EII	environmental investigation instruction
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
equip	equipment
ER	environmental restoration
ERA	expedited response action
ERB	engineering review board
ERDF	Environmental Restoration Disposal Facility
ERMC	environmental restoration management contractor
ERO	environmental restoration operations
ERPO	environmental restoration program office
ERSDF	environmental restoration storage and disposal facility

GLOSSARY (cont)

FDB	functional design basis
FDC	functional design criteria
FDS	financial data system
FEMP	facility effluent monitoring plan(s)
FFS	focused feasibility study
FS	feasibility study
FSPRD	Final Surplus Production Reactor Decommissioning
FTE	full-time equivalent
FY	fiscal year
FYP	fiscal year plan
FYWP	fiscal year work plan
G&A	general and administrative
GAO	General Accounting Office
GIS	geographic information system
govt	government
HASM	Hanford Analytical Services Management
HEIS	Hanford Environmental Information System
HGP	Hanford Generating Plant
HEHF	Hanford Environmental Health Facility
HLAN	Hanford Local Area Network
HRA	Hanford remedial action
HSAAP	Hanford Site Asbestos Abatement Program
IMS	information management system
IMSP	information management system plan
IROD	interim record of decision
IRM	interim response measure
ISV	in-situ vitrification
JCS	job control system
KEH	Kaiser Engineers Hanford Company
lab	laboratory
LDR	land disposal restrictions
LFI	limited field investigation
LIMS	laboratory information management system
LRPP	long-range planning program
M&O	maintenance and operations
MCL	milestone control log
MDS	milestone description sheets
mgmt	management

GLOSSARY (cont)

MOU	memorandum of understanding
MSA	major system acquisition
MYPP	multi-year program plan
NEPA	*National Environmental Policy Act of 1969*
NOD	notice of deficiency
NPC	notice of project closeout
NPL	National Priorities List
NRDA	National Resource Damage Assessment
NRDWL	nonradioactive dangerous waste landfill
NW	northwest
OMB	Office of Management and Budget
OU	operable unit
PAS	preliminary assessment screening
PFP	plutonium finishing plant
PM&S	program management and support
PNL	Pacific Northwest Laboratory
Pu Conc	plutonium concentration
PUREX	plutonium-uranium extraction
QA	quality assurance
QASR	quality assurance system requirements
QTR	quality training requirement
RA	remedial action
RAM	responsibility assignment matrix
RARA	radiation area remedial action
RCRA	*Resource Conservation and Recovery Act of 1976*
REDOX	reduction oxidation
RFI-CMS	RCRA facility investigation/corrective measure studies
RFP	request for proposal
RI	remedial investigation
RIDS	record inventory disposition schedule
RI/FS	remedial investigation/feasibility study
RL	U.S. Department of Energy, Richland Operations Office
RLID	Richland implementation document
RLP	Richland procurement instruction
RMP	records management plan
RMWDF	radioactive mixed waste disposal facility
ROD	record of decision
S&M	surveillance and maintenance
SEMP	systems engineering management plan
SMS	site management system
SPRD	Surplus Production Reactor Decommissioning
SST	single-shell tank

GLOSSARY (cont)

SWEC	Stone & Webster Engineering Corporation
Sys. Eng	systems engineering
TPA	Tri-Party Agreement
TRU	transuranic
Tri-Party Agreement	*Hanford Federal Facility Agreement and Consent Order*
TSD	treatment, storage, and/or disposal
USACE	U.S. Army Corps of Engineers
USACE/PM	U.S. Army Corps of Engineers/Program Manager
USGS	U.S. Geological Survey
UST	underground storage tank
WAC	Washington Administrative Code
WBS	work breakdown structure
Westinghouse Hanford	Westinghouse Hanford Company
WGW	200 West Area groundwater
WHC	Westinghouse Hanford Company
WIDS	waste information data system

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HANFORD SITE ENVIRONMENTAL RESTORATION PROGRAM
1994 FISCAL YEAR WORK PLAN WORK BREAKDOWN STRUCTURE 2.0

1.0 ENVIRONMENTAL RESTORATION PROGRAM DESCRIPTION

Site Management System (SMS) guidance requires a Fiscal Year Work Plan (FYWP) to be prepared for the Environmental Restoration (ER) Mission Area and all related programs. This revision is a complete update to cover the FY 1994 time period. This document describes the overall ER Mission Area and provides FYWP appendices for each of the following five program areas: Remedial Action (RA); Decontamination and Decommissioning (D&D); Project Management and Support (PM&S); Surveillance and Maintenance (S&M); and Disposal Facilities (DF).

Figure 1-1 depicts the Hanford Site ER documentation hierarchy and the relationship of the FYWP to the other documentation within the ER Program.

1.1 ENVIRONMENTAL RESTORATION MISSION STATEMENT

The U.S. Department of Energy (DOE) is committed to a 30-year goal of completing the assessment and remediation of inactive facilities and sites on the Hanford Site that have been contaminated by various types of waste. Waste generated by Hanford Site nuclear reactors and chemical reprocessing plants has been treated, stored, and/or disposed of in a variety of ways. Some of the waste contains radioactive materials. Some of the waste contains hazardous chemical materials, but most of the waste material is mixed waste--a combination of radioactive material and nonradioactive hazardous material.

The primary mission on the Hanford Site is waste management and environmental restoration and remediation. On May 15, 1989, the DOE, the U.S. Environmental Protection Agency (EPA), and the Washington State Department of Ecology (Ecology) signed the *Hanford Federal Facility Agreement and Consent Order* (Ecology et al. 1992), commonly known as the Tri-Party Agreement, to clean up radioactive and chemical waste at the Hanford Site over the next 30 years. The Tri-Party Agreement contains a blueprint for cleanup and uses enforceable milestones to keep the program on schedule. The ER Program was established in 1987 to plan, execute, and control the remediation efforts. Additionally, the ER Program mission includes the S&M of facilities deactivated by other Hanford Site mission areas and facilities transferred to the surplus facilities management program until D&D has been completed.

The ER Program is assigned to the DOE's Office of Environmental Restoration within the Office of Environmental Restoration and Waste Management. The ER Program is managed by the DOE, Richland Operations Office (DOE-RL) with Westinghouse Hanford Company (Westinghouse Hanford) and the U.S. Army Corps of Engineers (USACE) as major participants. On the Hanford Site, the ER mission is divided into five programs described in the following sections.

1.2 ENVIRONMENTAL RESTORATION MISSION SCOPE

The DOE designated the Hanford ER Program as a major systems acquisition (MSA). The ER mission mandates the management and disposition of Hanford Site past-practice environmental contamination in accordance with the *Hanford Integrated Planning Process, 1992 Hanford Mission Plan* (Hanford Mission Plan) (DOE-RL 1992b). The mission is divided into five components, or summary subprojects, consisting of RA, D&D, PM&S, S&M, and DF. A description of each summary subproject is provided in the following.

Remedial Action is responsible for the management, identification, assessment, and remediation of past-practice waste sites. This includes contaminated soils, contaminated groundwater, and solid waste contained in past-practice units that have been inactive since March 1, 1987. This also requires the identification and completion of interim stabilization actions to mitigate the potential for the expansion of contaminated zones, remediation of single-shell tank (SST) waste structures and residual waste upon conclusion of the SST waste disposal activities, and disposition of nonradioactive underground storage tanks (UST) and certain *Resource Conservation and Recovery Act* (RCRA) *of 1976* treatment, storage, and/or disposal (TSD) units.

The majority of the work entails waste site identification and characterization, feasibility studies for remedial design and cleanup, and actual remediation and/or closure of waste sites. The emphasis is to bring all known waste sites into compliance with federal, state, and local environmental laws and regulations. The Tri-Party Agreement is the major regulatory driver.

Decontamination and Decommissioning is responsible for the S&M of facilities awaiting decommissioning, as well as the actual D&D of facilities, and for ensuring compliance with all applicable regulations, including DOE Orders. In addition to existing surplus facilities management, D&D is responsible for accepting facilities from other DOE-RL mission areas following deactivation of these facilities in compliance with surplus facilities management acceptance criteria.

Specific tasks encompass the following: S&M, assessment and characterization, environmental review, engineering, D&D operations, and closeout of surplus radioactively contaminated facilities. Routine S&M is required for over 100 facilities awaiting decommissioning.

Agreements have been reached during Tri-Party Agreement negotiations on setting milestones and target dates for stabilization and transition of major Hanford D&D facilities. The D&D program acknowledges strong interface with other programs on the Hanford Site to assure safe transition of surplus facilities.

The FY 1993 project included the S&M of hot cells in the 324 and 325 buildings. Beginning in FY 1994, funding for the hot cells will be transferred to Waste Management. Other facilities included in this inventory are shutdown production reactors, chemical separation plants,

and numerous support facilities. The 100-N Reactor complex shutdown activities and S&M will be funded as a part of the D&D Facilities summary subproject. The major regulatory driver is DOE Order 5820.2A.

Program Management and Support addresses the overall program management, management systems development, information and data management, public and media relations, quality assurance (QA), technical support, laboratory and facilities, systems, and equipment upgrades. This includes the staff (professional and support personnel) necessary to maintain QA and cost and schedule control in accordance with DOE policies and regulations, program control, business management, and scheduling, as well as detailed cost estimating support. The major regulatory driver is DOE Order 4700.1A.

Technical support and laboratory, facilities, systems, and equipment upgrades portion of this component include those necessary to achieve baseline milestones for the ER MSA.

Efforts falling within the management systems development include the creation of numerous management system documents; i.e., a multi-year program plan (MYPP), FYWP, configuration management plan (CMP), systems engineering management plan (SEMP), document control plan (DCP), records management plan (RMP), and an information management systems plan (IMSP). The development and implementation of these plans are critical to the program's MSA designation and implementation, and to the effective and efficient management of the program in the years to come.

Information and data management encompass the development and operations of an environmental information storage and retrieval system in support of the Tri-Party Agreement. Public and media relations efforts are in direct support of the Tri-Party Agreement. The Tri-Party Agreement specifically outlines the requirements for a community relations plan and public outreach.

Surveillance and Maintenance entails the postclosure or post-remediation S&M of facilities.

Disposal Facilities funds and manages the planning and construction of facilities required to remediate contaminated sites. The major facilities to be provided in this work scope are the Environmental Restoration Disposal Facility (ERDF) and the Radioactive Mixed Waste Disposal Facility (RMWDF). Both facilities are required for disposal of remediated waste and are cornerstones in the ER Program. The RMWDF is the near-term disposal facility to be used until the ERDF is ready for use.

1.3 1994 FISCAL YEAR PROGRAM OBJECTIVES

The 1994 FY objectives are developed from the ER baseline, previous year FYWP objectives, the *Hanford Site Environmental Restoration Project Plan* (DOE-RL 1993), and DOE planning guidance.

The following are FY 1994 objectives for the ER Program:

- Ensure the safety of operations
- Plan and meet enforceable Tri-Party Agreement, U.S. Department of Energy-Headquarters (DOE-HQ), and DOE-RL milestones
- Comply with laws and regulations intended to protect human health and the environment
- Manage all radioactive, hazardous, mixed, and sanitary waste in a manner that protects human health and the environment
- Develop and implement programs and projects that minimize the generation of waste by material and product substitutions, by recycling, by administrative controls, and by stimulating the development of more modern materials processing methods
- Support the Defense Program, Nuclear Energy, Energy Research, Waste Operations, and other DOE missions
- Execute a strong QA program to improve the efficiency and effectiveness of ER Programs and document achievement of QA requirements
- Base planned growth of individual programs on priorities, consistent with the program technical baseline from the MYPP and project plan
- Reduce overhead and infrastructure costs
- Complete projects underway in FY 1994 on schedule, unless delays are consistent with priorities
- Consider the placement of work in the private sector, whenever practical
- Support the ongoing commitments to Washington State, the Indian Nations, and the overall Hanford Site integrated planning effort, i.e., long-range planning program (LRPP)
- Identify roles and required resources for each participant in program documents.
- Plan program management and other level of effort activities in accordance with the guidance provided in this document. Other activities will be baselined (technical, cost, schedule) through completion
- Plan past-practice activities that have approved work plans to meet the milestones of the current approved Tri-Party Agreement. All other

past-practice activities should be planned in accordance with scope that is being renegotiated with the regulators, the EPA, and Ecology

- Consider the infrastructure required to support the current and recently negotiated scopes of work in planning upgrades to facilities and equipment
- Execute Program Management in compliance with Richland Implementation Documents (RLIDs) and Richland Procurement Instructions (RLPs)
- Establish productivity improvement targets
- Provide near-term disposal capabilities (e.g., RMWDF) to support scheduled interim remediation actions and emergency response actions
- Complete definition of long-range disposal requirements and proceed with facility designs (e.g., ERDF).

1.4 1994 FISCAL YEAR PROGRAM PRIORITIES

Specific ER priorities are established annually by the Hanford Site ER MSA project team. Additionally, specific priorities regarding facility decommissioning are established by using prioritization criteria outlined in the *Defense Decontamination and Decommissioning (D&D) Program Overview Manual* (DOE-RL 1988).

1.4.1 Overall Priorities

Overall priorities for the ER Program include the following:

- Ensure safety of operations
- Meet near-term Tri-Party Agreement milestones
- Comply with other environmental, federal, state, and local regulations
- Maintain a minimum required infrastructure
- Conduct S&M of inactive contaminated ground sites and shut down facilities
- Ensure a safe, viable, and responsive program by providing adequate project management
- Remediate operable units in accordance with the latest Tri-Party Agreement negotiations
- Stabilize contaminated surface sites in accordance with the *Hanford Site Surface Soil Radioactive Contamination Control Plan* (WHC 1993)

- Complete RCRA closures
- Complete D&D of ER baseline facilities
- Complete conceptual design report of ERDF, a proposed enforceable Tri-Party Agreement milestone, and begin design (unfunded)
- Complete near-term disposal facility (RMWDF).

1.4.2 Specific Priorities

Table 1-1 provides a list of specific priorities. The priorities are presented by activity data sheet (ADS) number.

1.5 FISCAL YEAR 1994 PROGRAM ASSUMPTIONS AND CONSTRAINTS

The FY 1994 assumptions and constraints are developed from the ER baseline and current year Westinghouse Hanford and DOE-RL guidance.

1.5.1 Assumptions and Constraints

The following are assumptions and constraints for the FY 1994 ER Program.

1.5.1.1 Environmental Restoration Management Contractor and U.S. Army Corps of Engineers Assumptions and Constraints. The following are the assumptions and constraints for the Environmental Restoration Management Contractor (ERMC) and the USACE.

- An ERMC will be awarded. Westinghouse Hanford will assist in the transition and there will be no adverse schedule or cost impact, assuming transition is within the allotted FY 1993 carryover dollars.
- The USACE will be responsible for the management of USACE activities, those of USACE contractors, and the activities of other contractors performing under USACE direction.
- The ERMC will use Westinghouse Hanford, Pacific Northwest Laboratory (PNL), and Kaiser Engineers Hanford (KEH), as necessary to maintain schedule continuity and Tri-Party Agreement milestones.
- The ERMC and the USACE will supply critical bargaining unit labor (e.g., health physics technicians) as needed to supplement onsite resources.
- The ERMC and the USACE will supply critical services (e.g., well-drilling and laboratories) as needed to supplement onsite resources.

1.5.1.2 Other Hanford Site-Specific Assumptions. Other Hanford Site-specific assumptions are as follows.

- Either Westinghouse Hanford or the ERMC will be the major participant responsible for the overall program management effort.

- The Hanford remedial action (HRA) environmental impact statement (EIS), currently scheduled to reach a record of decision in FY 1996, will document formal resolution of issues concerning the potential future use of the waste areas within the ER Program, such that the ER workscope can proceed without impact.

- Until the HRA-EIS record of decision (ROD) is published, resolution of *National Environmental Policy Act* (NEPA) *of 1969* requirements and future use of the Hanford Site will be determined on a case-by-case basis.

- Current remediation technologies and strategies will be sufficient for remediation activities.

- Nuclear facility safety requirements will apply to ER activities.

- The Hanford Site ER Project will generate large volumes of waste that will require onsite disposal.

- Near-term disposal capability (RMWDF) will be provided to support scheduled ER activities.

- Site characterization, environmental baseline, and other activities required to support design and construction of the ERDF will be provided.

- The goal of the ER Program is to remediate all sites and facilities currently identified in the ER Program by FY 2018.

- Skill sources, laboratory support, analytical capabilities, and equipment will be available when needed.

- The RCRA closure activities will be based on the Tri-Party Agreement milestone commitments and RCRA closure plans as submitted to Ecology and revised in accordance with the notice of deficiency (NOD) review process.

- Non-SST USTs will be managed in accordance with the Washington Administrative Code (WAC) 173-360.

- Reviews will occur that cannot be anticipated or planned. The support of these reviews by Westinghouse Hanford might impact ongoing work.

- Basic Ordering Agreement and other remediation support subcontracts will be available October 1, 1994 to meet milestones.

1.5.1.3 Regulatory Compliance Assumptions and Constraints--General. General regulatory compliance assumptions and constraints are as follows.

- Current laws, orders, regulations, and Hanford Site policies significantly will not be changed.

- There will be no significant new laws, orders, regulations, and Hanford Site policies.

- No drastically different interpretations or legal precedents will occur for current agreements.

- The Hanford Site assumes that the highest priority agreement is the Tri-Party Agreement.

1.5.1.4 Regulatory Compliance Assumptions and Constraints--Federal. Federal regulatory compliance assumptions and constraints are as follows.

- The DOE Order 5440.1E and 10 Code of Federal Regulations (CFR) 1021 will continue to be implemented for the NEPA process.

- The Tri-Party Agreement required reviews and approvals performed by EPA Region 10 and DOE-HQ will not adversely constrain implementation of ER Program activities.

- Modifications to DOE policies and land disposal restrictions (LDR) that will permit disposal or treatment of ER-generated waste on the Hanford Site will be developed as appropriate.

1.5.1.5 Regulatory Compliance Assumptions and Constraints--State. General regulatory compliance assumptions and constraints are as follows.

- Washington State will continue to have primacy for dangerous waste requirements but not for the requirements of the *Hazardous and Solid Waste Amendments of 1984*.

- Tri-Party Agreement required reviews and approvals performed by Washington State will not adversely constrain implementation of ER Program activities.

1.5.1.6 Regulatory Compliance Assumptions and Constraints--Third Party. The Tri-Party Agreement will take precedence over all other third-party agreements.

1.5.1.7 Regulatory Compliance Assumptions and Constraints--Hanford Site-Specific. Hanford Site-Specific regulatory compliance assumptions and constraints are as follows.

- Current institutional control of the Hanford Site by the DOE will remain in force

- No future audit or inspection team findings will result in significant, new compliance requirements.

1.5.1.8 Budget and Project Baseline Assumptions and Constraints. Budget and project baseline assumptions and constraints are as follows.

- The FY 1994 baseline reflects a constrained case as directed by the Office of Management and Budget (OMB).
- The ER MSA baseline will be implemented.
- New DOE requirements will not significantly affect project scope, cost, or schedules.
- Budget guidance will be developed and issued in sufficient time to allow for budget planning.
- Adequate funding will be provided to the regulators to support oversight of the ER Program.
- Project schedules might be constrained by funding guidance.
- Project scope, as defined by the Tri-Party Agreement, will not be changed significantly.
- No significant additional costs or surcharges will be imposed by regulatory agencies or other outside organizations.
- Scope is based on currently known waste sites and the extent of groundwater contamination.
- Funding for FY 1994 is $217,070,000.
- Funding for FY 1993 will be carried over into FY 1994.

1.5.2 Impacts

Based on current reviews, there are no anticipated impacts because of the limitation of FY 1994 funding.

1.6 MAJOR DEVIATIONS FROM THE BASELINE PROGRAM SUMMARY

Major deviations between the FYWP and the baseline are identified in Section 4.0, Table 4-3. Section 1.5 of the respective appendix contain the specific narrative for these deviations.

1.7 PROGRAM LOGIC

The Hanford ER Program Project Logic Diagram, Logic Diagram 1-1, illustrates the summary subprojects within the ER Mission. Interfaces among the summary subprojects are shown as well as the functional elements anticipated for each summary subproject. The summary subprojects shown are:

RA, excluding SSTs; D&D; PM&S; S&M; and DF. The SST Closure Subproject, while residing within the RA summary subproject, is illustrated separately on the diagram because of the complexity of the challenges inherent within this set of remedial actions.

The project logic describes the general sequence in which the steps or phases of the project must be completed to meet the baseline objectives. In summary, the Hanford Site ER Program logic includes gaining consensus on future site use, publishing the HRA-EIS, completing past-practice strategy, D&D, the RCRA closures, construction of a disposal facility, and implementation of a large-scale remediation approach to overall cleanup.

This section and the logic diagram contain the ER roadmap that reflects the logic of the various portions of the ER Program activities. Additional information on the roadmapping process is documented in the ER program roadmap (DOE-RL 1992a).

The activities represented by this diagram include the RCRA closures, remedial investigation/feasibility studies (RI/FS), and RCRA facility investigation/corrective measure studies (RFI/CMS), D&D, SST programs, and UST programs. The basis and assumptions used to prepare these diagrams are as follows.

- The diagrams were prepared to reflect each process from origination to end, in relatively simple terms.
- A Sitewide overview of past-practice investigations of 78 OUs is depicted.
- The past-practice process is in the early stages and is continuing to evolve.

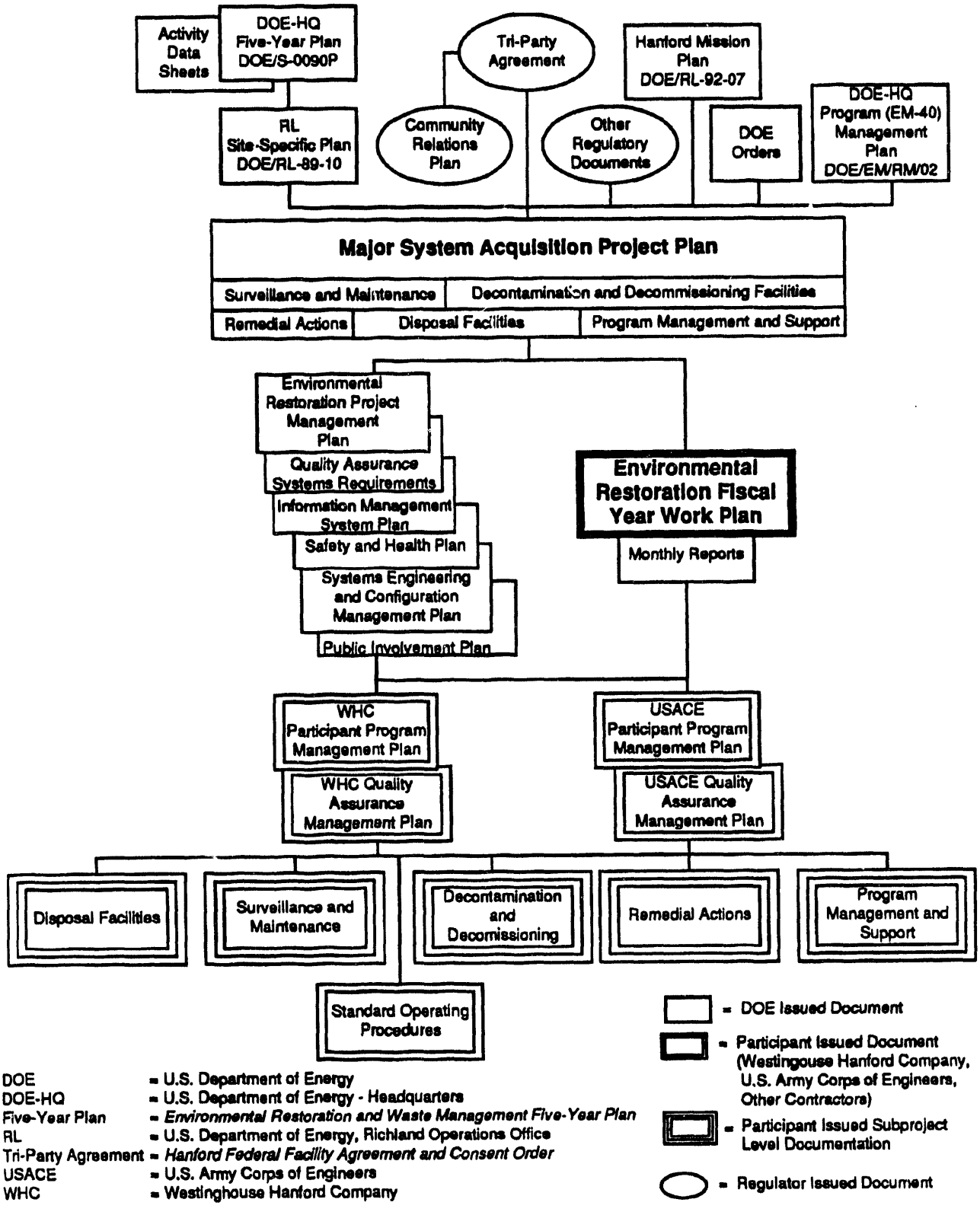
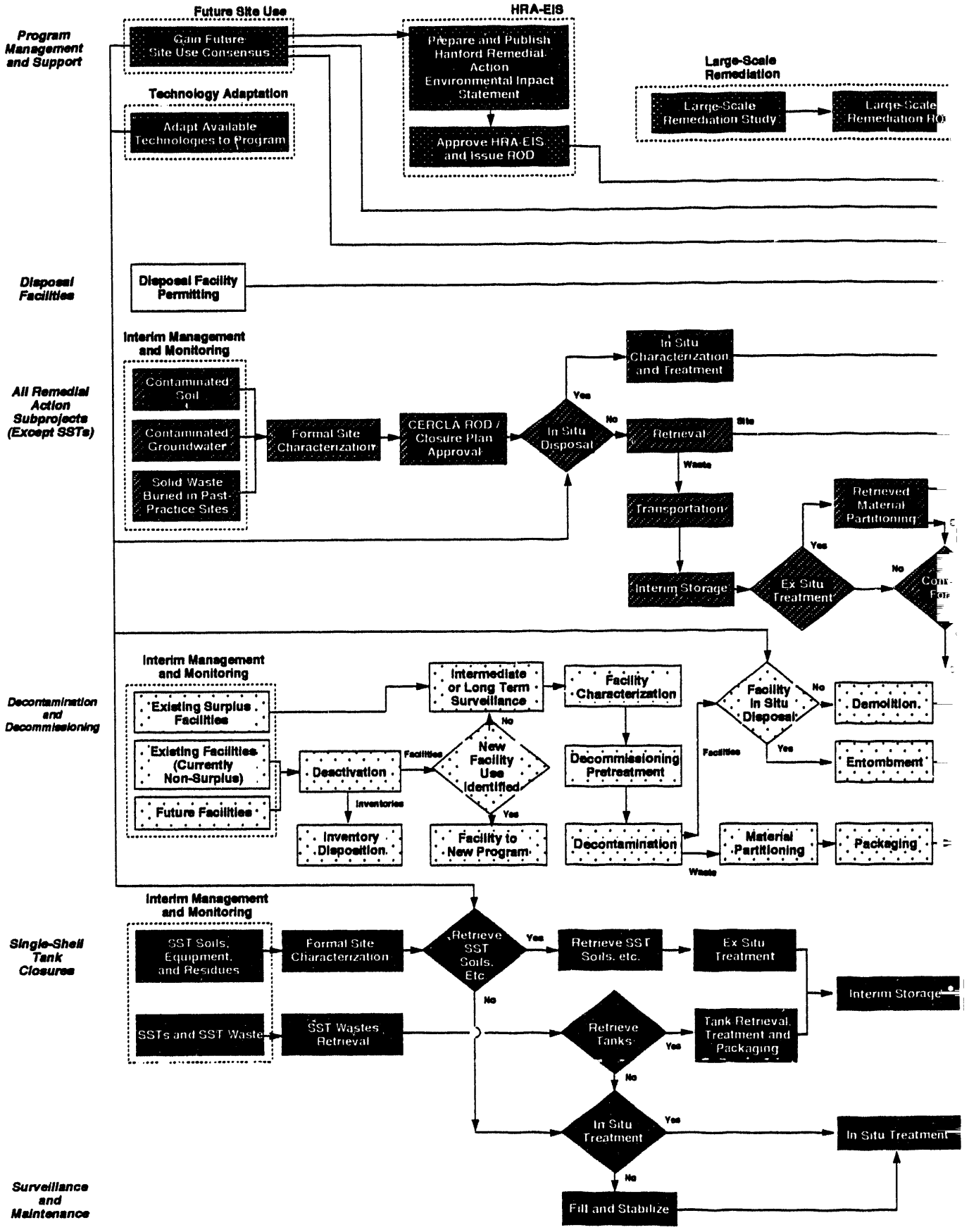
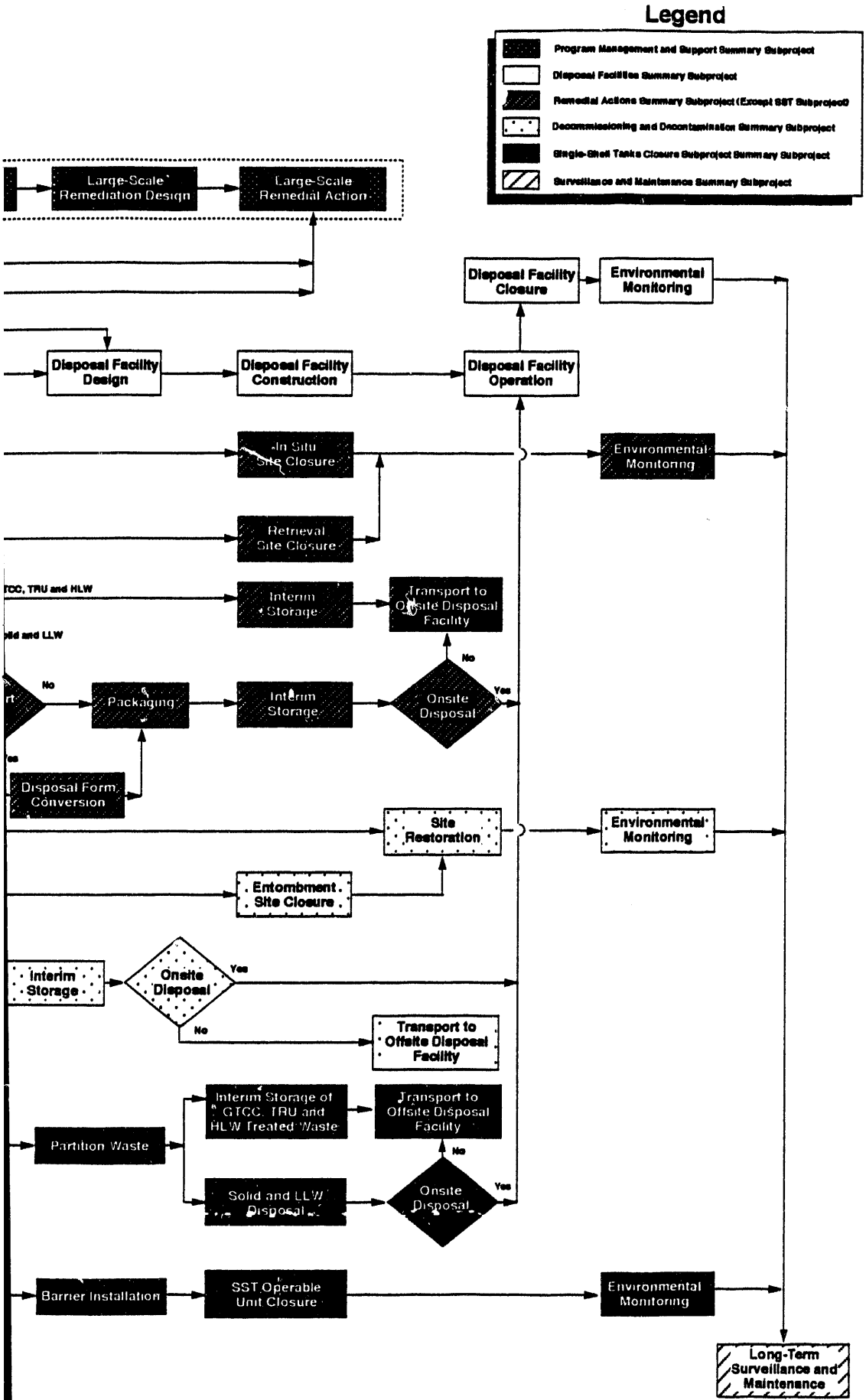


Figure 1-1. Hanford Site Environmental Restoration Documentation Hierarchy.


Program Management and Support
Future Site Use
Gain Future Site Use Consensus
HRA-EIS
Prepare and Publish Hanford Remedial Action Environmental Impact Statement
Approve HRA-EIS and Issue ROD
Large-Scale Remediation
Large-Scale Remediation Study
Technology Adaptation
Adapt Available Technologies to Program
Disposal Facilities
Disposal Facility Permitting
All Remedial Action Subprojects (Except SSTs)
Interim Management and Monitoring
Contaminated Soil
Contaminated Groundwater
Solid Waste Buried in Past Practice Sites
Formal Site Characterization
CERCLA ROD / Closure Plan Approval
In Situ Disposal
Yes
No
In Situ Characterization and Treatment
Retrieval
Site
Waste
Transportation
Interim Storage
Ex Situ Treatment
Retrieved Material Partitioning
Decontamination and Decommissioning
Interim Management and Monitoring
Existing Surplus Facilities
Existing Facilities (Currently Non-Surplus)
Future Facilities
Deactivation
Facilities
Inventories
Inventory Disposition
Intermediate or Long Term Surveillance
New Facility Use Identified
Facility to New Program
Facility Characterization
Decommissioning Pretreatment
Decontamination
Facility In Situ Disposal
Demolition
Entombment
Material Partitioning
Packaging
Single-Shell Tank Closures
Interim Management and Monitoring
SST Soils, Equipment, and Residues
SSTs and SST Waste
Formal Site Characterization
SST Wastes Retrieval
Retrieve SST Soils, Etc
Retrieve SST Soils, etc.
Ex Situ Treatment
Retrieve Tanks
Tank Retrieval, Treatment and Packaging
Interim Storage
In Situ Treatment
Fill and Stabilize
Surveillance and Maintenance



Logic Diagram 1-1. Hanford Environmental Restoration Program Logic Diagram.

Table 1-1. Hanford Site Environmental Restoration Fiscal Year 1994 Priority List. (sheet 1 of 2)

Priority	ADS #	Description	WHC	USACE	RL	Total Budget
1	3510	S&M 100 Area Common Activities D&D Assessment	$6,928	$0	$0	$6,928
2	3520	S&M 200 Area Common Activities D&D Assessment	$3,746	$0	$0	$3,746
3	3400	Program Management RA and Quality Assurance and RL	$11,744	$3,320	$7,572	$22,636
4	3410	Program Management and Support D&D	$1,125	$0	$0	$1,125
5	3400	HRA-EIS	$1,191	$0	$1,900	$3,091
6	3010	RARA Surveillance and Vegetation Management	$4,319	$0	$0	$4,319
7	3500	Asbestos Abatement	$2,085	$0	$0	$2,085
8	3010	Acreage Decontamination and Stabilization	$2,537	$0	$0	$2,537
9	3235	200-ZP-2 ERA Implementation - Carbon Tetrachloride	$5,719	$0	$0	$5,719
10	3125	100-NR-2 ERA Design - N Springs	$1,791	$0	$0	$1,791
11	3300	300-IU-1 ERA Design - 618-11	$28	$0	$0	$28
12	3105	ERA Implementation - Riverland Wash Pit	$197	$0	$0	$197
13	3390	1100-EM - Remediation	$0	$7,583	$0	$7,583
14	3520	200 Area D&D - Assessment (232-Z and 232-S)	$3,047	$0	$0	$3,047
15	3300	300-FF-1 Remediation	$0	$0	$0	$0
16	3300	300-FF - Assessment (300-FF-1 and 300-FF-2)	$3,813	$0	$0	$3,813
17	3200	200-BP-1 Remediation	$2,355	$0	$0	$2,355
18	3300	300-FF-5 Assessment	$1,188	$0	$0	$1,188
19	3600	N Reactor	$20,963	$0	$0	$20,963
20	3400	General Support	$3,385	$0	$0	$3,385
21	3400	Program Management RA and RL/State/Tribal Governments	$5,650	$0	$4,920	$10,570
22	3510	100 Area D&D - Remediation	$3,114	$0	$0	$3,114
23	3120	100-HR-1 Assessment	$397	$0	$0	$397
24	3120	100-HR-3 Assessment and ERA Pickling Acid Crib	$3,698	$0	$0	$3,698
25	3100	100-DR-1 Assessment	$815	$0	$0	$815
26	3105	100-BC-1 - Assessment	$1,956	$0	$0	$1,956
27	3105	100-BC-5 Assessment	$1,250	$0	$0	$1,250
28	3110	100-KR-1 Assessment	$470	$0	$0	$470
29	3110	100-KR-4 Assessment	$694	$0	$0	$694
30	3125	100-NR-1 Assessment	$463	$0	$0	$463
31	3125	100-NR-2 Assessment	$869	$0	$0	$869
32	3115	100-FR-1 Assessment	$471	$0	$0	$471
33	3115	100-FR-3 Assessment	$957	$0	$0	$957
34	3120	100 NPL Common Activities	$12,915	$0	$0	$12,915
35	3020	RCRA Closures	$3,896	$0	$0	$3,896
36	3400	QA Self-Assessment Program Development	$1,323	$0	$0	$1,323
37	3400	Permanent Isolation Barrier Development	$2,974	$0	$0	$2,974
38	3400	Facilities, Systems, and Equipment Support	$10,843	$0	$0	$10,843
39	3020	RCRA 100-NR	$430	$0	$0	$430
40	3230	200-UP-2 Assessment	$7,117	$0	$0	$7,117
41	3105	100-BC-2 Assessment	$466	$0	$0	$466
42	3230	200-UP-1 Assessment	$4,477	$0	$0	$4,477
43	3120	100-HR-2 Assessment	$754	$0	$0	$754
44	3235	200-ZP-1	$4,058	$0	$0	$4,058
45	3100	100-DR-2 Assessment	$578	$0	$0	$578
46	3200	200-BP-5 Assessment	$4,781	$0	$0	$4,781
47	3110	100-KR-2 Assessment	$920	$0	$0	$920
48	3200	200-BP-11 Assessment	$523	$0	$0	$523
49	3200	200-BP-8 Assessment and 200 NPL Common Activities	$592	$0	$0	$592
50	3115	100-IU-3 Remediation (North Slope)	$2,972	$1,976	$0	$4,948

Table 1-1. Hanford Site Environmental Restoration Fiscal Year 1994 Priority List. (sheet 2 of 2)

Priority	ADS #	Description	WHC	USACE	RL	Total Budget
51	3400	Technology Adaptations	$2,234	$1,664	$1,270	$5,168
52	3400	Facilities, Systems, and Equipment Support (CENRTC)	$4,377	$0	$0	$4,377
53	3400	Laboratory Support	$4,824	$0	$0	$4,824
54	3010	UST Removal/Regulatory Compliance	$486	$0	$0	$486
55	3700	Disposal Facilities	$5,156	$3,844	$0	$12,000
56	3210	200-PO-1 Assessment	$297	$0	$0	$297
57	3210	200-PO-5 Assessment	$0	$0	$0	$0
58	3400	Permanent Isolation Barrier Development	$1,202	$0	$0	$1,202
59	3200	200-BP - Assessment (200-BP-1 and 200-BP-4)	$3,007	$0	$0	$3,007
60	3225	200-TP-1 Assessment	$0	$0	$0	$0
61	3610	Reactor Engineering D&D Remediation	$2,048	$0	$0	$2,048
62	3000	Single-Shell Tank Closures	$408	$0	$0	$408
		Richland Environmental Restoration Project	$183,021	$18,387	$15,662	$217,070

ADS# = activity data sheet number
CENRTC = capital equipment not related to construction
D&D = decontamination and decommissioning
EIS = environmental impact statement
ERA = expedited response action
HRA = Hanford remedial actions
NPL = "National Priorities List"
QA = Quality Assurance
RA = remedial actions
RARA = radiation area remedial actions
RCRA = Resource Conservation and Recovery Act of 1976
RL = U.S. Department of Energy, Richland Operations Office
S&M = surveillance and maintenance
USACE = U.S. Army Corps of Engineers
UST = Underground Storage Tank
WHC = Westinghouse Hanford Company

2.0 MISSION TECHNICAL BASELINE

The technical baseline section consists of graphics and tables displaying the work breakdown structure (WBS) and the responsibility assignment matrix (RAM) for the ER Mission.

2.1 SUMMARY LEVEL GRAPHIC

Figure 2-1 depicts the Mission-level WBS to the subproject level. A cross-reference among the various WBS numbering sequences including the DOE-HQ WBS (1.4.10.1), the Hanford Site WBS (2.0), and the Hanford Site WBS (E) is shown.

2.2 WORK BREAKDOWN STRUCTURE DICTIONARY

The WBS Dictionary is developed to the cost account level in the Part-I Index, Table 2-1. The complete WBS structure, including outyear activities, is displayed in an effort to portray the range of effort for these activities. The activities that are not part of the FY 1994 work scope are shaded to differentiate the FY efforts from the total work scope. Applicable pages of the Part I-Index also reside in the respective program appendices.

Table 2-2 contains the WBS Dictionary, Part II-Element Definition sheet for the Mission level. The WBS Dictionary, Part II-Element Definition for the MSA activity level is included in the applicable program appendices and are prepared only for the activities that are within the FY 1994 workscope.

2.3 RESPONSIBILITY ASSIGNMENT MATRIX

The RAM, Table 2-3, is depicted to the MSA subproject level for the ER Mission. The program level matrices are included in the respective program appendices, from the MSA subproject level through the cost account level. The RAM is developed only for activities that are within the FY 1994 workscope.

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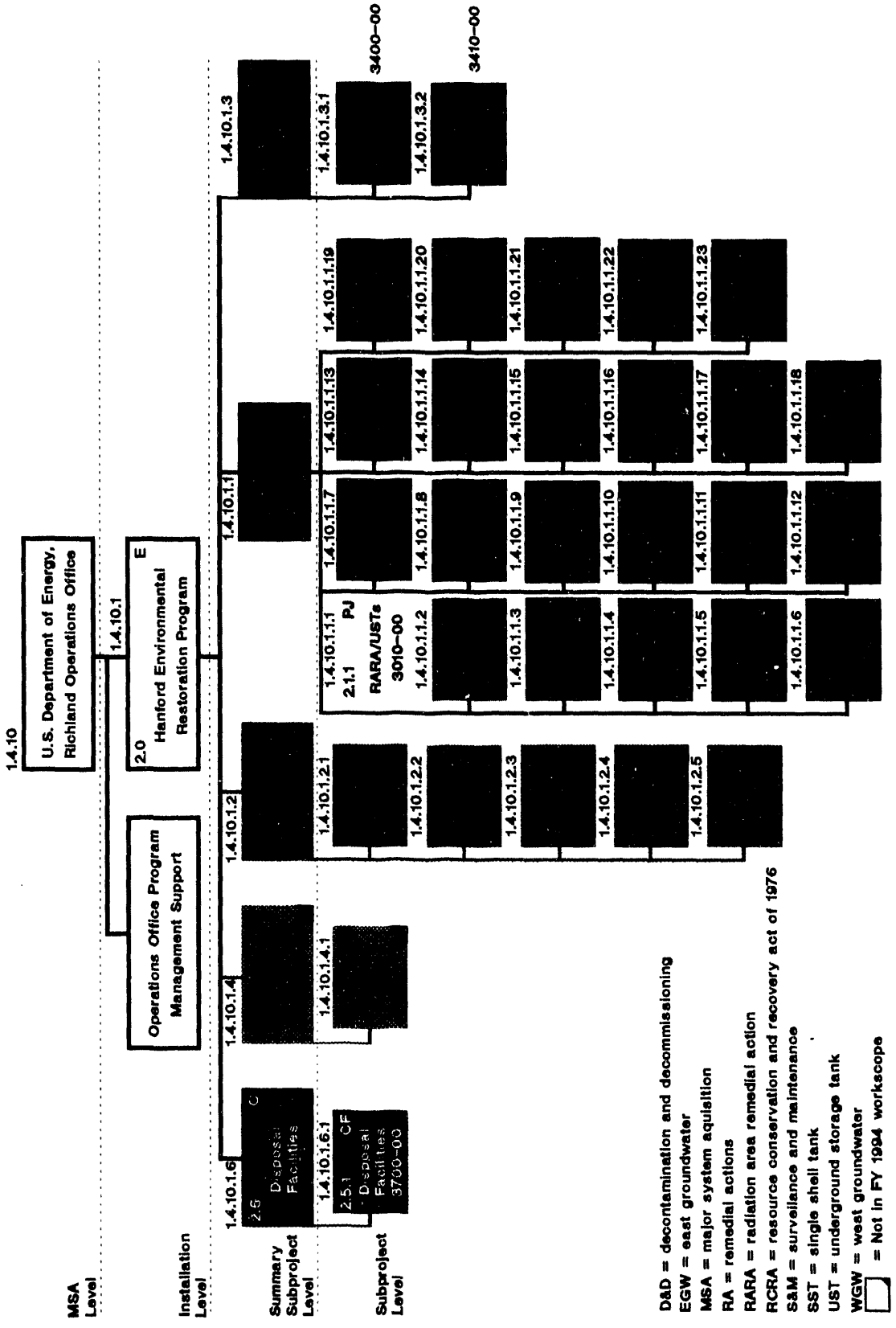

Figure 2-1. Mission Level Work Breakdown Structure.

U. S. DEPARTMENT OF ENERGY

Table 2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
PART I - INDEX

DOE F1332.10
(11-84)

FORM APPROVED
OMB NO. 1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
1	X						Hanford Environmental Restoration	1.4.10.1	(E)		2.0	
2		X					Disposal Facilities	1.4.10.1.6	(C)		2.5	
3			X				Disposal Facilities	1.4.10.1.6.1	(CF)	EW201030	2.5.1	3700
4				X			Long-Term Disposal Facilities and Equipment - ERDF	1.4.10.1.6.1.1	(CF1)	EW201030	2.5.1.1	3700
5					X		Technical Support and Engineering	1.4.10.1.6.1.1.1	(CF11)	EW2010302	2.5.1.1.20	3700
6						X	Program Management and Administrative	1.4.10.1.6.1.1.1.1	(CF111)	EW2010302	2.5.1.1.20.1	3700
7						X	Project Definition and Technical Engineering	1.4.10.1.6.1.1.1.2	(CF112)	EW2010302	2.5.1.1.20.2	3700
8						X	Regulatory Documentation	1.4.10.1.6.1.1.1.3	(CF113)	EW2010302	2.5.1.1.20.3	3700
9						X	Operational Readiness	1.4.10.1.6.1.1.1.4	(CF114)	EW2010302	2.5.1.1.20.4	3700
10					X		Facilities Design and Construction-USACE	1.4.10.1.6.1.1.2	(CF12)	EW2010302	2.5.1.1.21	3700
11						X	Construction Management-USACE	1.4.10.1.6.1.1.2.1	(CF121)	EW2010302	2.5.1.1.21.1	3700
12						X	Engineering Studies-USACE	1.4.10.1.6.1.1.2.2	(CF122)	EW2010302	2.5.1.1.21.2	3700
13						X	Conceptual Design-USACE	1.4.10.1.6.1.1.2.3	(CF123)	EW2010302	2.5.1.1.21.3	3700
13a						X	Definitive Design-USACE	1.4.10.1.6.1.1.2.4	7CF124	EW2010302	2.5.1.1.21.4	3700
13b						X	Construction-USACE	1.4.10.1.6.1.1.2.5	7CF125	EW2010302	2.5.1.1.21.5	3700
14				X			Near-Term Disposal Facilities and Equipment	1.4.10.1.6.1.2	(CF2)	EW2010302	2.5.1.2	3700
15					X		Disposal Facility, W-025	1.4.10.1.6.1.2.1	(CF21)	EW2010302	2.5.1.2.25	3700
16						X	Project Management and Support	1.4.10.1.6.1.2.1.1	(CF211)	EW2010302	2.5.1.2.25.1	3700
17						X	Design	1.4.10.1.6.1.2.1.2	7CF212	EW2010302	2.5.1.2.25.2	3700
17a						X	Construction	1.4.10.1.6.1.2.1.3	7CF213	EW2010302	2.5.1.2.25.3	3700
17b						X	Operational Readiness	1.4.10.1.6.1.2.1.4	(CF214)	EW2010302	2.5.1.2.25.4	3700
18					X		Disposal Facility, W-025A	1.4.10.1.6.1.2.2	(CF22)	EW2010302	2.5.1.2.26	3700
19						X	Project Managemnt and Support	1.4.10.1.6.1.2.2.1	(CF221)	EW2010302	2.5.1.2.26.1	3700
20						X	Design	1.4.10.1.6.1.2.2.2	7CF222	EW2010302	2.5.1.2.26.2	3700
20a						X	Construction	1.4.10.1.6.1.2.2.3	7CF223	EW2010302	2.5.1.2.26.3	3700
20b						X	Operational Readiness	1.4.10.1.6.1.2.2.4	(CF224)	EW2010302	2.5.1.2.26.4	3700
21					X		Future Disposal Facility	1.4.10.1.6.1.2.3	(CF23)	EW2010302	2.5.1.2.27	3700
21a						X	Future Trench, W-025B	1.4.10.1.6.1.2.3.1	(CF231)	EW2010302	2.5.1.2.27.1	3700
22		X					Surveillance and Maintenance	1.4.10.1.4	(S)		2.4	
23			X				Facility Surveillance and Maintenance	1.4.10.1.4.1	(SM)	EW201040	2.4.1	3800
24				X			S&M 100 Areas	1.4.10.1.4.1.1	(SM1)	EW201040	2.4.1.1	3800
25				X			S&M 200 Areas	1.4.10.1.4.1.2	(SM2)	EW201040	2.4.1.2	3800
26				X			S&M 300 Area	1.4.10.1.4.1.3	(SM3)	EW201040	2.4.1.3	3800
27				X			S&M 1100 Area	1.4.10.1.4.1.4	(SM4)	EW201040	2.4.1.4	3800
28		X					Decontamination and Decommissioning	1.4.10.1.2	(U)		2.2	
29			X				Asbestos Abatement	1.4.10.1.2.1	(UV)	EW201040	2.2.1	3500
30				X			Asbestos Abatement Common Activities	1.4.10.1.2.1.1	(UV1)	EW2010401	2.2.1.1	3500

U. S. DEPARTMENT OF ENERGY

Table 2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
PART I - INDEX

DOE F1332.10
(11-84)

FORM APPROVED
OMB NO. 1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
31					X		Assessment	1.4.10.1.2.1.1.1	(UV11)	EW2010401	2.2.1.1.10	3500
32					X		Remediation	1.4.10.1.2.1.1.2	(UV12)	EW2010402	2.2.1.1.20	3500
33						X	Asbestos Abatement	1.4.10.1.2.1.1.2.1	(UV121)	EW2010401	2.2.1.1.20.1	3500
34			X				100 Areas D&D	1.4.10.1.2.2	(UB)	EW201040	2.2.2	3510
35				X			100 Areas Common Activities	1.4.10.1.2.2.1	(UB1)	EW201040	2.2.2.1	3510
36					X		Assessment	1.4.10.1.2.2.1.1	(UB11)	EW2010401	2.2.2.1.10	3510
37						X	S&M 100 Areas Common Activities	1.4.10.1.2.2.1.1.1	(UB111)	EW2010401	2.2.2.1.10.1	3510
38						X	100/200 Risk Assessment Upgrades	1.4.10.1.2.2.1.1.2	(UB112)	EW2010401	2.2.2.1.10.2	3510
38a						X	Effluent Pipeline ERA	1.4.10.1.2.2.1.1.5	(UB115)	EW2010401	2.2.2.1.10.5	3510
39					X		Remediation	1.4.10.1.2.2.1.2	(UB12)	EW2010402	2.2.2.1.20	3510
40						X	100/200 Areas Risk Assessment	1.4.10.1.2.2.1.2.1	(UB121)	EW2010402	2.2.2.1.20.1	3510
41						X	Reactor Engineering	1.4.10.1.2.2.1.2.2	(UB122)	EW2010402	2.2.2.1.20.2	3510
42						X	Transporter and Equipment	1.4.10.1.2.2.1.2.3	(UB123)	EW2010402	2.2.2.1.20.3	3510
43						X	105-F/H Basins	1.4.10.1.2.2.1.2.4	(UB124)	EW2010402	2.2.2.1.20.4	3510
44						X	100 Areas Ancillary Facility Remediation	1.4.10.1.2.2.1.2.5	(UB125)	EW2010402	2.2.2.1.20.5	3510
45						X	100 Areas Riverline Remediation	1.4.10.1.2.2.1.2.6	(UB126)	EW2010402	2.2.2.1.20.6	3510
46				X			D&D 100-BC-1	1.4.10.1.2.2.2	(UB2)	EW2010401	2.2.2.2	3510
47					X		Assessment	1.4.10.1.2.2.2.1	(UB21)	EW2010401	2.2.2.2.10	3510
48						X	105-B Reactor Assessment	1.4.10.1.2.2.2.1.1	(UB211)	EW2010401	2.2.2.2.10.1	3510
49						X	185/190-B Ancillary Facilities	1.4.10.1.2.2.2.1.2	(UB212)	EW2010401	2.2.2.2.10.2	3510
50					X		Remediation	1.4.10.1.2.2.2.2	(UB22)	EW2010402	2.2.2.2.20	3510
51						X	105-B Reactor Remediation	1.4.10.1.2.2.2.2.1	(UB221)	EW2010402	2.2.2.2.20.1	3510
52						X	185/190-B Ancillary Facilities	1.4.10.1.2.2.2.2.2	(UB222)	EW2010402	2.2.2.2.20.2	3510
53				X			D&D 100-BC-3	1.4.10.1.2.2.3	(UB3)	EW201040	2.2.2.3	3510
54					X		Assessment	1.4.10.1.2.2.3.1	(UB31)	EW2010401	2.2.2.3.10	3510
55						X	105-C Reactor	1.4.10.1.2.2.3.1.1	(UB311)	EW2010401	2.2.2.3.10.1	3510
56						X	Ancillary Facilites	1.4.10.1.2.2.3.1.2	(UB312)	EW2010401	2.2.2.3.10.2	3510
57					X		Remediation	1.4.10.1.2.2.3.2	(UB32)	EW2010402	2.2.2.3.20	3510
58						X	105-C Reactor	1.4.10.1.2.2.3.2.1	(UB321)	EW2010402	2.2.2.3.20.1	3510
59						X	190-C Ancillary Facilities	1.4.10.1.2.2.3.2.2	(UB322)	EW2010402	2.2.2.3.20.2	3510
60				X			D&D 100-DR-1	1.4.10.1.2.2.4	(UB4)	EW201040	2.2.2.4	3510
61					X		Assessment	1.4.10.1.2.2.4.1	(UB41)	EW2010401	2.2.2.4.10	3510
62						X	105-D/116-D Assessment	1.4.10.1.2.2.4.1.1	(UB411)	EW2010401	2.2.2.4.10.1	3510
63						X	Ancillary Facilities	1.4.10.1.2.2.4.1.2	(UB412)	EW2010401	2.2.2.4.10.2	3510
64					X		Remediation	1.4.10.1.2.2.4.2	(UB42)	EW2010402	2.2.2.4.20	3510
65						X	105-D Reactor	1.4.10.1.2.2.4.2.1	(UB421)	EW2010402	2.2.2.4.20.1	3510
66						X	185/189/190-D/116-D Ancillary	1.4.10.1.2.2.4.2.2	(UB422)	EW2010402	2.2.2.4.20.2	3510
67				X			D&D 100-DR-2	1.4.10.1.2.2.5	(UB5)	EW201040	2.2.2.5	3510
68					X		Assessment	1.4.10.1.2.2.5.1	(UB51)	EW2010401	2.2.2.5.10	3510
69						X	105-DR/116-DR	1.4.10.1.2.2.5.1.1	(UB511)	EW2010401	2.2.2.5.10.1	3510
70						X	Ancillary Facilities	1.4.10.1.2.2.5.1.2	(UB512)	EW2010401	2.2.2.5.10.2	3510
71					X		Remediation	1.4.10.1.2.2.5.2	(UB52)	EW2010402	2.2.2.5.20	3510
72						X	105-DR/116-DR	1.4.10.1.2.2.5.2.1	(UB521)	EW2010402	2.2.2.5.20.1	3510
73						X	Ancillary Facilities	1.4.10.1.2.2.5.2.2	(UB522)	EW2010402	2.2.2.5.20.2	3510
74				X			D&D 100-FR-1	1.4.10.1.2.2.6	(UB6)	EW201040	2.2.2.6	3510

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Table 2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
PART I - INDEX

DOE F1332.10
(11-84)

FORM APPROVED
OMB NO. 1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
75					X		Assessment	1.4.10.1.2.2.6.1	(UB61)	EW2010401	2.2.2.6.10	3510
76						X	105-F Reactor	1.4.10.1.2.2.6.1.1	(UB611)	EW2010401	2.2.2.6.10.1	3510
77						X	Ancillary Facilities	1.4.10.1.2.2.6.1.2	(UB612)	EW2010401	2.2.2.6.10.2	3510
78					X		Remediation	1.4.10.1.2.2.6.2	(UB62)	EW2010402	2.2.2.6.20	3510
79						X	105-F Reactor	1.4.10.1.2.2.6.2.1	(UB621)	EW2010402	2.2.2.6.20.1	3510
80						X	Ancillary Facilites	1.4.10.1.2.2.6.2.2	(UB622)	EW2010402	2.2.2.6.20.2	3510
81				X			D&D 100-HR-1	1.4.10.1.2.2.7	(UB7)	EW201040	2.2.2.7	3510
82					X		Assesment	1.4.10.1.2.2.7.1	(UB71)	EW2010401	2.2.2.7.10	3510
83						X	105-H Reactor	1.4.10.1.2.2.7.1.1	(UB711)	EW2010401	2.2.2.7.10.1	3510
84						X	Ancillary Facilities	1.4.10.1.2.2.7.1.2	(UB712)	EW2010401	2.2.2.7.10.2	3510
85					X		Remediation	1.4.10.1.2.2.7.2	(UB72)	EW2010402	2.2.2.7.20	3510
86						X	105-H Reactor	1.4.10.1.2.2.7.2.1	(UB721)	EW2010402	2.2.2.7.20.1	3510
87						X	Ancillary Facilities	1.4.10.1.2.2.7.2.2	(UB722)	EW2010402	2.2.2.7.20.2	3510
88				X			D&D 100-HR-2	1.4.10.1.2.2.8	(UB8)	EW201040	2.2.2.8	3510
89					X		Assessment	1.4.10.1.2.2.8.1	(UB81)	EW2010401	2.2.2.8.10	3510
90					X		Remediation	1.4.10.1.2.2.8.2	(UB82)	EW2010402	2.2.2.8.20	3510
91				X			D&D 100-KR-2	1.4.10.1.2.2.9	(UB9)	EW201040	2.2.2.9	3510
92					X		Assessment	1.4.10.1.2.2.9.1	(UB91)	EW2010401	2.2.2.9.10	3510
93					X		Remediation	1.4.10.1.2.2.9.2	(UB92)	EW2010402	2.2.2.9.20	3510
94						X	105-KE Reactor	1.4.10.1.2.2.9.2.1	(UB921)	EW2010402	2.2.2.9.20.1	3510
95						X	105-KW Reactor	1.4.10.1.2.2.9.2.2	(UB922)	EW2010402	2.2.2.9.20.2	3510
96				X			D&D 100-KR-3	1.4.10.1.2.2.10	(UBA)	EW201040	2.2.2.10	3510
97					X		Assessment	1.4.10.1.2.2.10.1	(UBA1)	EW2010401	2.2.2.10.10	3510
98					X		Remediation	1.4.10.1.2.2.10.2	(UBA2)	EW2010402	2.2.2.10.20	3510
99			X				200 Areas D&D	1.4.10.1.2.3	(UE)	EW201040	2.2.3	3520
100				X			200 Areas Common Activities	1.4.10.1.2.3.1	(UE1)	EW201040	2.2.3.1	3520
101					X		Assessment	1.4.10.1.2.3.1.1	(UE11)	EW2010401	2.2.3.1.10	3520
102						X	S&M 200 Areas Common Activities	1.4.10.1.2.3.1.1.1	(UE111)	EW2010401	2.2.3.1.10.1	3520
103						X	Process Facility Engineering	1.4.10.1.2.3.1.1.2	(UE112)	EW2010401	2.2.3.1.10.2	3520
104					X		Remediation	1.4.10.1.2.3.1.2	(UE12)	EW2010402	2.2.3.1.20	2520
105				X			D&D 200-PO-1	1.4.10.1.2.3.2	(UE2)	EW201040	2.2.3.2	3520
106					X		Assessment	1.4.10.1.2.3.2.1	(UE21)	EW2010401	2.2.3.2.10	3520
107						X	PUREX Plant Assessment	1.4.10.1.2.3.2.1.1	(UE211)	EW2010401	2.2.3.2.10.1	3520
108						X	Ancillary Facilities	1.4.10.1.2.3.2.1.2	(UE212)	EW2010401	2.2.3.2.10.2	3520
109					X		Remediation	1.4.10.1.2.3.2.2	(UE22)	EW2010402	2.2.3.2.20	3520
110						X	PUREX Plant Assessment	1.4.10.1.2.3.2.2.1	(UE221)	EW2010402	2.2.3.2.20.1	3520
111						X	Ancillary Facilities	1.4.10.1.2.3.2.2.2	(UE222)	EW2010402	2.2.3.2.20.2	3520
112				X			D&D 200-PO-3	1.4.10.1.2.3.3	(UE3)	EW201040	2.2.3.3	3520
113					X		Assessment	1.4.10.1.2.3.3.1	(UE31)	EW2010401	2.2.3.3.10	3520
114						X	N/A	1.4.10.1.2.3.3.1.1	(UE311)	EW2010401	2.2.3.3.10.1	3520
115						X	Ancillary Facilities	1.4.10.1.2.3.3.1.2	(UE312)	EW2010401	2.2.3.3.10.2	3520
116					X		Remediation	1.4.10.1.2.3.3.2	(UE32)	EW2010402	2.2.3.3.20	3520
117						X	N/A	1.4.10.1.2.3.3.2.1	(UE321)	EW2010402	2.2.3.3.20.1	3520
118						X	Ancillary Facilities	1.4.10.1.2.3.3.2.2	(UE322)	EW2010402	2.2.3.3.20.2	3520
119				X			D&D 200-PO-5	1.4.10.1.2.3.4	(UE4)	EW201040	2.2.3.4	3520
120					X		Assessment	1.4.10.1.2.3.4.1	(UE41)	EW2010401	2.2.3.4.10	3520

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Table 2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
121						X	N/A	1.4.10.1.2.3.4.1.1	(UE411)	EW2010401	2.2.3.4.10.1	3520
122						X	Ancillary Facilites	1.4.10.1.2.3.4.1.2	(UE412)	EW2010401	2.2.3.4.10.2	3520
123					X		Remediation	1.4.10.1.2.3.4.2	(UE42)	EW2010402	2.2.3.4.20	3520
124						X	N/A	1.4.10.1.2.3.4.2.1	(UE421)	EW2010402	2.2.3.4.20.1	3520
125						X	Ancillary Facilities	1.4.10.1.2.3.4.2.2	(UE422)	EW2010402	2.2.3.4.20.2	3520
126				X			D&D 200-BP-5	1.4.10.1.2.3.5	(UE5)	EW201040	2.2.3.5	3520
127					X		Assessment	1.4.10.1.2.3.5.1	(UE51)	EW2010401	2.2.3.5.10	3520
128						X	B Plant Assessment	1.4.10.1.2.3.5.1.1	(UE511)	EW2010401	2.2.3.5.10.1	3520
129						X	Ancillary Facilities	1.4.10.1.2.3.5.1.2	(UE512)	EW2010401	2.2.3.5.10.2	3520
130					X		Remediation	1.4.10.1.2.3.5.2	(UE52)	EW2010402	2.2.3.5.20	3520
131						X	B Plant Remediation	1.4.10.1.2.3.5.2.1	(UE521)	EW2010402	2.2.3.5.20.1	3520
132						X	Ancillary Facilities	1.4.10.1.2.3.5.2.2	(UE522)	EW2010402	2.2.3.5.20.2	3520
133				X			D&D 200-BP-6	1.4.10.1.2.3.6	(UE6)	EW201040	2.2.3.6	3520
134					X		Assessment	1.4.10.1.2.3.6.1	(UE61)	EW2010401	2.2.3.6.10	3520
135						X	N/A	1.4.10.1.2.3.6.1.1	(UE611)	EW2010401	2.2.3.6.10.1	3520
136						X	Ancillary Facilities	1.4.10.1.2.3.6.1.2	(UE612)	EW2010401	2.2.3.6.10.2	3520
137					X		Remediation	1.4.10.1.2.3.6.2	(UE62)	EW2010402	2.2.3.6.20	3520
138						X	N/A	1.4.10.1.2.3.6.2.1	(UE621)	EW2010402	2.2.3.6.20.1	3520
139						X	Ancillary Facilities	1.4.10.1.2.3.6.2.2	(UE622)	EW2010402	2.2.3.6.20.2	3520
140				X			D&D 200-SO-1	1.4.10.1.2.3.7	(UE7)	EW201040	2.2.3.7	3520
141					X		Assessment	1.4.10.1.2.3.7.1	(UE71)	EW2010401	2.2.3.7.10	3520
142						X	N/A	1.4.10.1.2.3.7.1.1	(UE711)	EW2010401	2.2.3.7.10.1	3520
143						X	201-C Semiwork	1.4.10.1.2.3.7.1.2	(UE712)	EW2010401	2.2.3.7.10.2	3520
144						X	Ancillary Facilities	1.4.10.1.2.3.7.1.3	(UE713)	EW2010401	2.2.3.7.10.3	3520
145					X		Remediation	1.4.10.1.2.3.7.2	(UE72)	EW2010402	2.2.3.7.20	3520
146						X	N/A	1.4.10.1.2.3.7.2.1	(UE721)	EW2010402	2.2.3.7.20.1	3520
147						X	201-C Semiwork	1.4.10.1.2.3.7.2.2	(UE722)	EW2010402	2.2.3.7.20.2	3520
148						X	Ancillary Facilities	1.4.10.1.2.3.7.2.3	(UE723)	EW2010402	2.2.3.7.20.3	3520
149				X			D&D 200-RO-1	1.4.10.1.2.3.8	(UE8)	EW201040	2.2.3.8	3520
150					X		Assessment	1.4.10.1.2.3.8.1	(UE81)	EW2010401	2.2.3.8.10	3520
151						X	N/A	1.4.10.1.2.3.8.1.1	(UE811)	EW2010401	2.2.3.8.10.1	3520
152						X	Ancillary Facilities	1.4.10.1.2.3.8.1.2	(UE812)	EW2010401	2.2.3.8.10.2	3520
153					X		Remediation	1.4.10.1.2.3.8.2	(UE82)	EW2010402	2.2.3.8.20	3520
154						X	N/A	1.4.10.1.2.3.8.2.1	(UE821)	EW2010402	2.2.3.8.20.1	3520
155						X	Ancillary Facilities	1.4.10.1.2.3.8.2.2	(UE822)	EW2010402	2.2.3.8.20.2	3520
156				X			D&D 200-RO-2	1.4.10.1.2.3.9	(UE9)	EW201040	2.2.3.9	3520
157					X		Assessment	1.4.10.1.2.3.9.1	(UE91)	EW2010401	2.2.3.9.10	3520
158						X	N/A	1.4.10.1.2.3.9.1.1	(UE911)	EW2010401	2.2.3.9.10.1	3520
159						X	Ancillary Facilities	1.4.10.1.2.3.9.1.2	(UE912)	EW2010401	2.2.3.9.10.2	3520
160					X		Remediation	1.4.10.1.2.3.9.2	(UE92)	EW2010402	2.2.3.9.20	3520
161						X	N/A	1.4.10.1.2.3.9.2.1	(UE921)	EW2010402	2.2.3.9.20.1	3520
162						X	Ancillary Facilities	1.4.10.1.2.3.9.2.2	(UE922)	Ew2010402	2.2.3.9.20.2	3520
163				X			D&D 200-RO-3	1.4.10.1.2.3.10	(UEA)	EW201040	2.2.3.10	3520
164					X		Assessment	1.4.10.1.2.3.10.1	(UEA1)	EW2010401	2.2.3.10.10	3520
165						X	REDOX (202-S Canyon)	1.4.10.1.2.3.10.1.1	(UEA11)	EW2010401	2.2.3.10.10.1	3520
166						X	233-S PU Concentration Facility	1.4.10.1.2.3.10.1.2	(UEA12)	EW2010401	2.2.3.10.10.2	3520

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4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
167						X	Ancillary Facilities	1.4.10.1.2.3.10.1.3	(UEA13)	EW2010401	2.2.3.10.10.3	3520
168					X		Remediation	1.4.10.1.2.3.10.2	(UEA2)	EW2010402	2.2.3.10.20	3520
169						X	REDOX (202-S Canyon)	1.4.10.1.2.3.10.2.1	(UEA21)	EW2010402	2.2.3.10.20.1	3520
170						X	233-S PU Conc. Facility	1.4.10.1.2.3.10.2.2	(UEA22)	EW2010402	2.2.3.10.20.2	3520
171						X	Ancillary Facilities	1.4.10.1.2.3.10.2.3	(UEA23)	EW2010402	2.2.3.10.20.3	3520
172				X			D&D 200-RO-4	1.4.10.1.2.3.11	(UEB)	EW201040	2.2.3.11	3520
173					X		Assessment	1.4.10.1.2.3.11.1	(UEB1)	EW2010401	2.2.3.11.10	3520
174						X	N/A	1.4.10.1.2.3.11.1.1	(UEB11)	EW2010401	2.2.3.11.10.1	3520
175						X	Ancillary Facilities	1.4.10.1.2.3.11.1.1	(UEB12)	EW2010401	2.2.3.11.10.2	3520
176					X		Remediation	1.4.10.1.2.3.11.2	(UEB2)	EW2010402	2.2.3.11.20	3520
177						X	N/A	1.4.10.1.2.3.11.2.1	(UEB21)	EW2010402	2.2.3.11.20.1	3520
178						X	Ancillary Facilities	1.4.10.1.2.3.11.2.2	(UEB22)	EW2010402	2.2.3.11.20.2	3520
179				X			D&D 200-TP-4	1.4.10.1.2.3.12	(UEC)	EW201040	2.2.3.12	3520
180					X		Assessment	1.4.10.1.2.3.12.1	(UEC1)	EW2010401	2.2.3.12.10	3520
181					X		Remediation	1.4.10.1.2.3.12.2	(UEC2)	EW2010402	2.2.3.12.20	3520
182				X			D&D 200-UP-2	1.4.10.1.2.3.13	(UED)	EW201040	2.2.3.13	3520
183					X		Assessment	1.4.10.1.2.3.13.1	(UED1)	EW2010401	2.2.3.13.10	3520
184						X	221-U/271-U Canyon	1.4.10.1.2.3.13.1.2	(UED11)	EW2010401	2.2.3.13.10.1	3520
185					X		Remediation	1.4.10.1.2.3.13.2	(UED2)	EW2010402	2.2.3.13.20	3520
186						X	221-U/271-U Canyon	1.4.10.1.2.3.13.2.2	(UED22)	EW2010402	2.2.3.13.20.2	3520
187				X			D&D 200-UP-3	1.4.10.1.2.3.14	(UEE)	EW201040	2.2.3.14	3520
188					X		Assessment	1.4.10.1.2.3.14.1	(UEE1)	EW2010401	2.2.3.14.10	3520
189					X		Remediation	1.4.10.1.2.3.14.2	(UEE2)	EW2010402	2.2.3.14.20	3520
190				X			D&D 200-ZP-1	1.4.10.1.2.3.15	(UEF)	EW201040	2.2.3.15	3520
191					X		Assessment	1.4.10.1.2.3.15.1	(UEF1)	EW2010401	2.2.3.15.10	3520
192						X	Pu Finishing Plant	1.4.10.1.2.3.15.1.1	(UEF11)	EW2010401	2.2.3.15.10.1	3520
193						X	232-Z Incinerator	1.4.10.1.2.3.15.1.2	(UEF12)	EW2010401	2.2.3.15.10.2	3520
194						X	Ancillary Facilities	1.4.10.1.2.3.15.1.3	(UEF13)	EW2010401	2.2.3.15.10.3	3520
195					X		Remediation	1.4.10.1.2.3.15.2	(UEF2)	EW2010402	2.2.3.15.20	3520
196						X	Pu Finishing Plant	1.4.10.1.2.3.15.2.1	(UEF21)	EW2010402	2.2.3.15.20.1	3520
197						X	232-Z Incinerator	1.4.10.1.2.3.15.2.2	(UEF22)	EW2010402	2.2.3.15.20.2	3520
198						X	Ancillary Facilities	1.4.10.1.2.3.15.2.3	(UEF23)	EW2010402	2.2.3.15.20.3	3520
199			X				300 Area D&D	1.4.10.1.2.4	(UC)	EW201040	2.2.4	3530
200				X			300 Area Common Activities	1.4.10.1.2.4.1	(UC1)	EW201040	2.2.4.1	3530
201						X	Assessment	1.4.10.1.2.4.1.1	(UC11)	EW2010401	2.2.4.1.10	3530
202						X	Remediation	1.4.10.1.2.4.1.2	(UC12)	EW2010402	2.2.4.1.20	3530
203			X				N Reactor	1.4.10.1.2.5	(UN)	EW201040	2.2.5	3600
204				X			Program Management and Integration	1.4.10.1.2.5.1	(UN1)	EW201040	2.2.5.1	3600
205					X		Program Management and Integration	1.4.10.1.2.5.1.1	(UN11)	EW2010401	2.2.5.1.10	3600
206						X	Program Management	1.4.10.1.2.5.1.1.1	(UN111)	EW2010401	2.2.5.1.10.1	3600
207						X	Business Management	1.4.10.1.2.5.1.1.2	(UN112)	EW2010401	2.2.5.1.10.2	3600
208				X			Deactivation Planning & Execution	1.4.10.1.2.5.2	(UN2)	EW201040	2.2.5.2	3600
209					X		Deactivation Execution-BOP	1.4.10.1.2.5.2.1	(UN21)	EW2010401	2.2.5.2.10	3600
210						X	Facility Compliance	1.4.10.1.2.5.2.1.1	(UN211)	EW2010401	2.2.5.2.10.1	3600
211						X	Facility Compliance-CENRTC	1.4.10.1.2.5.2.1.11	6UN211	EW2010401	2.2.5.2.10.1.1	3600
212						X	Waste Handling-BOP	1.4.10.1.2.5.2.1.2	(UN212)	EW2010401	2.2.5.2.10.2	3600

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213						X	Waste Disposal-BOP	1.4.10.1.2.5.2.1.3	(UN213)	EW2010401	2.2.5.2.10.3	3600
214						X	Safeguards and Security	1.4.10.1.2.5.2.1.5	(UN215)	EW2010401	2.2.5.2.10.5	3600
215						X	Building/System Deactivation	1.4.10.1.2.5.2.1.6	(UN216)	EW2010401	2.2.5.2.10.6	3600
216						X	HGP Deactivation	1.4.10.1.2.5.2.1.7	(UN217)	EW2010401	2.2.5.2.10.7	3600
217					X		Deactivation Execution - N Basin	1.4.10.1.2.5.2.2	(UN22)	EW2010402	2.2.5.2.20	3600
218						X	N Basin Cleanup	1.4.10.1.2.5.2.2.1	(UN221)	EW2010402	2.2.5.2.20.1	3600
219						X	Liquid Effluent Response	1.4.10.1.2.5.2.2.2	(UN222)	EW2010402	2.2.5.2.20.2	3600
220				X			Regulatory Response	1.4.10.1.2.5.3	(UN3)	EW201040	2.2.5.3	3600
221					X		Regulatory Response Assessment	1.4.10.1.2.5.3.1	(UN31)	EW2010401	2.2.5.3.10	3600
222						X	Regulatory Response Program Management	1.4.10.1.2.5.3.1.1	(UN311)	EW2010401	2.2.5.3.10.1	3600
223						X	N Facility Compliance Modifications	1.4.10.1.2.5.3.1.2	(UN312)	EW2010401	2.2.5.3.10.2	3600
224						X	N Effluent Sampling and Monitoring	1.4.10.1.2.5.3.1.3	(UN313)	EW2010401	2.2.5.3.10.3	3600
225						X	Environmental Permits	1.4.10.1.2.5.3.1.4	(UN314)	EW2010401	2.2.5.3.10.4	3600
226						X	N Area Operations Environmental Monitoring	1.4.10.1.2.5.3.1.5	(UN315)	EW2010401	2.2.5.3.10.5	3600
227						X	NEPA Documentation Action	1.4.10.1.2.5.3.1.6	(UN316)	EW2010401	2.2.5.3.10.6	3600
228						X	N Reactor Environmental Surveillance	1.4.10.1.2.5.3.1.7	(UN317)	EW2010401	2.2.5.3.10.7	3600
229				X			Surveillance and Maintenance	1.4.10.1.2.5.4	(UN4)	EW201040	2.2.5.4	3600
230					X		Assessment	1.4.10.1.2.5.4.1	(UN41)	EW2010401	2.2.5.4.10	3600
231					X		Remediation	1.4.10.1.2.5.4.2	(UN42)	EW2010402	2.2.5.4.20	3600
232		X					Remedial Actions	1.4.10.1.1	(P)	EW201030	2.1	3010
233			X				RARA/USTs	1.4.10.1.1.1	(PJ)	EW201030	2.1.1	3010
234				X			RARA Common Activities	1.4.10.1.1.1.1	(PJ1)	EW201030	2.1.1.1	3010
235					X		RARA Common Activities-Remediation	1.4.10.1.1.1.1.2	(PJ12)	EW2010302	2.1.1.1.20	3010
236						X	Acreage Decontamination and Stabilization	1.4.10.1.1.1.1.2.1	(PJ121)	EW2010302	2.1.1.1.20.1	3010
237						X	RARA Surveillance	1.4.10.1.1.1.1.2.2	(PJ122)	EW2010302	2.1.1.1.20.2	3010
238						X	Vegetation Management	1.4.10.1.1.1.1.2.3	(PJ123)	EW2010302	2.1.1.1.20.3	3010
239				X			UST Common Activities	1.4.10.1.1.1.2	(PJ2)	EW2010302	2.1.1.2	3010
240					X		UST Common Activities - Remediation	1.4.10.1.1.1.2.2	(PJ22)	EW2010302	2.1.1.2.20	
241						X	UST Removal/Regulatory Compliance	1.4.10.1.1.1.2.2.1	(PJ221)	EW2010302	2.1.1.2.20.1	3010
242			X				RCRA Closures	1.4.10.1.1.2	(PV)	EW201020	2.1.2	3020
243				X			RCRA Common Activities	1.4.10.1.1.2.1	(PV1)	EW201020	2.1.2.1	3020
244					X		Assessment	1.4.10.1.1.2.1.1	(PV11)	EW2010201	2.1.2.1.10	3020
245						X	Vegetation Studies	1.4.10.1.1.2.1.1.1	(PV111)	EW2010201	2.1.2.1.10.1	3020
246						X	Inactive Underground Tanks	1.4.10.1.1.2.1.1.2	(PV112)	EW2010301	2.1.2.1.10.2	3020
247					X		Remediation	1.4.10.1.1.2.1.2	(PV12)	EW2010202	2.1.2	3020
248				X			RCRA 100-BC	1.4.10.1.1.2.2	(PV2)	EW201020	2.1.2.2	3020
249					X		Assessment	1.4.10.1.1.2.2.1	(PV21)	EW2010201	2.1.2.2.10	3020
250					X		Remediation	1.4.10.1.1.2.2.2	(PV22)	EW2010202	2.1.2.2.20	3020
251				X			RCRA 100-DR	1.4.10.1.1.2.3	(PV3)	EW201020	2.1.2.3	3020
252					X		Assessment	1.4.10.1.1.2.3.1	(PV31)	EW2010201	2.1.2.3.10	3020
253						X	100-D Pond Planning Document	1.4.10.1.1.2.3.1.1	(PV311)	EW2010201	2.1.2.3.10.1	3020

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Table 2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
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(11-84)

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
254					X		Remediation	1.4.10.1.1.2.3.2	(PV32)	EW2010202	2.1.2.3.20	3020
255						X	100-D Pond	1.4.10.1.1.2.3.2.1	(PV321)	EW2010202	2.1.2.3.20.1	3020
256				X			RCRA 100-FR	1.4.10.1.1.2.4	(PV4)	EW201020	2.1.2.4	3020
257					X		Assessment	1.4.10.1.1.2.4.1	(PV41)	EW2010201	2.1.2.4.10	3020
258					X		Remediation	1.4.10.1.1.2.4.2	(PV42)	EW2010202	2.1.2.4.20	3020
259				X			RCRA 100-HR	1.4.10.1.1.2.5	(PV5)	EW201020	2.1.2.5	3020
260					X		Assessment	1.4.10.1.1.2.5.1	(PV51)	EW2010201	2.1.2.5.10	3020
261					X		Remediation	1.4.10.1.1.2.5.2	(PV52)	EW2010202	2.1.2.5.20	3020
262						X	183-H Solar Evaporation Basins	1.4.10.1.1.2.5.2.1	(PV521)	EW2010202	2.1.2.5.20.1	3020
263				X			RCRA 100-KR	1.4.10.1.1.2.6	(PV6)	EW201020	2.1.2.6	3020
264					X		Assessment	1.4.10.1.1.2.6.1	(PV61)	EW2010201	2.1.2.6.10	3020
265					X		Remediation	1.4.10.1.1.2.6.2	(PV62)	EW2010202	2.1.2.6.20	3020
266				X			RCRA 100-NR	1.4.10.1.1.2.7	(PV7)	EW2010201	2.1.2.7	3020
267					X		Assessment	1.4.10.1.1.2.7.1	(PV71)	EW2010201	2.1.2.7.10	3020
268						X	1301-N/1325-N Closure Plan	1.4.10.1.1.2.7.1.1	(PV711)	EW2010201	2.1.2.7.10.1	3020
268a						X	1324-N/1324-NA Closure Plan	1.4.10.1.1.2.7.1.2	(PV712)	EW2010201	2.1.2.7.10.2	3020
269					X		Remediation	1.4.10.1.1.2.7.2	PV72)	EW2020202	2.1.2.7.20	3020
270				X			RCRA 200 Area A (PO)	1.4.10.1.1.2.8	(PVA)	EW201020	2.1.2.8	3020
271					X		Assessment	1.4.10.1.1.2.8.1	(PVA1)	EW2010201	2.1.2.8.10	3020
272						X	216-A-36B Crib	1.4.10.1.1.2.8.1.1	(PVA11)	EW2010201	2.1.2.8.10.1	3020
273						X	216-A-10 Crib	1.4.10.1.1.2.8.1.2	(PVA12)	EW2010201	2.1.2.8.10.2	3020
274						X	216-A-29 Ditch	1.4.10.1.1.2.8.1.3	(PVA13)	EW2010201	2.1.2.8.10.3	3020
275					X		Remediation	1.4.10.1.1.2.8.2	(PVA2)	EW2010202	2.1.2.8.20	3020
276						X	216-A-36B Crib	1.4.10.1.1.2.8.2.1	(PVA21)	EW2010202	2.1.2.8.20.1	3020
277						X	216-A-10 Crib	1.4.10.1.1.2.8.2.2	(PVA22)	EW2010202	2.1.2.8.20.2	3020
278						X	216-A-29 Ditch	1.4.10.1.1.2.8.2.3	(PVA23)	EW2010202	2.1.2.8.20.3	3020
279				X			RCRA 200 Area B (BP)	1.4.10.1.1.2.9	(PVB)	EW201020	2.1.2.9	3020
280					X		Assessment	1.4.10.1.1.2.9.1	(PVB1)	EW2010201	2.1.2.9.10	3020
281						X	B-Pond Closure	1.4.10.1.1.2.9.1.1	(PVB11)	EW2010201	2.1.2.9.10.1	3020
282						X	216-B-63 Trench	1.4.10.1.1.2.9.1.2	(PVB12)	EW2010201	2.1.2.9.10.2	3020
283						X	X-009 By Pass Lobe	1.4.10.1.1.2.9.1.3	(PVB13)	EW2010201	2.1.2.9.10.3	3020
284					X		Remediation	1.4.10.1.1.2.9.2	(PVB2)	EW2010202	2.1.2.9.20	3020
285						X	B-Pond Closure	1.4.10.1.1.2.9.2.1	(PVB21)	EW2010202	2.1.2.9.20.1	3020
286						X	216-B-63 Trench	1.4.10.1.1.2.9.2.2	(PVB22)	EW2010202	2.1.2.9.20.2	3020
287					X		200-BP Remediation	1.4.10.1.1.2.9.2	7PVB2	EW2010202	2.1.2.9.20	3020
288						X	X-009 BYPass Lobe -Construction	1.4.10.1.1.2.9.2.3	7PVB23	EW2010202	2.1.2.9.20.3	3020
289				X			RCRA 200 Area C (CP)	1.4.10.1.1.2.10	(PVC)	EW201020	2.1.2.10	3020
290					X		Assessment	1.4.10.1.1.2.10.1	(PVC1)	EW2010201	2.1.2.10.10	3020
291					X		Remediation	1.4.10.1.1.2.10.2	(PVC2)	EW2010202	2.1.2.10.20	3020
292				X			RCRA 200 Area S (RO)	1.4.10.1.1.2.11	(PVS)	EW201020	2.1.2.11	3020
293					X		Assessment	1.4.10.1.1.2.11.1	(PVS1)	EW2010201	2.1.2.11.10	3020
294						X	216-S-10 Pond	1.4.10.1.1.2.11.1.1	(PVS11)	EW2010201	2.1.2.11.10.1	3020
295						X	Hexone	1.4.10.1.1.2.11.1.2	(PVS12)	EW2010201	2.1.2.11.10.2	3020
296					X		Remediation	1.4.10.1.1.2.11.2	(PVS2)	EW2010202	2.1.2.11.20	3020
297						X	216-S-10 Pond	1.4.10.1.1.2.11.2.1	(PVS21)	EW2010202	2.1.2.11.20.1	3020
298						X	Hexone	1.4.10.1.1.2.11.2.2	(PVS22)	EW2010202	2.1.2.11.20.2	3020

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4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
299				X			RCRA 200 Area TP	1.4.10.1.1.2.12	(PVT)	EW201020	2.1.2.12	3020
300					X		Assessment	1.4.10.1.1.2.12.1	(PVT1)	EW2010201	2.1.2.12.10	3020
301					X		Remediation	1.4.10.1.1.2.12.2	(PVT2)	EW2010202	2.1.2.12.20	3020
302				X			RCRA 200 Area UP	1.4.10.1.1.2.13	(PVU)	EW201020	2.1.2.13	3020
303					X		Assessment	1.4.10.1.1.2.13.1	(PVU1)	EW2010201	2.1.2.13.10	3020
304						X	216-U-12 Crib	1.4.10.1.1.2.13.1.1	(PVU11)	EW2010201	2.1.2.13.10.1	3020
305					X		Remediation	1.4.10.1.1.2.13.2	(PVU2)	EW2010202	2.1.2.13.20	3020
306						X	216-U-12 Crib	1.4.10.1.1.2.13.2.1	(PVU21)	EW2010202	2.1.2.13.20.1	3020
307				X			RCRA 200 Area ZP	1.4.10.1.1.2.14	(PVZ)	EW201020	2.1.2.14	3020
308					X		Assessment	1.4.10.1.1.2.14.1	(PVZ1)	EW2010201	2.1.2.14.10	3020
309					X		Remediation	1.4.10.1.1.2.14.1	(PVZ2)	EW2010202	2.1.2.14.20	3020
310				X			RCRA 200 Area IU	1.4.10.1.1.2.15	(PVI)	EW201020	2.1.2.15	3020
311					X		Assessment	1.4.10.1.1.2.15.1	(PVI1)	EW2010201	2.1.2.15.10	3020
312						X	NRDWL	1.4.10.1.1.2.15.1.1	(PVI11)	EW2010201	2.1.2.15.10.1	3020
313					X		Remediation	1.4.10.1.1.2.15.2	(PVI2)	EW2010202	2.1.2.15.20	3020
314						X	NRDWL	1.4.10.1.1.2.15.2.1	(PVI21)	EW2010202	2.1.2.15.20.1	3020
315				X			RCRA 300 Area FF	1.4.10.1.1.2.16	(PVF)	EW201020	2.1.2.16	3020
316					X		Assessment	1.4.10.1.1.2.16.1	(PVF1)	EW2010201	2.1.2.16.10	3020
317						X	300 Area Process Trenches	1.4.10.1.1.2.16.1.1	(PVF11)	EW2010201	2.1.2.16.10.1	3020
318					X		Remediation	1.4.10.1.1.2.16.2	(PVF2)	EW2010202	2.1.2.16.20	3020
319						X	300 Area Process Trenches	1.4.10.1.1.2.16.2.1	(PVF21)	EW2010202	2.1.2.16.20.1	3020
320			X				SST Closures	1.4.10.1.1.3	(PF)	EW201020	2.1.3	3000
321				X			SST Closures-Common Activities	1.4.10.1.1.3.1	(PF1)	EW201020	2.1.3.1	3000
322					X		Assessment	1.4.10.1.1.3.1.1	(PF11)	EW2010201	2.1.3.1.10	3000
323						X	SST Field Assessment	1.4.10.1.1.3.1.1.1	(PF111)	EW2010201	2.1.3.1.10.1	3000
324						X	SST Engineering Activities	1.4.10.1.1.3.1.1.2	(PF112)	EW2010201	2.1.3.1.10.2	3000
325					X		Remediation	1.4.10.1.1.3.1.2	(PF12)	EW2010202	2.1.3.1.20	3000
326						X	SST Closures-Common Activities	1.4.10.1.1.3.1.2.1	(PF121)	EW2010202	2.1.3.1.20.1	3000
327				X			SST 200 East Aggregate Area	1.4.10.1.1.3.2	(PFE)	EW201020	2.1.3.2	3000
328					X		Assessment	1.4.10.1.1.3.2.1	(PFE1)	EW2010201	2.1.3.2.10	3000
329				X			SST 200 West Aggregate Area	1.4.10.1.1.3.3	(PFW)	EW201020	2.1.3.3	3000
330					X		Assessment	1.4.10.1.1.3.3.1	(PFW1)	EW2010201	2.1.3.3.10	3000
331				X			SST 200 Area A (PO)	1.4.10.1.1.3.4	(PFA)	EW201020	2.1.3.4	3000
332					X		Assessment	1.4.10.1.1.3.4.1	(PFA1)	EW2010201	2.1.3.4.10	3000
333						X	SST (A, AX, C - 200-PO-3)	1.4.10.1.1.3.4.1.1	(PFA11)	EW2010201	2.1.3.4.10.1	3000
334					X		Remediation	1.4.10.1.1.3.4.2	(PFA2)	EW2010202	2.1.3.4.20	3000
335						X	SST (A, AX, C - 200-PO-3)	1.4.10.1.1.3.4.2.1	(PFA21)	EW2010202	2.1.3.4.20.1	3000
336				X			SST 200 Area B (BP)	1.4.10.1.1.3.5	(PFB)	EW201020	2.1.3.5	3000
337					X		Assessment	1.4.10.1.1.3.5.1	(PFB1)	EW2010201	2.1.3.5.10	3000
338						X	SST, (B, BY, BX - 200-BP-7)	1.4.10.1.1.3.5.1.1	(PFB11)	EW2010201	2.1.3.5.10.1	3000
339					X		Remediation	1.4.10.1.1.3.5.2	(PFB2)	EW2010202	2.1.3.5.20	3000
340						X	SST, (B, BY, BX - 200-BP-7)	1.4.10.1.1.3.5.2.1	(PFB21)	EW2010202	2.1.3.5.20.1	3000
341				X			SST 200 Area S (RO)	1.4.10.1.1.3.6	(PFS)	EW201020	2.1.3.6	3000
342					X		Assessment	1.4.10.1.1.3.6.1	(PFS1)	EW2010201	2.1.3.6.10	3000
343						X	SST (S,SX Farm-200-RO-4)	1.4.10.1.1.3.6.1.1	(PFS11)	EW2010201	2.1.3.6.10.1	3000
344					X		Remediation	1.4.10.1.1.3.6.2	(PFS2)	EW2010202	2.1.3.6.20	3000

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345						X	SST (S,SX Farm-200-RO-4)	1.4.10.1.1.3.6.2.1	(PFS21)	EW2010202	2.1.3.6.20.1	3000
346				X			SST 200 Area T (TP)	1.4.10.1.1.3.7	(PFT)	EW201020	2.1.3.7	3000
347					X		Assessment	1.4.10.1.1.3.7.1	(PFT1)	EW2010201	2.1.3.7.10	3000
348						X	SST (T - 200-TP-6) (T106)	1.4.10.1.1.3.7.1.1	(PFT11)	EW2010201	2.1.3.7.10.1	3000
349						X	SST (T, TX Farm - 200-TP-5)	1.4.10.1.1.3.7.1.2	(PFT12)	EW2010201	2.1.3.7.10.2	3000
350						X	SST (T - 200-TP-6)	1.4.10.1.1.3.7.1.3	(PFT13)	EW2010201	2.1.3.7.10.3	3000
351					X		Remediation	1.4.10.1.1.3.7.2	(PFT2)	EW2010202	2.1.3.7.20	3000
352						X	SST (T - 200-TP-6) (T106)	1.4.10.1.1.3.7.2.1	(PFT21)	EW2010202	2.1.3.7.20.1	3000
353						X	SST (T, TX Farm - 200-TP-5)	1.4.10.1.1.3.7.2.2	(PFT22)	EW2010202	2.1.3.7.20.2	3000
354						X	SST (T - 200-TP-6)	1.4.10.1.1.3.7.2.3	(PFT23)	EW2010202	2.1.3.7.20.3	3000
355				X			SST 200 Area U (UP)	1.4.10.1.1.3.8	(PFU)	EW201020	2.1.3.8	3000
356					X		Assessment	1.4.10.1.1.3.8.1	(PFU1)	EW2010201	2.1.3.8.10	3000
357						X	SST (U Farm - 200-UP-3)	1.4.10.1.1.3.8.1.1	(PFU11)	EW2010201	2.1.3.8.10.1	3000
358					X		Remediation	1.4.10.1.1.3.8.2	(PFU2)	EW2010202	2.1.3.8.20	3000
359						X	SST (U Farm - 200-UP-3)	1.4.10.1.1.3.8.2.1	(PFU21)	EW2010202	2.1.3.8.20.1	3000
360			X				100-DR	1.4.10.1.1.4	(PA)	EW201030	2.1.4	3100
361				X			100-DR-1	1.4.10.1.1.4.1	(PA1)	EW201030	2.1.4.1	3100
362					X		Assessment	1.4.10.1.1.4.1.1	(PA11)	EW2010301	2.1.4.1.10	3100
363						X	100-DR-1 General	1.4.10.1.1.4.1.1.1	(PA111)	EW2010301	2.1.4.1.10.1	3100
364						X	100-DR-1 Characterization	1.4.10.1.1.4.1.1.3	(PA113)	EW2010301	2.1.4.1.10.3	3100
365						X	100-DR-1 Feasibility Studies	1.4.10.1.1.4.1.1.4	(PA114)	EW2010301	2.1.4.1.10.4	3100
366						X	100-DR-1 Treatability	1.4.10.1.1.4.1.1.5	(PA115)	EW2010301	2.1.4.1.10.5	3100
367					X		Remediation	1.4.10.1.1.4.1.2	(PA12)	EW2010302	2.1.4.1.20	3100
368				X			100-DR-2	1.4.10.1.1.4.2	(PA2)	EW201030	2.1.4.2	3100
369					X		Assessment	1.4.10.1.1.4.2.1	(PA21)	EW2010301	2.1.4.2.10	3100
370						X	100-DR-2 General	1.4.10.1.1.4.2.1.1	(PA211)	EW2010301	2.1.4.2.10.1	3100
371						X	100-DR-2 Planning Document	1.4.10.1.1.4.2.1.2	(PA212)	EW2010301	2.1.4.2.10.2	3100
372						X	100-DR-2 Characterization	1.4.10.1.1.4.2.1.3	(PA213)	EW2010301	2.1.4.2.10.3	3100
373						X	100-DR-2 Feasibility Studies	1.4.10.1.1.4.2.1.4	(PA214)	EW2010301	2.1.4.2.10.4	3100
374						X	Treatability	1.4.10.1.1.4.2.1.5	(PA215)	EW2010301	2.1.4.2.10.5	3100
375					X		Remediation	1.4.10.1.1.4.2.2	(PA22)	EW2010302	2.1.4.2.20	3100
376				X			100-DR-3	1.4.10.1.1.4.3	(PA3)	EW201030	2.1.4.3	3100
377					X		Assessment	1.4.10.1.1.4.3.1	(PA31)	EW2010301	2.1.4.3.10	3100
378					X		Remediation	1.4.10.1.1.4.3.2	(PA32)	EW2010302	2.1.4.3.20	3100
379			X				100-BC	1.4.10.1.1.5	(PB)	EW201030	2.1.5	3105
380				X			100-BC-1	1.4.10.1.1.5.1	(PB1)	EW201030	2.1.5.1	3105
381					X		Assessment	1.4.10.1.1.5.1.1	(PB11)	EW2010301	2.1.5.1.10	3105
382						X	100-BC-1 General	1.4.10.1.1.5.1.1.1	(PB111)	EW2010301	2.1.5.1.10.1	3105
383						X	100-BC-1 Characterization	1.4.10.1.1.5.1.1.3	(PB113)	EW2010301	2.1.5.1.10.3	3105
384						X	100-BC-1 Feasibility Studies	1.4.10.1.1.5.1.1.4	(PB114)	EW2010301	2.1.5.1.10.4	3105
385						X	100-BC-1 Treatability	1.4.10.1.1.5.1.1.5	(PB115)	EW2010301	2.1.5.1.10.5	3105
386						X	100-BC-1 Treatability Engineering	1.4.10.1.1.5.1.1.6	(PB116)	EW2010301	2.1.5.1.10.6	3105
387					X		Remediation	1.4.10.1.1.5.1.2	(PB12)	EW2010302	2.1.5.1.20	3105
388				X			100-BC-2	1.4.10.1.1.5.2	(PB2)	EW201030	2.1.5.2	3105
389					X		Assessment	1.4.10.1.1.5.2.1	(PB21)	EW2010301	2.1.5.2.10	3105
390						X	100-BC-2 General	1.4.10.1.1.5.2.1.1	(PB211)	EW2010301	2.1.5.2.10.1	3105

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Table 2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
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DOE F1332.10
(11-84)

FORM APPROVED
OMB NO. 1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
391						X	100-BC-2 Characterization	1.4.10.1.1.5.2.1.3	(PB213)	EW2010301	2.1.5.2.10.3	3105
392						X	100-BC-2 Feasibility Studies	1.4.10.1.1.5.2.1.4	(PB214)	EW2010301	2.1.5.2.10.4	3105
393				X			100-BC-5	1.4.10.1.1.5.5	(PB5)	EW201030	2.1.5.5	3105
394					X		Assessment	1.4.10.1.1.5.5.1	(PB51)	EW2010301	2.1.5.5.10	3105
395						X	100-BC-5 General	1.4.10.1.1.5.5.1.1	(PB511)	EW2010301	2.1.5.5.10.1	3105
396						X	100-BC-5 Characterization	1.4.10.1.1.5.5.1.3	(PB513)	EW2010301	2.1.5.5.10.3	3105
397						X	100-BC-5 Feasibility Studies	1.4.10.1.1.5.5.1.4	(PB514)	EW2010301	2.1.5.5.10.4	3105
398						X	100-BC-5 Treatability	1.4.10.1.1.5.5.1.5	(PB515)	EW2010301	2.1.5.5.10.5	3105
399					X		Remediation	1.4.10.1.1.5.5.2	(PB52)	EW2010302	2.1.5.5.20	3105
400				X			100-IU-1	1.4.10.1.1.5.6	(PB6)	EW201030	2.1.5.6	3105
401					X		Assessment	1.4.10.1.1.5.6.1	(PB61)	EW2010301	2.1.5.6.10	3105
402					X		Remediation	1.4.10.1.1.5.6.2	(PB62)	EW2010302	2.1.5.6.20	3105
403						X	Riverland Wash Pit - ERA	1.4.10.1.1.5.6.2.2	(PB622)	EW2010302	2.1.5.6.20.2	3105
404			X				100-KR	1.4.10.1.1.6	(PC)	EW201030	2.1.6	3110
405				X			100-KR-1	1.4.10.1.1.6.1	(PC1)	EW201030	2.1.6.1	3110
406					X		Assessment	1.4.10.1.1.6.1.1	(PC11)	EW2010301	2.1.6.1.10	3110
407						X	100-KR-1 General	1.4.10.1.1.6.1.1.1	(PC111)	EW2010301	2.1.6.1.10.1	3110
408						X	100 KR-1 Characterization	1.4.10.1.1.6.1.1.3	(PC113)	EW2010301	2.1.6.1.10.3	3110
409						X	100-KR-1 Feasibility Studies	1.4.10.1.1.6.1.1.4	(PC114)	EW2010301	2.1.6.1.10.4	3110
410					X		Remediation	1.4.10.1.1.6.1.2	(PC12)	EW2010302	2.1.6.1.20	3110
411				X			100-KR-2	1.4.10.1.1.6.2	(PC2)	EW201030	2.1.6.2	3110
412					X		Assessment	1.4.10.1.1.6.2.1	(PC21)	EW2010301	2.1.6.2.10	3110
413						X	100-KR-2 General	1.4.10.1.1.6.2.1.1	(PC211)	EW2010301	2.1.6.2.10.1	3110
414						X	100-KR-2 Planning Document	1.4.10.1.1.6.2.1.2	(PC212)	EW2010301	2.1.6.2.10.2	3110
415						X	100-KR-2 Characterization	1.4.10.1.1.6.2.1.3	(PC213)	EW2010301	2.1.6.2.10.3	3110
416						X	100-KR-2 Feasibility Studies	1.4.10.1.1.6.2.1.4	(PC214)	EW2010301	2.1.6.2.10.4	3110
417						X	100-KR-2 Treatability	1.4.10.1.1.6.2.1.5	(PC215)	EW2010301	2.1.6.2.10.5	3110
418					X		Remediation	1.4.10.1.1.6.2.2	(PC22)	EW2010302	2.1.6.2.20	3110
419				X			100-KR-3	1.4.10.1.1.6.3	(PC3)	EW201030	2.1.6.3	3110
420					X		Assessment	1.4.10.1.1.6.3.1	(PC31)	EW2010301	2.1.6.3.10	3110
421					X		Remediation	1.4.10.1.1.6.3.2	(PC32)	EW2010302	2.1.6.3.20	3110
422				X			100-KR-4	1.4.10.1.1.6.4	(PC4)	EW201030	2.1.6.4	3110
423					X		Assessment	1.4.10.1.1.6.4.1	(PC41)	EW2010301	2.1.6.4.10	3115
424						X	100-KR-4 General	1.4.10.1.1.6.4.1.1	(PC411)	EW2010301	2.1.6.4.10.1	3115
425						X	100-KR-4 Characterization	1.4.10.1.1.6.4.1.3	(PC413)	EW2010301	2.1.6.4.10.3	3115
426						X	100-KR-4 Feasibility Studies	1.4.10.1.1.6.4.1.4	(PC414)	EW2010301	2.1.6.4.10.4	3115
427					X		Remediation	1.4.10.1.1.6.4.2	(PC42)	EW2010302	2.1.6.4.20	3115
428			X				100-FR	1.4.10.1.1.7	(PD)	EW201030	2.1.7	3115
429				X			100-FR-1	1.4.10.1.1.7.1	(PD1)	EW201030	2.1.7.1	3115
430					X		Assessment	1.4.10.1.1.7.1.1	(PD11)	EW2010301	2.1.7.1.10	3115
431						X	100-FR-1 General	1.4.10.1.1.7.1.1.1	(PD111)	EW2010301	2.1.7.1.10.1	3115
432						X	100-FR-1 Characterization	1.4.10.1.1.7.1.1.3	(PD113)	EW2010301	2.1.7.1.10.3	3115
433						X	100-FR-1 Feasibility Studies	1.4.10.1.1.7.1.1.4	(PD114)	EW2010301	2.1.7.1.10.4	3115
434					X		Remediation	1.4.10.1.1.7.1.2	(PD12)	EW2010302	2.1.7.1.20	3115
435				X			100-FR-2	1.4.10.1.1.7.2	(PD2)	EW201030	2.1.7.2	3115
436					X		Assessment	1.4.10.1.1.7.2.1	(PD21)	EW2010301	2.1.7.2.10	3115

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Table 2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
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(11-84)

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
437					X		Remediation	1.4.10.1.1.7.2.2	(PD22)	EW2010302	2.1.7.2.20	3115
438				X			100-FR-3	1.4.10.1.1.7.3	(PD3)	EW201030	2.1.7.3	3115
439					X		Assessment	1.4.10.1.1.7.3.1	(PD31)	EW2010301	2.1.7.3.10	3115
440						X	100-FR-3 General	1.4.10.1.1.7.3.1.1	(PD311)	EW2010301	2.1.7.3.10.1	3115
441						X	100-FR-3 Characterization	1.4.10.1.1.7.3.1.3	(PD313)	EW2010301	2.1.7.3.10.3	3115
442						X	100-FR-3 Feasibility Studies	1.4.10.1.1.7.3.1.4	(PD314)	EW2010301	2.1.7.3.10.4	3115
443					X		Remediation	1.4.10.1.1.7.3.2	(PD32)	EW2010302	2.1.7.3.20	3115
44[illegible]				X			100-IU-3	1.4.10.1.1.7.4	(PD4)	EW201030	2.1.7.4	3115
445					X		Assessment	1.4.10.1.1.7.4.1	(PD41)	EW2010301	2.1.7.4.10	3115
445a						X	100-IU-3 North Slope Characterization	1.4.10.1.1.7.4.1.3	(PD413)	EW2010301	2.1.7.4.10.3	3115
446					X		Remediation	1.4.10.1.1.7.4.2	(PD42)	EW2010302	2.1.7.4.20	3115
446a						X	100-IU-3 North Slope Design	1.4.10.1.1.7.4.2.1	(PD421)	EW2010302	2.1.7.4.20.1	3115
447						X	100-IU-3 North Slope - ERA	1.4.10.1.1.7.4.2.2	(PD422)	EW2010302	2.1.7.4.20.2	3115
448			X				100-HR	1.4.10.1.1.8	(PE)	EW201030	2.1.8	3120
449				X			100-HR-1	1.4.10.1.1.8.1	(PE1)	EW201030	2.1.8.1	3120
450					X		Assessment	1.4.10.1.1.8.1.1	(PE11)	EW2010301	2.1.8.1.10	3120
451						X	100-HR-1 General	1.4.10.1.1.8.1.1.1	(PE111)	EW2010301	2.1.8.1.10.1	3120
452						X	100-HR-1 Characterization	1.4.10.1.1.8.1.1.3	(PE113)	EW2010301	2.1.8.1.10.3	3120
453						X	100-HR-1 Feasibility Studies	1.4.10.1.1.8.1.1.4	(PE114)	EW2010301	2.1.8.1.10.4	3120
454					X		Remediation	1.4.10.1.1.8.1.2	(PE12)	EW2010302	2.1.8.1.20	3120
455				X			100-HR-2	1.4.10.1.1.8.2	(PE2)	EW201030	2.1.8.2	3120
456					X		Assessment	1.4.10.1.1.8.2.1	(PE21)	EW2010301	2.1.8.2.10	3120
457						X	100-HR-2 General	1.4.10.1.1.8.2.1.1	(PE211)	EW2010301	2.1.8.2.10.1	3120
458						X	100-HR-2 Planning Document	1.4.10.1.1.8.2.1.2	(PE212)	EW2010301	2.1.8.2.10.2	3120
459						X	100-HR-2 Characterization	1.4.10.1.1.8.2.1.3	(PE213)	EW2010301	2.1.8.2.10.3	3120
460						X	100-HR-2 Feasibility Studies	1.4.10.1.1.8.2.1.4	(PE214)	EW201301	2.1.8.2.10.4	3120
461					X		Remediation	1.4.10.1.1.8.2.2	(PE22)	EW2010302	2.1.8.2.20	3120
462				X			100-HR-3	1.4.10.1.1.8.3	(PE3)	EW201030	2.1.8.3	3120
463					X		Assessment	1.4.10.1.1.8.3.1	(PE31)	EW2010301	2.1.8.3.10	3120
464						X	100-HR-3 General	1.4.10.1.1.8.3.1.1	(PE311)	EW2010301	2.1.8.3.10.1	3120
465						X	100-HR-3 Characterization	1.4.10.1.1.8.3.1.3	(PE313)	EW2010301	2.1.8.3.10.3	3120
466						X	100-HR-3 Feasibility Studies	1.4.10.1.1.8.3.1.4	(PE314)	EW2010301	2.1.8.3.10.4	3120
467						X	100-HR-3 Treatability	1.4.10.1.1.8.3.1.5	(PE315)	EW2010301	2.1.8.3.10.5	3120
468					X		Remediation	1.4.10.1.1.8.3.2	(PE32)	EW2010302	2.1.8.3.20	3120
469				X			100-IU-2	1.4.10.1.1.8.4	(PE4)	EW201030	2.1.8.4	3120
470					X		Assessment	1.4.10.1.1.8.4.1	(PE41)	EW2010301	2.1.8.4.10	3120
471					X		Remediation	1.4.10.1.1.8.4.2	(PE42)	EW2010302	2.1.8.4.20	3120
472				X			100-IU-4	1.4.10.1.1.8.5	(PE5)	EW201030	2.1.8.5	3120
473					X		Assessment	1.4.10.1.1.8.5.1	(PE51)	EW2010301	2.1.8.5.10	3120
474					X		Remediation	1.4.10.1.1.8.5.2	(PE52)	EW2010302	2.1.8.5.20	3120
475				X			100-IU-5	1.4.10.1.1.8.6	(PE6)	EW201030	2.1.8.6	3120
476					X		Assessment	1.4.10.1.1.8.6.1	(PE61)	EW2010301	2.1.8.6.10	3120
477					X		Remediation	1.4.10.1.1.8.6.2	(PE62)	EW2010302	2.1.8.6.20	3120
478						X	ERA-(Design)	1.4.10.1.1.8.6.2.1	(PE621)	EW2010302	2.1.8.6.20.1	3120
479						X	ERA-(Implementation)	1.4.10.1.1.8.6.2.2	(PE622)	EW2010302	2.1.8.6.20.2	3120

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Table 2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
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DOE F1332.10
(11-84)

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
480				X			100 NPL-Common Activities	1.4.10.1.1.8.7	(PE7)	EW201030	2.1.8.7	3120
481					X		Assessment	1.4.10.1.1.8.7.1	(PE71)	EW2010301	2.1.8.7.10	3120
482						X	General	1.4.10.1.1.8.7.1.1	(PE711)	EW2010301	2.1.8.7.10.1	3120
483						X	Planning Document	1.4.10.1.1.8.7.1.2	(PE712)	EW2010301	2.1.8.7.10.2	3120
484						X	Characterization	1.4.10.1.1.8.7.1.3	(PE713)	EW2010301	2.1.8.7.10.3	3120
485						X	Feasibility Studies	1.4.10.1.1.8.7.1.4	(PE714)	EW2010301	2.1.8.7.10.4	3120
486						X	Treatability	1.4.10.1.1.8.7.1.5	(PE715)	EW2010301	2.1.8.7.10.5	3120
487					X		Remediation	1.4.10.1.1.8.7.2	(PE72)	EW2010302	2.1.8.7.20	3120
488			X				100-NR	1.4.10.1.1.9	(PG)	EW201030	2.1.9	3125
489				X			100-NR-1	1.4.10.1.1.9.1	(PG1)	EW201030	2.1.9.1	3125
490					X		Assessment	1.4.10.1.1.9.1.1	(PG11)	EW2010301	2.1.9.1.10	3125
491						X	100-NR-1 General	1.4.10.1.1.9.1.1.1	(PG111)	EW2010301	2.1.9.1.10.1	3125
492						X	100-NR-1 Planning Document	1.4.10.1.1.9.1.1.2	(PG112)	EW2010301	2.1.9.1.10.2	3125
493						X	100-NR-1 Characterization	1.4.10.1.1.9.1.1.3	(PG113)	EW2010301	2.1.9.1.10.3	3125
494						X	100-NR-1 Feasibility Studies	1.4.10.1.1.9.1.1.4	(PG114)	EW2010301	2.1.9.1.10.4	3125
495						X	100-NR-1 Treatability	1.4.10.1.1.9.1.1.5	(PG115)	EW2010301	2.1.9.1.10.5	3125
496					X		Remediation	1.4.10.1.1.9.1.2	(PG12)	EW2010302	2.1.9.1.20	3125
497				X			100-NR-2	1.4.10.1.1.9.2	(PG2)	EW201030	2.1.9.2	3125
498					X		Assessment	1.4.10.1.1.9.2.1	(PG21)	EW2010301	2.1.9.2.10	3125
499						X	100-NR-2 General	1.4.10.1.1.9.2.1.1	(PG211)	EW2010301	2.1.9.2.10.1	3125
500						X	100-NR-2 Planning Document	1.4.10.1.1.9.2.1.2	(PG212)	EW2010301	2.1.9.2.10.2	3125
501						X	100-NR-2 Characterization	1.4.10.1.1.9.2.1.3	(PG213)	EW2010301	2.1.9.2.10.3	3125
502						X	100-NR-2 Feasibility Studies	1.4.10.1.1.9.2.1.4	(PG214)	EW2010301	2.1.9.2.10.4	3125
503						X	100-NR-2 Treatability	1.4.10.1.1.9.2.1.5	(PG215)	EW2010301	2.1.9.2.10.5	3125
504					X		Remediation	1.4.10.1.1.9.2.2	(PG22)	EW2010302	2.1.9.2.20	3125
505						X	100-NR-2 N-Springs-ERA	1.4.10.1.1.9.2.2.1	(PG221)	EW2010302	2.1.9.2.20.1	3125
506			X				200-BP	1.4.10.1.1.10	(PL)	EW201030	2.1.10	3200
507				X			200-BP-1	1.4.10.1.1.10.1	(PL1)	EW201030	2.1.10.1	3200
508					X		Assessment	1.4.10.1.1.10.1.1	(PL11)	EW2010301	2.1.10.1.10	3200
509						X	200-BP-1 General	1.4.10.1.1.10.1.1.1	(PL111)	EW2010301	2.1.10.1.10.1	3200
510						X	200-BP-1 Feasibility Studies	1.4.10.1.1.10.1.1.4	(PL114)	EW2010301	2.1.10.1.10.4	3200
511						X	200-BP-1 Treatability	1.4.10.1.1.10.1.1.5	(PL115)	EW2010301	2.1.10.1.10.5	3200
512					X		Remediation	1.4.10.1.1.10.1.2	(PL12)	EW2010302	2.1.10.1.20	3200
513						X	200-BP-1 Remedial Actions Design	1.4.10.1.1.10.1.2.5	(PL125)	EW2010302	2.1.10.1.20.5	3200
514				X			200-BP-2	1.4.10.1.1.10.2	(PL2)	EW201030	2.1.10.2	3200
515					X		Assessment	1.4.10.1.1.10.2.1	(PL21)	EW2010301	2.1.10.2.10	3200
516					X		Remediation	1.4.10.1.1.10.2.2	(PL22)	EW2010302	2.1.10.2.20	3200
517				X			200-BP-3	1.4.10.1.1.10.3	(PL3)	EW201030	2.1.10.3	3200
518					X		Assessment	1.4.10.1.1.10.3.1	(PL31)	EW2010301	2.1.10.3.10	3200
519					X		Remediation	1.4.10.1.1.10.3.2	(PL32)	EW2010302	2.1.10.3.20	3200
520				X			200-BP-4	1.4.10.1.1.10.4	(PL4)	EW201030	2.1.10.4	3200
521					X		Assessment	1.4.10.1.1.10.4.1	(PL41)	EW2010301	2.1.10.4.10	3200
522					X		Remediation	1.4.10.1.1.10.4.2	(PL42)	EW2010302	2.1.10.4.20	3200
523				X			200-BP-5	1.4.10.1.1.10.5	(PL5)	EW201030	2.1.10.5	3200
524					X		Assessment	1.4.10.1.1.10.5.1	(PL51)	EW2010301	2.1.10.5.10	3200
525						X	200-BP-5 General	1.4.10.1.1.10.5.1.1	(PL511)	EW2010301	2.1.10.5.10.1	3200

U. S. DEPARTMENT OF ENERGY

Table 2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
PART I - INDEX

DOE F1332.10
(11-84)

FORM APPROVED
OMB NO. 1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
526						X	200-BP-5 Characterization	1.4.10.1.1.10.5.1.3	(PL513)	EW2010301	2.1.10.5.10.3	3200
527						X	200-BP-5 Treatability	1.4.10.1.1.10.5.1.5	(PL515)	EW2010301	2.1.10.5.10.5	3200
528					X		Remediation	1.4.10.1.1.10.5.2	(PL52)	EW2010302	2.1.10.5.20	3200
529				X			200-BP-6	1.4.10.1.1.10.6	(PL6)	EW201030	2.1.10.6	3200
530					X		Assessment	1.4.10.1.1.10.6.1	(PL61)	EW2010301	2.1.10.6.10	3200
531					X		Remediation	1.4.10.1.1.10.6.2	(PL62)	EW2010302	2.1.10.6.20	3200
532				X			200-BP-8	1.4.10.1.1.10.7	(PL7)	EW201030	2.1.10.7	3200
533					X		Assessment	1.4.10.1.1.10.7.1	(PL71)	EW2010301	2.1.10.7.10	3200
534					X		Remediation	1.4.10.1.1.10.7.2	(PL72)	EW2010302	2.1.10.7.20	3200
535				X			200-BP-9	1.4.10.1.1.10.8	(PL8)	EW201030	2.1.10.8	3200
536					X		Assessment	1.4.10.1.1.10.8.1	(PL81)	EW2010301	2.1.10.8.10	3200
537					X		Remediation	1.4.10.1.1.10.8.2	(PL82)	EW2010302	2.1.10.8.20	3200
538				X			200-BP-10	1.4.10.1.1.10.9	(PL9)	EW201030	2.1.10.9	3200
539					X		Assessment	1.4.10.1.1.10.9.1	(PL91)	EW2010301	2.1.10.9.10	3200
540					X		Remediation	1.4.10.1.1.10.9.2	(PL92)	EW2010302	2.1.10.9.20	3200
541				X			200-BP-11	1.4.10.1.1.10.10	(PLA)	EW201030	2.1.10.10	3200
542					X		Assessment	1.4.10.1.1.10.10.1	(PLA1)	EW2010301	2.1.10.10.10	3200
543						X	200-BP-11 General	1.4.10.1.1.10.10.1.1	(PLA11)	EW2010301	2.1.10.10.10.1	3200
544						X	200-BP-11 Planning Documents	1.4.10.1.1.10.10.1.2	(PLA12)	EW2010301	2.1.10.10.10.2	3200
545						X	200-BP-11 Characterization	1.4.10.1.1.10.10.1.3	(PLA13)	EW2010301	2.1.10.10.10.3	3200
546					X		Remediation	1.4.10.1.1.10.10.2	(PLA2)	EW2010302	2.1.10.10.20	3200
547				X			200 NPL Common Activities	1.4.10.1.1.10.11	(PLB)	EW201030	2.1.10.11	3200
548					X		Assessment	1.4.10.1.1.10.11.1	(PLB1)	EW2010301	2.1.10.11.10	3205
549						X	200 Areas General	1.4.10.1.1.10.11.1.1	(PLB11)	EW2010301	2.1.10.11.10.1	3205
549a						X	Groundwater Remediation Strategy	1.4.10.1.1.10.11.1.2	(PLB12)	EW2010301	2.1.10.11.10.2	3205
550						X	Common Characterizationn	1.4.10.1.1.10.11.1.3	(PLB13)	EW2010301	2.1.10.11.10.3	3205
551					X		Remediation	1.4.10.1.1.10.11.2	(PLB2)	EW2010302	2.1.10.11.20	3205
552						X	WHC Support to ER Pipeline	1.4.10.1.1.10.11.2.10	(PLB2A)	EW2010302	2.1.10.11.20.10	3205
553						X	ER Pipeline in W-094-H Trench	1.4.10.1.1.10.11.2.117	PLB2B	EW2010302	2.1.10.11.20.11	3205
554			X				200-NO	1.4.10.1.1.11	(PM)	EW201030	2.1.11	3205
555				X			200-NO-1	1.4.10.1.1.11.1	(PM1)	EW201030	2.1.11.1	3205
556					X		Assessment	1.4.10.1.1.11.1.1	(PM11)	EW2010301	2.1.11.1.10	3205
557					X		Remediation	1.4.10.1.1.11.1.2	(PM12)	EW2010302	2.1.11.1.20	3205
558			X				200-PO	1.4.10.1.1.12	(PN)	EW201030	2.1.12	3210
559				X			200-PO-1	1.4.10.1.1.12.1	(PN1)	EW201030	2.1.12.1	3210
560					X		Assessment	1.4.10.1.1.12.1.1	(PN11)	EW2010301	2.1.12.1.10	3210
561						X	200-PO-1 General	1.4.10.1.1.12.1.1.1	(PN111)	EW2010301	2.1.12.1.10.1	3210
562						X	200-PO-1 Planning Documents	1.4.10.1.1.12.1.1.2	(PN112)	EW2010301	2.1.12.1.10.2	3210
563					X		Remediation	1.4.10.1.1.12.1.2	(PN12)	EW2010302	2.1.12.1.20	3210
564				X			200-PO-2	1.4.10.1.1.12.2	(PN2)	EW201030	2.1.12.2	3210
565					X		Assessment	1.4.10.1.1.12.2.1	(PN21)	EW2010301	2.1.12.2.10	3210
566					X		Remediation	1.4.10.1.1.12.2.2	(PN22)	EW2010302	2.1.12.2.20	3210
567				X			200-PO-4	1.4.10.1.1.12.3	(PN3)	EW201030	2.1.12.3	3210
568					X		Assessment	1.4.10.1.1.12.3.1	(PN31)	EW2010301	2.1.12.3.10	3210
569					X		Remediation	1.4.10.1.1.12.3.2	(PN32)	EW2010302	2.1.12.3.2	3210
570				X			200-PO-5	1.4.10.1.1.12.4	(PN4)	EW201030	2.1.12.4	3210

U. S. DEPARTMENT OF ENERGY

Table 2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
PART I - INDEX

DOE F1332.10
(11-84)

FORM APPROVED
OMB NO. 1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
571					X		Assessment	1.4.10.1.1.12.4.1	(PN41)	EW2010301	2.1.12.4.10	3210
572					X		Remediation	1.4.10.1.1.12.4.2	(PN42)	EW2010302	2.1.12.4.20	3210
573				X			200-PO-6	1.4.10.1.1.12.5	(PN5)	EW201030	2.1.12.5	3210
574					X		Assessment	1.4.10.1.1.12.5.1	(PN51)	EW2010301	2.1.12.5.10	3210
575					X		Remediation	1.4.10.1.1.12.5.2	(PN52)	EW2010302	2.1.12.5.20	3210
576			X				200-RO	1.4.10.1.1.13	(PP)	EW201030	2.1.13	3215
577				X			200-RO-1	1.4.10.1.1.13.1	(PP1)	EW201030	2.1.13.1	3215
578					X		Assessment	1.4.10.1.1.13.1.1	(PP11)	EW2010301	2.1.13.1.10	3215
579					X		Remediation	1.4.10.1.1.13.1.2	(PP12)	EW2010302	2.1.13.1.20	3215
580				X			200-RO-2	1.4.10.1.1.13.2	(PP2)	EW201030	2.1.13.2	3215
581					X		Assessment	1.4.10.1.1.13.2.1	(PP21)	EW2010301	2.1.13.2.10	3215
582					X		Remediation	1.4.10.1.1.13.2.2	(PP22)	EW2010302	2.1.13.2.20	3215
583				X			200-RO-3	1.4.10.1.1.13.3	(PP3)	EW201030	2.1.13.3	3215
584					X		Assessment	1.4.10.1.1.13.3.1	(PP31)	EW2010301	2.1.13.3.10	3215
585					X		Remediation	1.4.10.1.1.13.3.2	(PP32)	EW2010302	2.1.13.3.20	3215
586			X				200-SO	1.4.10.1.1.14	(PR)	EW201030	2.1.14	3220
587				X			200-SO-1	1.4.10.1.1.14.1	(PR1)	EW201030	2.1.14.1	3220
588					X		Assessment	1.4.10.1.1.14.1.1	(PR11)	EW2010301	2.1.14.1.10	3220
589					X		Remediation	1.4.10.1.1.14.1.2	(PR12)	EW2010302	2.1.14.1.20	3220
590			X				200-TP	1.4.10.1.1.15	(PS)	EW201030	2.1.15	3225
591				X			200-TP-1	1.4.10.1.1.15.1	(PS1)	EW201030	2.1.15.1	3225
592					X		Assessment	1.4.10.1.1.15.1.1	(PS11)	EW2010301	2.1.15.1.10	3225
593					X		Remediation	1.4.10.1.1.15.1.2	(PS12)	EW2010302	2.1.15.1.20	3225
594				X			200-TP-2	1.4.10.1.1.15.2	(PS2)	EW201030	2.1.15.2	3225
595					X		Assessment	1.4.10.1.1.15.2.1	(PS21)	EW2010301	2.1.15.2.10	3225
596					X		Remediation	1.4.10.1.1.15.2.2	(PS22)	EW2010302	2.1.15.2.20	3225
597				X			200-TP-3	1.4.10.1.1.15.3	(PS3)	EW201030	2.1.15.3	3225
598					X		Assessment	1.4.10.1.1.15.3.1	(PS31)	EW2010301	2.1.15.3.10	3225
599					X		Remediation	1.4.10.1.1.15.3.2	(PS32)	EW2010302	2.1.15.3.20	3225
600				X			200-TP-4	1.4.10.1.1.15.4	(PS4)	EW201030	2.1.15.4	3225
601					X		Assessment	1.4.10.1.1.15.4.1	(PS41)	EW2010301	2.1.15.4.10	3225
602					X		Remediation	1.4.10.1.1.15.4.2	(PS42)	EW2010302	2.1.15.4.20	3225
603			X				200-UP	1.4.10.1.1.16	(PT)	EW201030	2.1.16	3230
604				X			200-UP-1	1.4.10.1.1.16.1	(PT1)	EW201030	2.1.16.1	3230
605					X		Assessment	1.4.10.1.1.16.1.1	(PT11)	EW2010301	2.1.16.1.10	3230
606						X	200-UP-1 General	1.4.10.1.1.16.1.1.1	(PT111)	EW2010301	2.1.16.1.10.1	3230
607						X	200-UP-1 Planning Documents	1.4.10.1.1.16.1.1.2	(PT112)	EW2010301	2.1.16.1.10.2	3220
608						X	200-UP-1 Characterization	1.4.10.1.1.16.1.1.3	(PT113)	EW2010301	2.1.16.1.10.3	3230
609						X	200-UP-1 Feasibility Studies	1.4.10.1.1.16.1.1.4	(PT114)	EW2010301	2.1.16.1.10.4	3230
610						X	200-UP-1 Treatability	1.4.10.1.1.16.1.1.5	(PT115)	EW2010301	2.1.16.1.10.5	3230
611					X		Remediation	1.4.10.1.1.16.1.2	(PT12)	EW2010302	2.1.16.1.20	3230
612				X			200-UP-2	1.4.10.1.1.16.2	(PT2)	EW201030	2.1.16.2	3230
613					X		Assessment	1.4.10.1.1.16.2.1	(PT21)	EW2010301	2.1.16.2.10	3230
614						X	200-UP-2 General	1.4.10.1.1.16.2.1.1	(PT211)	EW2010301	2.1.16.2.10.1	3230
615						x	200-UP-2 Characterization	1.4.10.1.1.16.2.1.3	(PT213)	EW2010301	2.1.16.2.10.3	3230
616						X	200-UP-2 Treatability	1.4.10.1.1.16.2.1.5	(PT215)	EW2010301	2.1.16.2.10.5	3230

U. S. DEPARTMENT OF ENERGY

Table 2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
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4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
617					X		Remediation	1.4.10.1.1.16.2.2	(PT22)	EW2010302	2.1.16.2.20	3230
618			X				200-ZP	1.4.10.1.1.17	(PU)	EW201030	2.1.17	3235
619				X			200-ZP-1	1.4.10.1.1.17.1	(PU1)	EW201030	2.1.17.1	3235
620					X		Assessment	1.4.10.1.1.17.1.1	(PU11)	EW2010301	2.1.17.1.10	3235
621						X	200-ZP-1 General	1.4.10.1.1.17.1.1.1	(PU111)	EW2010301	2.1.17.1.10.1	3235
622					X		Remediation	1.4.10.1.1.17.1.2	(PU12)	EW2010302	2.1.17.1.20	3235
623						X	200-ZP-1 IRM Design	1.4.10.1.1.17.1.2.3	(PU123)	EW2010302	2.1.17.1.20.3	3235
624						X	200-ZP-1 IRM Implementation	1.4.10.1.1.17.1.2.4	(PU124)	EW2010302	2.1.17.1.20.4	3235
625				X			200-ZP-2	1.4.10.1.1.17.2	(PU2)	EW201030	2.1.17.2	3235
626					X		Assessment	1.4.10.1.1.17.2.1	(PU21)	EW2010301	2.1.17.2.10	3235
627					X		Remediation	1.4.10.1.1.17.2.2	(PU22)	EW2010302	2.1.17.2.20	3235
628						X	200-ZP-2 ERA Implementation	1.4.10.1.1.17.2.2.2	(PU222)	EW2010302	2.1.17.2.20.2	3235
629				X			200-ZP-3	1.4.10.1.1.17.3	(PU3)	EW201030	2.1.17.3	3235
630					X		Assessment	1.4.10.1.1.17.3.1	(PU31)	EW2010301	2.1.17.3.10	3235
631					X		Remediation	1.4.10.1.1.17.3.2	(PU32)	EW2010302	2.1.17.3.20	3235
632			X				200-IU	1.4.10.1.1.18	(PY)	EW201030	2.1.18	3240
633				X			200-IU-1	1.4.10.1.1.18.1	(PY1)	EW201030	2.1.18.1	3240
634					X		Assessment	1.4.10.1.1.18.1.1	(PY11)	EW2010301	2.1.18.1.10	3240
635					X		Remediation	1.4.10.1.1.18.1.2	(PY12)	EW2010302	2.1.18.1.20	3240
636				X			200-IU-2	1.4.10.1.1.18.2	(PY2)	EW201030	2.1.18.2	3240
637					X		Assessment	1.4.10.1.1.18.2.1	(PY21)	EW2010301	2.1.18.2.10	3240
638					X		Remediation	1.4.10.1.1.18.2.2	(PY22)	EW2010302	2.1.18.2.20	3240
639				X			200-IU-3	1.4.10.1.1.18.3	(PY3)	EW201030	2.1.18.3	3240
640					X		Assessment	1.4.10.1.1.18.3.1	(PY31)	EW2010301	2.1.18.3.10	3240
641					X		Remediation	1.4.10.1.1.18.3.2	(PY32)	EW2010302	2.1.18.3.20	3240
642				X			200-IU-4	1.4.10.1.1.18.4	(PY4)	EW201030	2.1.18.4	3240
643					X		Assessment	1.4.10.1.1.18.4.1	(PY41)	EW2010301	2.1.18.4.10	3240
644					X		Remediation	1.4.10.1.1.18.4.2	(PY42)	EW2010302	2.1.18.4.20	3240
645				X			200-IU-5	1.4.10.1.1.18.5	(PY5)	EW201030	2.1.18.5	3240
646					X		Assessment	1.4.10.1.1.18.5.1	(PY51)	EW2010301	2.1.18.5.10	3240
647					X		Remediation	1.4.10.1.1.18.5.2	(PY52)	EW2010302	2.1.18.5.20	3240
648				X			200-IU-6	1.4.10.1.1.18.6	(PY6)	EW201030	2.1.18.6	3240
649					X		Assessment	1.4.10.1.1.18.6.1	(PY61)	EW2010301	2.1.18.6.10	3240
650					X		Remediation	1.4.10.1.1.18.6.2	(PY62)	EW2010302	2.1.18.6.20	3240
651			X				200-SS	1.4.10.1.1.19	(PW)	EW201030	2.1.19	324
652				X			200-SS-1	1.4.10.1.1.19.1	(PW1)	EW201030	2.1.19.1	3245
653					X		Assessment	1.4.10.1.1.19.1.1	(PW11)	EW2010301	2.1.19.1.10	3245
654					X		Remediation	1.4.10.1.1.19.1.2	(PW12)	EW2010302	2.1.19.1.20	3245
655				X			200-SS-2	1.4.10.1.1.19.2	(PW2)	EW201030	2.1.19.2	3245
656					X		Assessment	1.4.10.1.1.19.2.1	(PW21)	EW2010301	2.1.19.2.10	3250
657					X		Remediation	1.4.10.1.1.19.2.2	(PW22)	EW2010302	2.1.19.2.20	3250
658			X				200-EGW	1.4.10.1.1.20	(PX)	EW201030	2.1.20	3250
659				X			200-EGW	1.4.10.1.1.20.1	(PX1)	EW201030	2.1.20.1	3250
660					X		Assessment	1.4.10.1.1.20.1.1	(PX11)	EW2010301	2.1.20.1.10	3250
661					X		Remediation	1.4.10.1.1.20.1.2	(PX12)	EW2010302	2.1.20.1.20	3250
662			X				200-WGW	1.4.10.1.1.21	(P1)	EW201030	2.1.21	3255

U. S. DEPARTMENT OF ENERGY

Table 2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
PART I - INDEX

DOE F1332.10
(11-84)

FORM APPROVED
OMB NO. 1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
663				X			200-WGW	1.4.10.1.1.21.1	(P11)	EW201030	2.1.21.1	3255
664					X		Assessment	1.4.10.1.1.21.1.1	(P111)	EW2010301	2.1.21.1.10	3255
665					X		Remediation	1.4.10.1.1.21.1.2	(P112)	EW2010302	2.1.21.1.20	3255
666			X				300-FF	1.4.10.1.1.22	(P2)	EW201030	2.1.22	3300
667				X			300-FF-1	1.4.10.1.1.22.1	(P21)	EW201030	2.1.22.1	3300
668					X		Assessment	1.4.10.1.1.22.1.1	(P211)	EW2010301	2.1.22.1.10	3300
669						X	300-FF-1 General	1.4.10.1.1.22.1.1.1	(P2111)	EW2010301	2.1.22.1.10.1	3300
670						X	300-FF-1 Characterization	1.4.10.1.1.22.1.1.3	(P2113)	EW2010301	2.1.22.1.10.3	3300
671						X	300-FF-1 Feasibility Studies	1.4.10.1.1.22.1.1.4	(P2114)	EW2010301	2.1.22.1.10.4	3300
672						X	300-FF-1 Treatability	1.4.10.1.1.22.1.1.5	(P2115)	EW2010301	2.1.22.1.10.5	3300
673					X		Remediation	1.4.10.1.1.22.1.2	(P212)	EW2010302	2.1.22.1.20	3300
674				X			300-FF-2	1.4.10.1.1.22.2	(P22)	EW201030	2.1.22.2	3300
675					X		Assessment	1.4.10.1.1.22.2.1	(P221)	EW2010301	2.1.22.2.10	3300
676						X	300-FF-2 Planning Documents	1.4.10.1.1.22.2.1.2	(P2212)	EW2010301	2.1.22.2.10.2	3300
677						X	300-FF-2 Characterization	1.4.10.1.1.22.2.1.3	(P2213)	EW2010301	2.1.22.2.10.3	3300
678					X		Remediation	1.4.10.1.1.22.2.2	(P222)	EW2010302	2.1.22.2.20	3300
679				X			300-FF-3	1.4.10.1.1.22.3	(P23)	EW201030	2.1.22.3	3300
680					X		Assessment	1.4.10.1.1.22.3.1	(P231)	EW2010301	2.1.22.3.10	3300
681					X		Remediation	1.4.10.1.1.22.3.2	(P232)	EW2010302	2.1.22.3.20	3300
682				X			300-FF-4	1.4.10.1.1.22.4	(P24)	EW201030	2.1.22.4	3300
683					X		Assessment	1.4.10.1.1.22.4.1	(P241)	EW2010301	2.1.22.4.10	3300
684					X		Remediation	1.4.10.1.1.22.4.2	(P242)	EW2010302	2.1.22.4.20	3300
685				X			300-FF-5	1.4.10.1.1.22.5	(P25)	EW201030	2.1.22.5	3300
686					X		Assessment	1.4.10.1.1.22.5.1	(P251)	EW2010301	2.1.22.5.10	33087
687						X	300-FF-5 General	1.4.10.1.1.22.5.1.1	(P2511)	EW2010301	2.1.22.5.10.1	3300
688						X	300-FF-5 Characterization	1.4.10.1.1.22.5.1.3	(P2513)	EW2010301	2.1.22.5.10.3	3300
689						X	300-FF-5 Feasibility Studies	1.4.10.1.1.22.5.1.4	(P2514)	EW2010301	2.1.22.5.10.4	3300
690					X		Remediation	1.4.10.1.1.22.5.2	(P252)	EW2010302	2.1.22.5.20	3300
691				X			300-IU-1	1.4.10.1.1.22.6	(P26)	EW201030	2.1.22.6	3300
692					X		Assessment	1.4.10.1.1.22.6.1	(P261)	EW2010301	2.1.22.6.10	3300
693					X		Remediation	1.4.10.1.1.22.6.2	(P262)	EW2010302	2.1.22.6.20	3300
694						X	300-IU-1 ERA Implementation	1.4.10.1.1.22.6.2.1	(P2621)	EW2010302	2.1.22.6.20.1	3300
695				X			300 NPL-Common Activities	1.4.10.1.1.22.7	(P27)	EW201030	2.1.22.7	3300
696					X		Assessment	1.4.10.1.1.22.7.1	(P271)	EW2010301	2.1.22.7.10	3300
697					X		Remediation	1.4.10.1.1.22.7.2	(P272)	EW2010302	2.1.22.7.20	3300
698			X				1100-EM	1.4.10.1.1.23	(P3)	EW201030	2.1.23	3390
699				X			1100-EM-1	1.4.10.1.1.23.1	(P31)	EW201030	2.1.23.1	3390
700					X		Assessment	1.4.10.1.1.23.1.1	(P311)	EW2010301	2.1.23.1.10	3390
701					X		Remediation	1.4.10.1.1.23.1.2	(P312)	EW2010302	2.1.23.1.20	3390
702				X			1100-EM-2	1.4.10.1.1.23.2	(P32)	EW201030	2.1.23.2	3390
703					X		Assessment	1.4.10.1.1.23.2.1	(P321)	EW2010301	2.1.23.2.10	3390
704					X		Remediation	1.4.10.1.1.23.2.2	(P322)	EW2010302	2.1.23.2.20	3390
705				X			1100-EM-3	1.4.10.1.1.23.3	(P33)	EW201030	2.1.23.3	3390
706					X		Assessment	1.4.10.1.1.23.3.1	(P331)	EW2010301	2.1.23.3.10	3390
707					X		Remediation	1.4.10.1.1.23.3.2	(P332)	EW2010302	2.1.23.3.20	3390
708				X			1100-IU-1	1.4.10.1.1.23.4	(P34)	EW201030	2.1.23.4	3390

U. S. DEPARTMENT OF ENERGY

Table 2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
PART I - INDEX

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Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
709					X		Assessment	1.4.10.1.1.23.4.1	(P341)	EW2010301	2.1.23.4.10	3390
710					X		Remediation	1.4.10.1.1.23.4.2	(P342)	EW2010302	2.1.23.4.20	3390
711				X			1100 NPL-Common Activities	1.4.10.1.1.23.5	(P35)	EW201030	2.1.23.5	3390
712					X		Assessment	1.4.10.1.1.23.5.1	(P351)	EW2010301	2.1.23.5.10	3390
713					X		Remediation	1.4.10.1.1.23.5.2	(P352)	EW2010302	2.1.23.5.20	3390
714				X			ALE Reserve	1.4.10.1.1.23.6	(P36)	EW201030	2.1.23.6	3390
715					X		ALE Assessment	1.4.10.1.1.23.6.1	(P361)	EW2010301	2.1.23.6.10	3390
716						X	ALE Preliminary Assessment Screening	1.4.10.1.1.23.6.1.6	(P3616)	EW2010301	2.1.23.6.10.6	3390
717					X		ALE Remediation	1.4.10.1.1.23.6.2	(P362)	EW2010302	2.1.23.6.20	3390
718						X	ALE Remedial Action Design	1.4.10.1.1.23.6.2.5	(P3625)	EW2010302	2.1.23.6.20.5	3390
719						X	ALE Remedial Action Implement	1.4.10.1.1.23.6.2.6	(P3626)	EW2010302	2.1.23.6.20.6	3390
720		X					Program Management and Support	1.4.10.1.3	(E)		2.3	
721			X				Program Management and Support - Remedial Actions	1.4.10.1.3.1	(EA)	EW201030	2.3.1	3400
722				X			Program Management	1.4.10.1.3.1.1	(EA1)	EW201030	2.3.1.1	3400
723					X		Program Management	1.4.10.1.3.1.1.1	(EA11)	EW2010301	2.3.1.1.01	3400
724						X	RA Program Management	1.4.10.1.3.1.1.1.1	(EA111)	EW2010301	2.3.1.1.01.1	3400
725						X	Program Control	1.4.10.1.3.1.1.1.2	(EA112)	EW2010301	2.3.1.1.01.2	3400
726						X	ER Baseline Planning and Development	1.4.10.1.3.1.1.1.3	(EA113)	EW2010301	2.3.1.1.01.3	3400
727						X	Records/Document Control	1.4.10.1.3.1.1.1.4	(EA114)	EW2010301	2.3.1.1.01.4	3400
728						X	HEIS/WIDS/GIS/IMS	1.4.10.1.3.1.1.1.6	(EA116)	EW2010301	2.3.1.1.01.6	3400
729						X	Systems Engineering Analysis/ Configuration Management Plan	1.4.10.1.3.1.1.1.7	(EA117)	EW2010301	2.3.1.1.01.7	3400
730						X	TPA/ER Public Involvement	1.4.10.1.3.1.1.1.9	(EA119)	EW2010301	2.3.1.1.01.9	3400
731						X	ERMC Transition Activity	1.4.10.1.3.1.1.1.10	(EA11A)	EW2010301	2.3.1.1.01.10	3400
732						X	TPA Support	1.4.10.1.3.1.1.1.11	(EA11B)	EW2010301	2.3.1.1.01.11	3400
733						X	JCS Assessment	1.4.10.1.3.1.1.1.12	(EA11C)	EW2010301	2.3.1.1.01.12	3400
734						X	Controller Commitment	1.4.10.1.3.1.1.1.13	(EA11D)	EW2010301	2.3.1.1.01.13	3400
734a						X	USACE/GIS Support	1.4.10.1.3.1.1.1.15	(EA11F)	EW2010301	2.3.1.1.01.15	3400
735						X	Hanford Mission Plan	1.4.10.1.3.1.1.1.17	(EA11H)	EW2010301	2.3.1.1.01.17	3400
735a						X	USACE Program Management	1.4.10.1.3.1.1.1.18	(EA11J)	EW2010301	2.3.1.1.01.18	3400
736				X			ER Program Self-Assessment and Development	1.4.10.1.3.1.2	(EA2)	EW201030	2.3.1.2	3400
737					X		Safety Analysis Support	1.4.10.1.3.1.2.1	(EA21)	EW2010301	2.3.1.2.01	3400
738						X	QA Self-Assessment Program Development	1.4.10.1.3.1.2.1.1	(EA211)	EW2010301	2.3.1.2.01.1	3400
739						X	ER Safety and Health	1.4.10.1.3.1.2.1.2	(EA212)	EW2010301	2.3.1.2.01.2	3400
740				X			RL/State/Tribal Governments	1.4.10.1.3.1.3	(EA3)	EW2010301	2.3.1.3	3400
741					X		RL/State/Tribal Governments	1.4.10.1.3.1.3.1	(EA31)	EW2010301	2.3.1.3.01	3400
742						X	State/Tribal Government Grants	1.4.10.1.3.1.3.1.1	(EA311)	EW2010301	2.3.1.3.01.1	3400
743						X	RL Contracts	1.4.10.1.3.1.3.1.2	(EA312)	EW2010301	2.3.1.3.01.2	3400
744						X	Direct Support - USACE	1.4.10.1.3.1.3.1.3	(EA313)	EW2010301	2.3.1.3.01.3	3400
745				X			Technology Adaptation	1.4.10.1.3.1.4	(EA4)	EW201030	2.3.1.4	3400
746					X		Technology Adaptation	1.4.10.1.3.1.4.1	(EA41)	EW2010301	2.3.1.4.01	3400

U. S. DEPARTMENT OF ENERGY

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747						X	Baseline Technical Planning	1.4.10.1.3.1.4.1.1	(EA411)	EW2010301	2.3.1.4.01.1	3400
748						X	HRA-EIS	1.4.10.1.3.1.4.1.2	(EA412)	EW2010301	2.3.1.4.01.2	3400
749						X	In-situ Chemical Treatment	1.4.10.1.3.1.4.1.4	(EA414)	EW2010301	2.3.1.4.01.4	3400
750						X	Barrier Development	1.4.10.1.3.1.4.1.5	(EA415)	EW2010301	2.3.1.4.01.5	3400
751						X	ISV Demo - Spot Melt	1.4.10.1.3.1.4.1.7	(EA417)	EW2010301	2.3.1.4.01.7	3400
752						X	Industrial Technology Transfer	1.4.10.1.3.1.4.1.8	(EA418)	EW2010301	2.3.1.4.01.8	3400
753						X	USACE Well Head Surveying	1.4.10.1.3.1.4.1.9	(EA419)	EW2010301	2.3.1.4.01.9	3400
754						X	Technology Adaptation	1.4.10.1.3.1.4.1.10	(EA41A)	EW2010301	2.3.1.4.01.10	3400
755						X	Public Involvement/NW Citizens Forum	1.4.10.1.3.1.4.1.11	(EA41B)	EW2010301	2.3.1.4.01.11	3400
755a						X	Chem Dept. WSU Tri-Cities	1.4.10.1.3.1.4.1.13	(EA41D)	EW2010301	2.3.1.4.01.13	3400
755b						X	Supported Liquid Membrane	1.4.10.1.3.1.4.1.14	(EA41E)	EW2010301	2.3.1.4.01.14	3400
755c						X	Geophysical Logging CRADA	1.4.10.1.3.1.4.1.15	(EA41F)	EW2010301	2.3.1.4.01.15	3400
755d						X	PNL Columbia River Study	1.4.10.1.3.1.4.1.16	(EA41G)	EW2010301	2.3.1.4.01.16	3400
756				X			Laboratory Support	1.4.10.1.3.1.5	(EA5)	EW201030	2.3.1.5	3400
757					X		Laboratory Support	1.4.10.1.3.1.5.1	(EA51)	EW2010301	2.3.1.5.01	3400
758						X	HASM Planning/Administration	1.4.10.1.3.1.5.1.2	(EA512)	EW2010301	2.3.1.5.01.2	3400
759						X	325 Laboratory Facility Upgrades	1.4.10.1.3.1.5.1.5	(EA515)	EW2010301	2.3.1.5.01.5	3400
760						X	222-S Assessment	1.4.10.1.3.1.5.1.7	(EA517)	EW2010301	2.3.1.5.01.7	3400
761				X			Facilities, Systems, and Equipment Support	1.4.10.1.3.1.6	(EA6)	EW201030	2.3.1.6	3400
762					X		General Support	1.4.10.1.3.1.6.1	(EA61)	EW2010301	2.3.1.6.01	3400
763						X	ER General Support	1.4.10.1.3.1.6.1.1	(EA611)	EW2010301	2.3.1.6.01.1	3400
764						X	Training and Course Development	1.4.10.1.3.1.6.1.2	(EA612)	EW2010301	2.3.1.6.01.2	3400
765						X	Baseline Documentation and Procedures	1.4.10.1.3.1.6.1.3	(EA613)	EW2010301	2.3.1.6.01.3	3400
766						X	Common Facility Studies	1.4.10.1.3.1.6.1.4	(EA614)	EW2010301	2.3.1.6.01.4	3400
767						X	Suspect Waste Sites	1.4.10.1.3.1.6.1.5	(EA615)	EW2010301	2.3.1.6.01.5	3400
768						X	Sitewide Background Investigations	1.4.10.1.3.1.6.1.6	(EA616)	EW2010301	2.3.1.6.01.6	3400
769						X	Expedited Response Actions	1.4.10.1.3.1.6.1.7	(EA617)	EW2010301	2.3.1.6.01.7	3400
770					X		Site Characterization	1.4.10.1.3.1.6.2	(EA62)	EW2010301	2.3.1.6.02	3400
771						X	Field Screening Applications	1.4.10.1.3.1.6.2.1	(EA621)	EW2010301	2.3.1.6.02.1	3400
772					X		ER Drilling Support	1.4.10.1.3.1.6.3	(EA63)	EW2010301	2.3.1.6.03	3400
773						X	Drilling Equipment Support	1.4.10.1.3.1.6.3.1	(EA631)	EW2010301	2.3.1.6.03.1	3400
774						X	Purgewater Assessment	1.4.10.1.3.1.6.3.2	(EA632)	EW2010301	2.3.1.6.03.2	3400
775						X	Environmental Analytical Laboratory	1.4.10.1.3.1.6.3.3	(EA633)	EW2010301	2.3.1.6.03.3	3400
776						X	RI/FS Equipment - CENTRC	1.4.10.1.3.1.6.3.5	6EA635	EW2010301	2.3.1.6.03.5	3400
777						X	Program Management - CENTRC (HEIS)	1.4.10.1.3.1.6.3.7	6EA637	EW2010301	2.3.1.6.03.7	3400
778			X				Program Management and Support - Decontamination and Decommissioning	1.4.10.1.3.2	(EB)	EW201040	2.3.2	3410
779				X			Program Management	1.4.10.1.3.2.1	(EB1)	EW201040	2.3.2.1	3410
780					X		Program Management	1.4.10.1.3.2.1.1	(EB11)	EW2010401	2.3.2.1.01	3410
781						X	D&D Program Management	1.4.10.1.3.2.1.1.1	(EB111)	EW2010401	2.3.2.1.01.1	3410
782						X	Advanced Engineering	1.4.10.1.3.2.1.1.4	(EB114)	EW2010401	2.3.2.1.01.4	3410

**	Surveillence and Maintenance (S) is not a part of the FY 1994 work breakdown structure
♦	P3 - 1100-EM Operable Units and UC - 300 Area D&D are non-FDS work breakdown structures.
ALE	-arid lands ecology
BOP	-balance of plant
CENTRC	-capital equipment not related to construction
CRADA	-Cooperative Research and Development Agreement
D&D	-decontamination and decommissioning
EGW	-200 East groundwater
ER	-environmental restoration
ERA	-expedited response actions
ERDF	-environmental restoration disposal facility
ERMC	-environmental restoration management contractor
FDS	-financial data system
JCS	-job control system
GIS	-geographic information system
HASM	-Hanford Analytical Services Management
HGP	-Hanford Generating Plant
HEIS	-Hanford Environmental Information System
HRA-EIS	-Hanford remedial actions- environmental impact statement
IMS	-information management system
ISV	-in-situ vitrification
IRM	-interim response measure
LIMS	-laboratory information management system
NEPA	*-National Environmental Policy Act of 1969*
NPL	-national priorities list
NRDWL	-nonradioactive dangerous waste landfill
NW	-northwest
OU	-operable unit-(The initials-PO,BP, CP, TP, UP,ZP,RO,IU, and FF are OU designators).
PNL	-Pacific Northwest Laboratory
Pu Conc	-plutonium concentration
PUREX	-Plutonium-Uranium Extraction Plant
QA	-quality assurance
RA	-remedial actions
RARA	-radiation area remedial action
RCRA	*-Resource Conservation and Recovery Act of 1976*
REDOX	-Reduction Oxidation Plant
RI/FS	-remedial investigation/feasibility study
S&M	-surveillance and maintenance
SST	-single-shell tank
TPA	-Tri-party Agreement (*Hanford Federal Facility Agreement and Consent Order)*
UST	-underground storage tank
WIDS	-waste information data system
WHC	-Westinghouse Hanford Company
WGW	-200 West groundwater

U.S. DEPARTMENT OF ENERGY

Table 2-2. WORK BREAKDOWN STRUCTURE DICTIONARY PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
1.4.10.1 (E) 2.0	Hanford Environmental Restoration	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
1	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to manage and execute the Hanford ER Program. This effort encompasses the management and disposition of past-practice environmental contamination on the Hanford Site, including contaminated soils, groundwater, and solid waste contained in past-practice units. In addition this effort encompasses the S&M of deactivated Hanford Site facilities transferred to the surplus facilities management program until D&D is scheduled; D&D of retired facilities; postclosure or post-remediation S&M facilities; providing disposal facilities necessary for program success; and program management and support.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

Complete remediation of the 1,178 known hazardous waste sites (grouped into operable units) and 96 surplus facilities in accordance with applicable RCRA and CERCLA requirements and DOE orders according to the schedule identified in the Tri-Party Agreement (Ecology et al. 1992).

C. Work Statement

The following actions will be performed:

1. Provide disposal facilities necessary for ER Program success
2. Conduct postclosure or post-remediation S&M of facilities
3. Conduct S&M of facilities awaiting decommissioning and inactive contaminated ground sites
4. Conduct D&D operations
5. Stabilize contaminated surface sites to prevent the spread of radioactive surface contamination
6. Remediate OUs in accordance with the latest Tri-Party Agreement negotiations
7. Provide adequate PM&S to ensure a viable , responsive program.

Table 2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 WORK PLAN RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE					
PROGRAM [SUMMARY SUBPROJECT LEVEL]	PROGRAM ELEMENT [SUBPROJECT LEVEL]	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
HANFORD ENVIRONMENTAL RESTORATION 2.0 [1E]					
2.1 (P)		REMEDIAL ACTIONS	WINTCZAK, TM	ERP	HARRIS, AC
	2.1.1 (1PJ)	RARA/UST	MIX, PD	DRCP	HARRIS, AC
	2.1.1 (6PJ)	RARA/UST-CENRTC	MIX, PD	DRCP	HARRIS, AC
	2.1.2 (1PV)	RCRA CLOSURES	MIX, PD	DRCP	MCLEOD, RG
	2.1.2 (7PV)	RCRA CLOSURES-CONSTRUCTION	MIX, PD	DRCP	MCLEOD, RG
	2.1.3 (1PF)	SST CLOSURES	MIX, PD	DRCP	WENDEL, NA
	2.1.4 (1PA)	100-DR OPERABLE UNITS	WINTCZAK, TM	RP	GOLLER, ED
	2.1.5 (1PB)	100-BC OPERABLE UNITS	WINTCZAK, TM	RP	GOLLER, ED
	2.1.6 (1PC)	100-KR OPERABLE UNITS	PATTERSON, JK	RP	GOLLER, ED
	2.1.7 (1PD)	100-FR OPERABLE UNITS	PATTERSON, JK	RP	GOLLER, ED
	2.1.8 (1PE)	100-HR OPERABLE UNITS	PATTERSON, JK	RP	GOLLER, ED
	2.1.9 (1PG)	100-NR OPERABLE UNITS	PATTERSON, JK	RP	GOLLER, ED
	2.1.10 (1PL)	200-BP OPERABLE UNITS	DOWNEY, HD	RP	PAK, PM
	2.1.11 (1PM)	200-NO OPERABLE UNITS	*	*	*
	2.1.12 (1PN)	200-PO OPERABLE UNITS	DOWNEY, HD	RP	PAK, PM
	2.1.13 (1PP)	200-RO OPERABLE UNITS	*	*	*
	2.1.14 (1PR)	200-SO OPERABLE UNITS	*	*	*
	2.1.15 (1PS)	200-TP OPERABLE UNITS	*	*	*

Table 2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 WORK PLAN RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE					
PROGRAM [SUMMARY SUBPROJECT LEVEL]	PROGRAM ELEMENT [SUBPROJECT LEVEL]	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
	2.1.16 (1PT)	200-UP OPERABLE UNITS	DOWNEY, HD	RP	PAK, PM
	2.1.17 (1PU)	200-ZP OPERABLE UNITS	DOWNEY, HD	RP	PAK, PM
	2.1.18 (1PY)	200-IU OPERABLE UNITS	*	*	*
	2.1.19 (1PW)	200-SS OPERABLE UNITS	*	*	*
	2.1.20 (1PX)	200-EGW	*	*	*
	2.1.21 (1P1)	200-WGW	*	*	*
	2.1.22 (1P2)	300 AREA OPERABLE UNITS	DOWNEY, HD	RP	MCLEOD, RG
	2.1.23 (1P3)	1100-EM	PARKHILL, TR	USACE	PERRO, WD
2.2 (1U)		D&D FACILITIES	MIHALIC, MA	DRCP	ERICKSON, J
	2.2.1 (1UV)	ASBESTOS ABATEMENT	MIHALIC, MA	DRCP	ERICKSON, J
	2.2.2 (1UB)	100 AREAS D&D	MIHALIC, MA	DRCP	ERICKSON, J
	2.2.3 (1UE)	200 AREA D&D	MASSEY, HD	PNL	ERICKSON, J
	2.2.4 (1UC)	300 AREAS D&D	*	*	*
	2.2.5 (1UN)	N REACTOR	GIMERA, RJ	NR	TRUMBLE, HR
(2U)		D&D FACILITIES-CENTRC TBD	MIX, PD	DRCP	ERICKSON, J
2.2 (6U)		D&D FACILITIES-CENTRC	MIX, PD	DRCP	ERICKSON, J
2.3 (1E)		PROGRAM MANAGEMENT AND SUPPORT	CHAMBERLAIN-DOW, C	PMS	FREEBERG, R
	2.3.1 (1EA)	PROGRAM MANAGEMENT AND SUPPORT (RA)	CHAMBERLAIN-DOW, C	PMS	FREEBERG, R
	2.3.1 (6EA)	PROGRAM MANAGEMENT AND SUPPORT-CENTRC	CHAMBERLAIN-DOW, C	PMS	ERICKSON, J

Table 2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 WORK PLAN RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE					
PROGRAM [SUMMARY SUBPROJECT LEVEL]	PROGRAM ELEMENT [SUBPROJECT LEVEL]	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
	2.3.2 (1EB)	PROGRAM MANAGEMENT AND SUPPORT (D&D)	MIHALIC, MA	DRCP	ERICKSON, J
2.4 (1S)		SURVEILLANCE AND MAINTENANCE	*	-	-
	2.4.1 (1SM)	FACILITY SURVEILLANCE AND MAINTENANCE	*	-	-
2.5 (1C)		DISPOSAL FACILITIES	WINTCZAK, TM	RP	ERICKSON, J
	2.5.1 (1CF)	DISPOSAL FACILITIES	WINTCZAK, TM	RP	ERICKSON, J

WESTINGHOUSE HANFORD RESPONSIBLE ORGANIZATION

DRCP	DECOMMISSIONING AND RCRA CLOSURE PROGRAM
ERP	ENVIRONMENTAL RESTORATION PROGRAM
PMS	PROGRAM MANAGEMENT SYSTEM
RP	REMEDIATION PROJECTS
NR	N REACTOR
PNL	PACIFIC NORTHWEST LABORATORY
USACE	U.S. ARMY CORPS OF ENGINEERS

* NOT IN THE 1994 FY WORK SCOPE

ABBREVIATIONS

CENRTC	CAPITAL EQUIPMENT NOT RELATED TO CONSTRUCTION
D&D	DECONTAMINATION AND DECOMMISSIONING
RARA	RADIATION AREA REMEDIAL ACTION
SST	SINGLE-SHELL TANK
TBD	TO BE DETERMINED
UST	UNDERGROUND STORAGE TANK

3.0 FISCAL YEAR 1994 MISSION SCHEDULE BASELINE

This section outlines the schedule baseline for the ER Mission. Figure 3-1 is a master program schedule summary and includes all applicable FY 1994 directive milestones of the DOE-HQ, DOE-RL and the Tri-Party Agreement. The summary schedule depicts major activities scheduled within each subproject for the ER Program in FY 1994. Detailed Program Element Schedules are provided in the respective program appendices

Table 3-1 is the milestone control log (MCL). The MCL lists the DOE-HQ, DOE-RL, and the Tri-Party Agreement milestones for FY 1994.

Appendices A through E contain milestone description sheets (MDS) for each DOE-HQ, DOE-RL, and Tri-Party Agreement milestone identified in the MCL.

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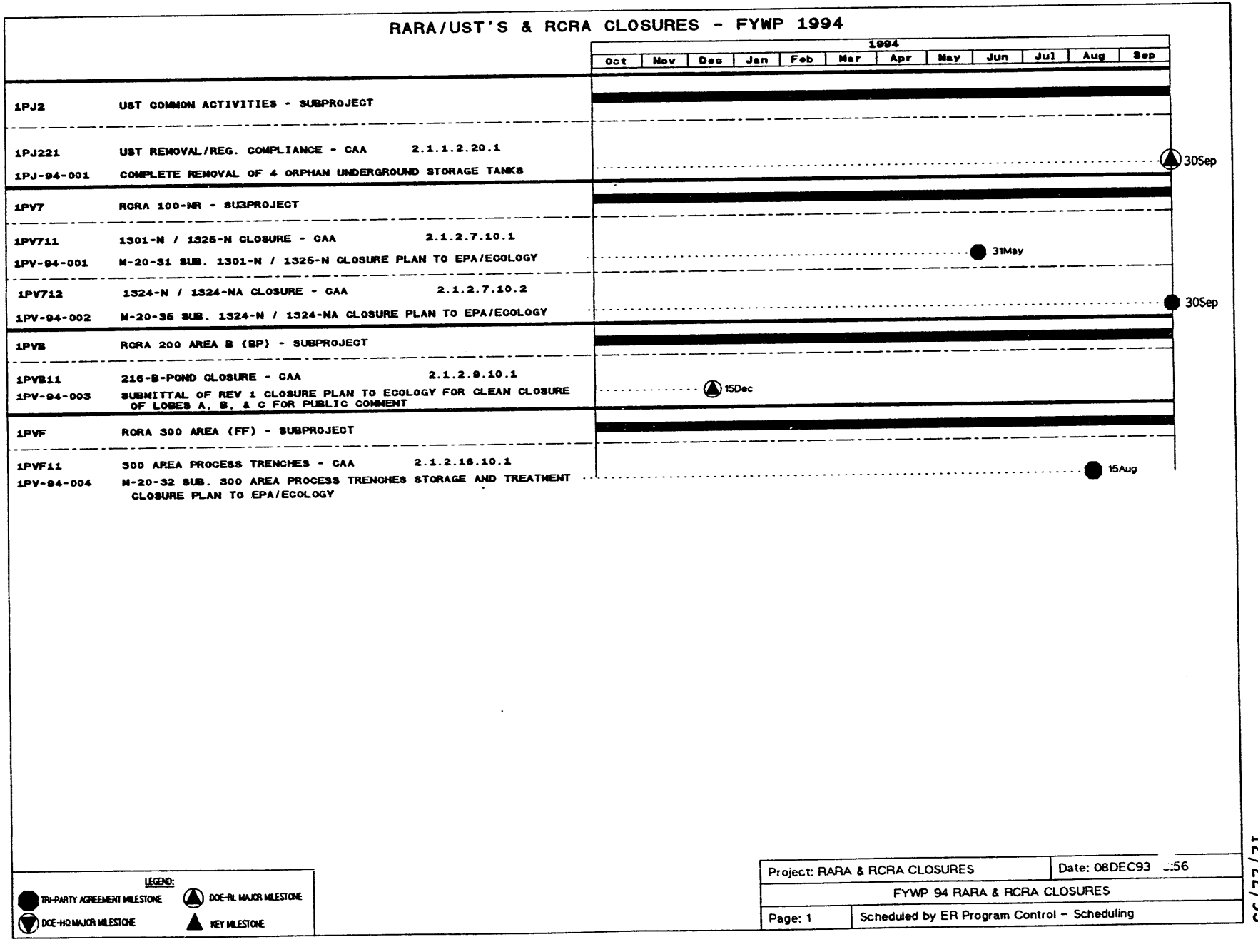

Figure 3-1. Mission Level Schedule--Remedial Action. (sheet 1 of 5)

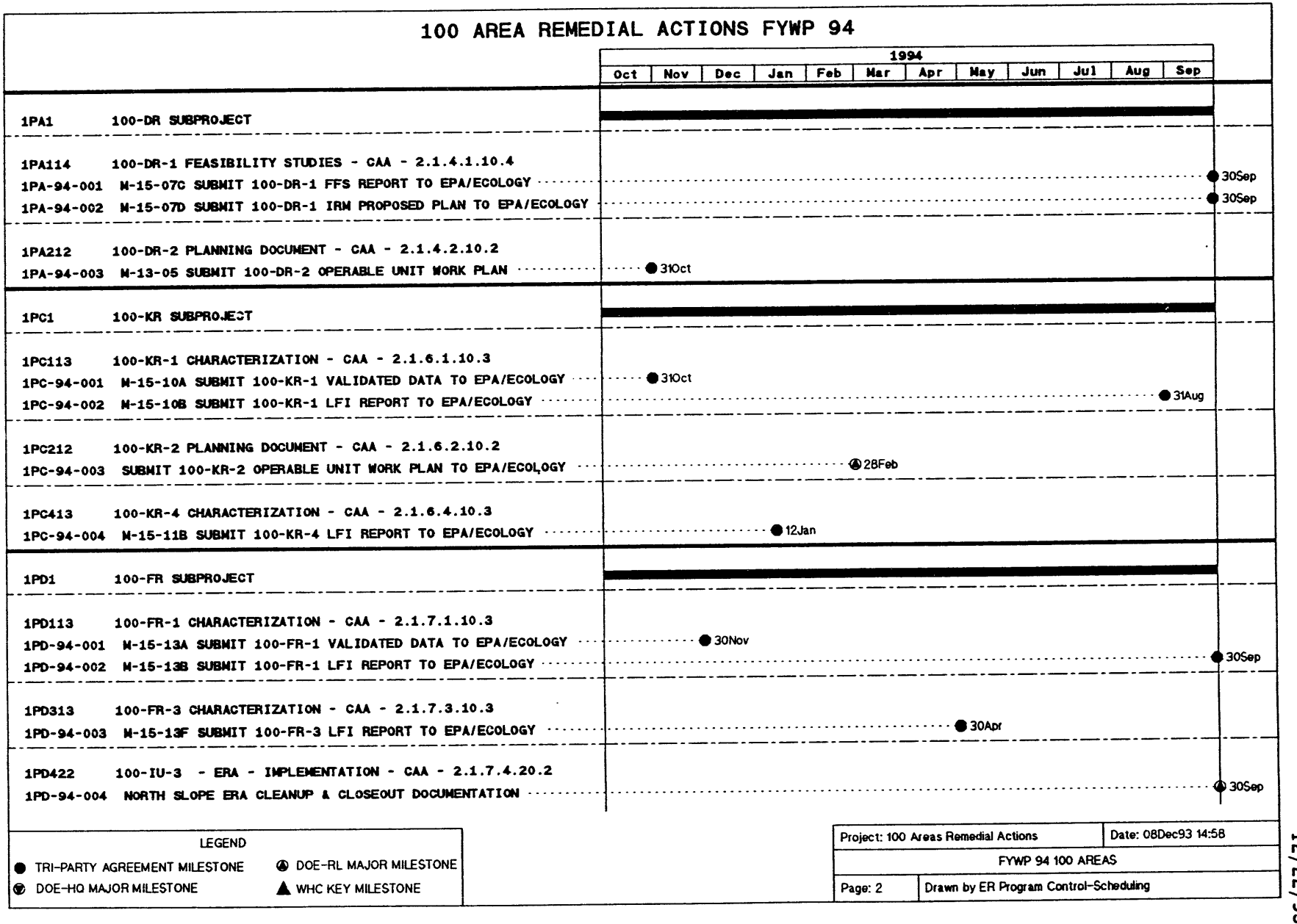

Figure 3-1. Mission Level Schedule--Remedial Action. (sheet 2 of 5)

100 AREA REMEDIAL ACTIONS FYWP 94

1994: Oct, Nov, Dec, Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep

1PE1	100-HR SUBPROJECT	
1PE114	100-HR-1 FEASIBILITY STUDY - CAA - 2.1.8.1.10.4	
1PE-94-001	M-15-05C SUBMIT 100-HR-1 FFS REPORT TO EPA/ECOLOGY	30Sep
1PE-94-002	M-15-05D SUBMIT 100-HR-1 IRM PROPOSED PLAN TO EPA/ECOLOGY	30Sep
1PE313	100-HR-3 CHARACTERIZATION - CAA - 2.1.8.3.10.3	
1PE-94-003	M-15-06A SUBMIT 100-HR-3 LFI REPORT TO EPA/ECOLOGY	31Oct
1PE314	100-HR-3 FEASIBILITY STUDY - CAA - 2.1.8.3.10.4	
1PE-94-004	M-15-06C SUBMIT 100-HR-3 FFS REPORT TO EPA/ECOLOGY	30Sep
1PE-94-005	M-15-06D SUBMIT 100-HR-3 IRM PROPOSED PLAN TO EPA/ECOLOGY	30Sep
1PE315	100-HR-3 TREATABILITY STUDY - CAA - 2.1.8.3.10.5	
1PE-94-006	M-15-06B COMPLETE 100-HR-3 TREATABILITY STUDY ACTIVITIES	30Nov
1PE-94-007	M-15-06E BEGIN 100-HR-3 PUMP AND TREAT OPERATIONS	31Aug
1PE715	100-AREA COMMON TREATABILITY STUDIES - CAA - 2.1.8.7.10.5	
1PE-94-008	M-15-07B COMPLETE 100-DR-1 TREATABILITY STUDY ACTIVITIES	31Aug
1PE-94-009	M-15-08C SUBMIT 100-BC-1 TREATABILITY STUDY REPORT	31Jan
1PE-94-010	M-15-05B COMPLETE 100-HR-1 TREATABILITY TEST ACTTIVITIES	30Nov

LEGEND

- ● TRI-PARTY AGREEMENT MILESTONE
- ◉ DOE-RL MAJOR MILESTONE
- ▼ DOE-HQ MAJOR MILESTONE
- ▲ WHC KEY MILESTONE

Project: 100 Areas Remedial Actions	date: 08Dec93 15:00
FYWP 94 100 AREAS	
Page: 3	Drawn by ER Program Control-Scheduling

Figure 3-1. Mission Level Schedule--Remedial Action. (sheet 3 of 5)

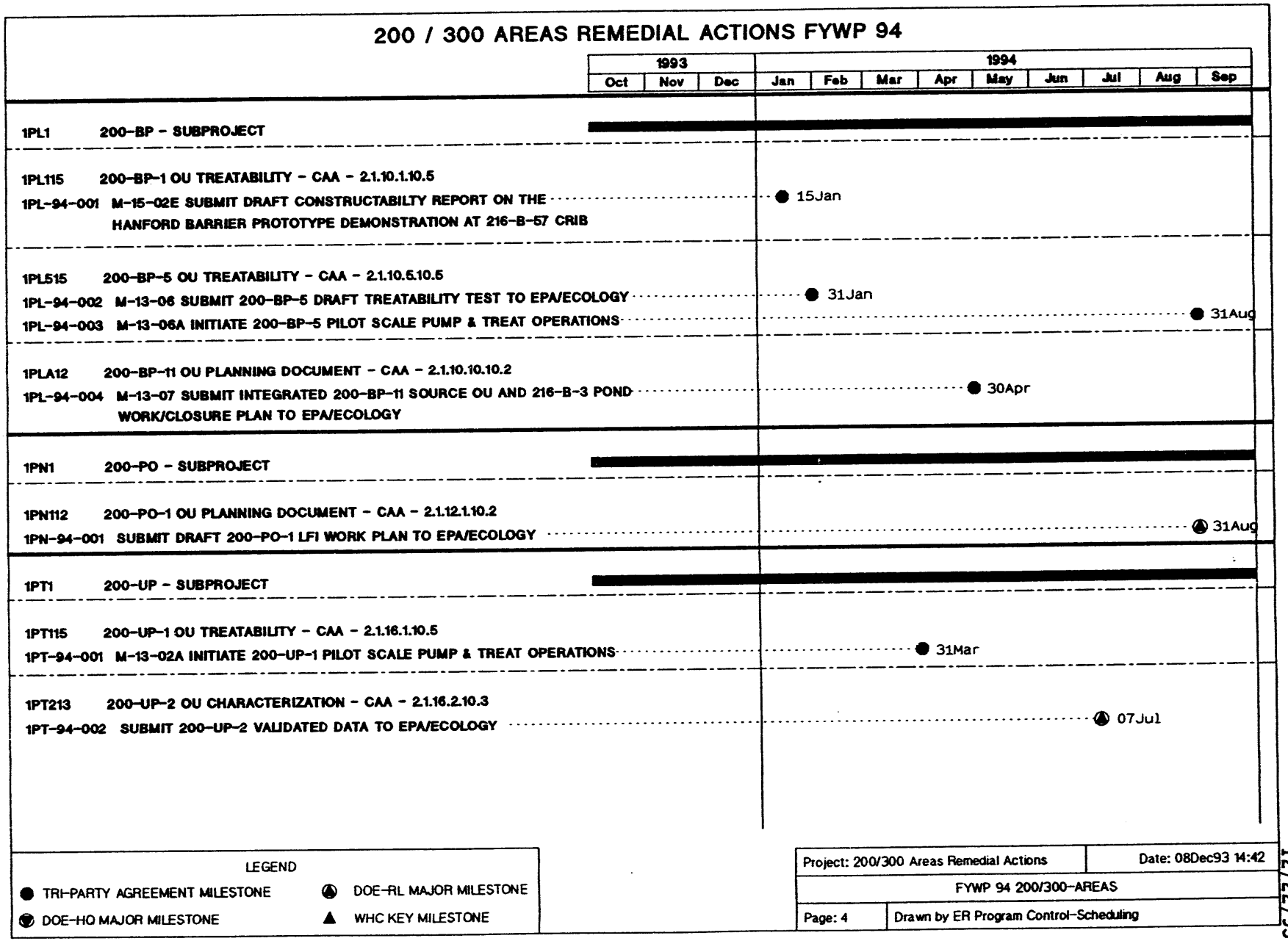

Figure 3-1. Mission Level Schedule--Remedial Action. (sheet 4 of 5)

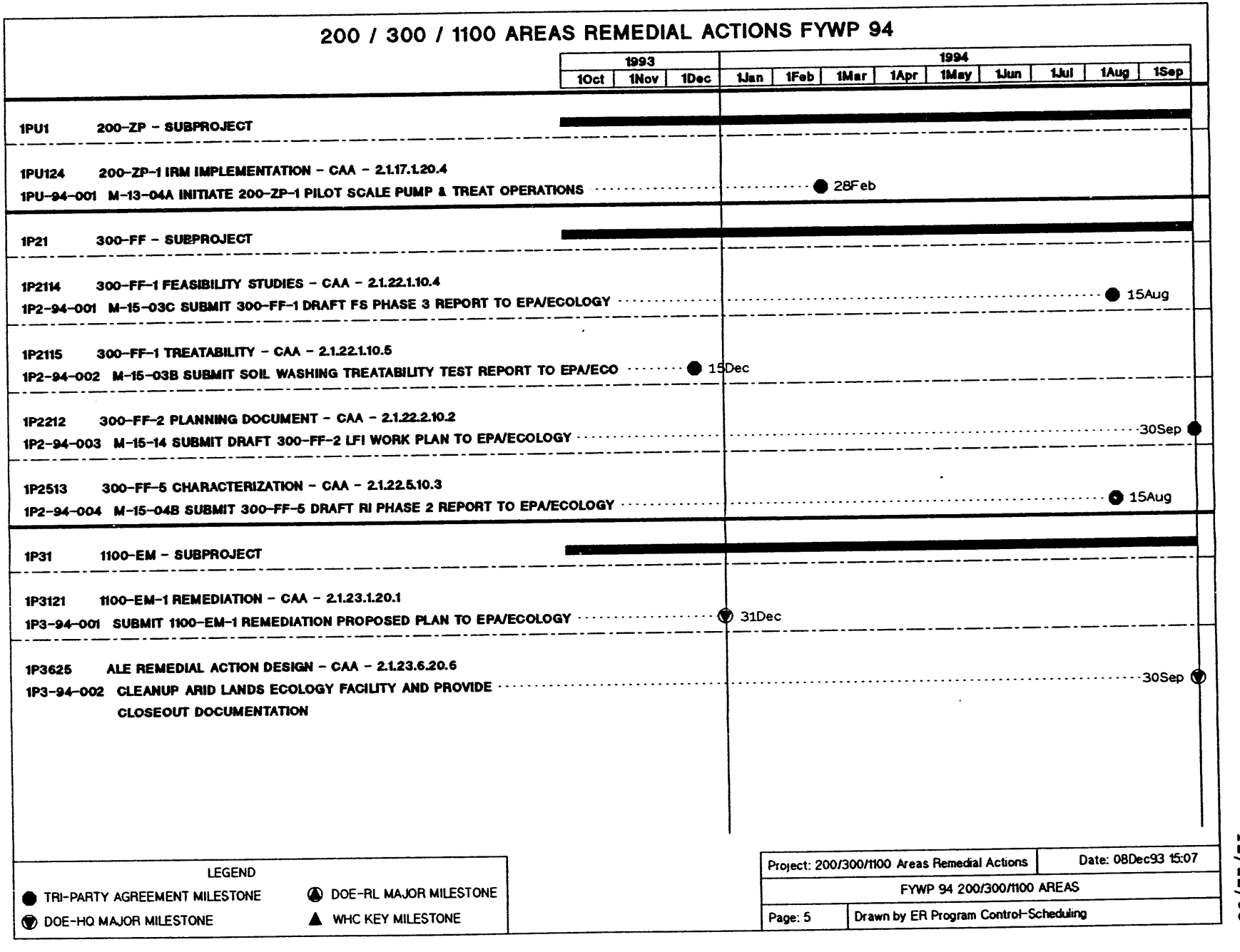

Figure 3-1. Mission Level Schedule--Remedial Action. (sheet 5 of 5)

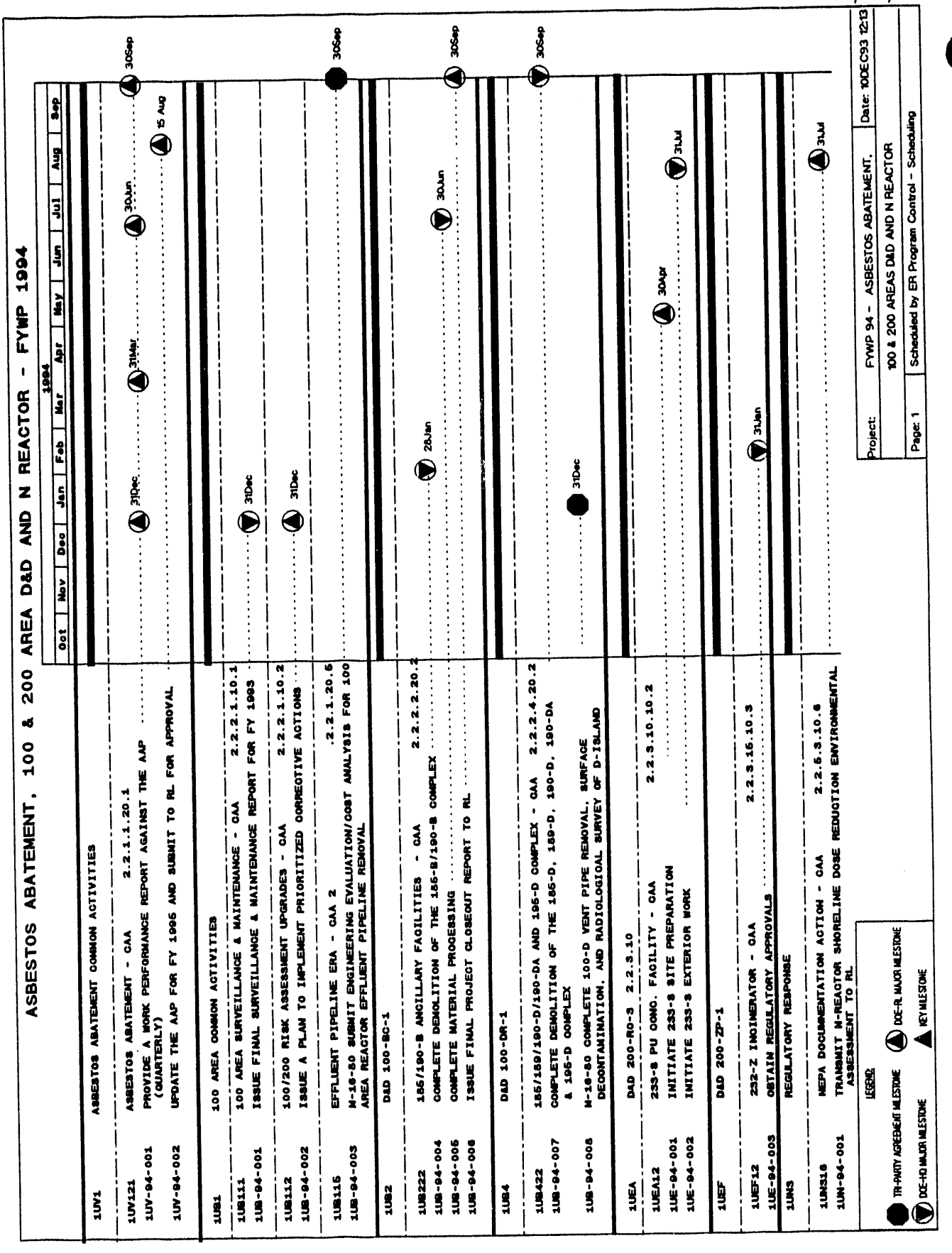

Figure 3-1. Mission Level Schedule--Decontamination and Decommissioning.

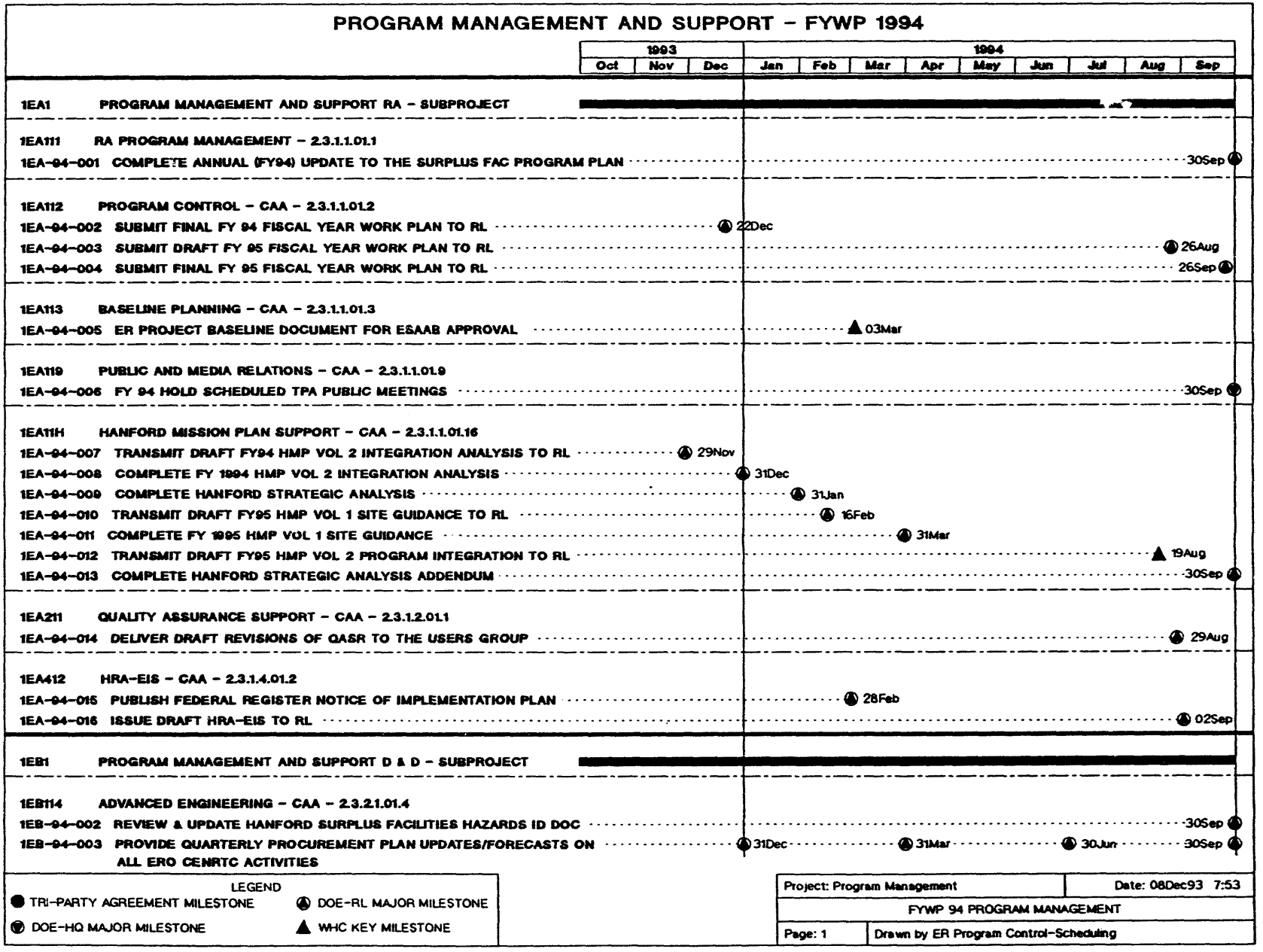

Figure 3-1. Mission Level Schedule--Project Management and Support.

There are no scheduled S&M activities for FY 1994.

Figure 3-1. Mission Level Schedule--Surveillance and Maintenance.

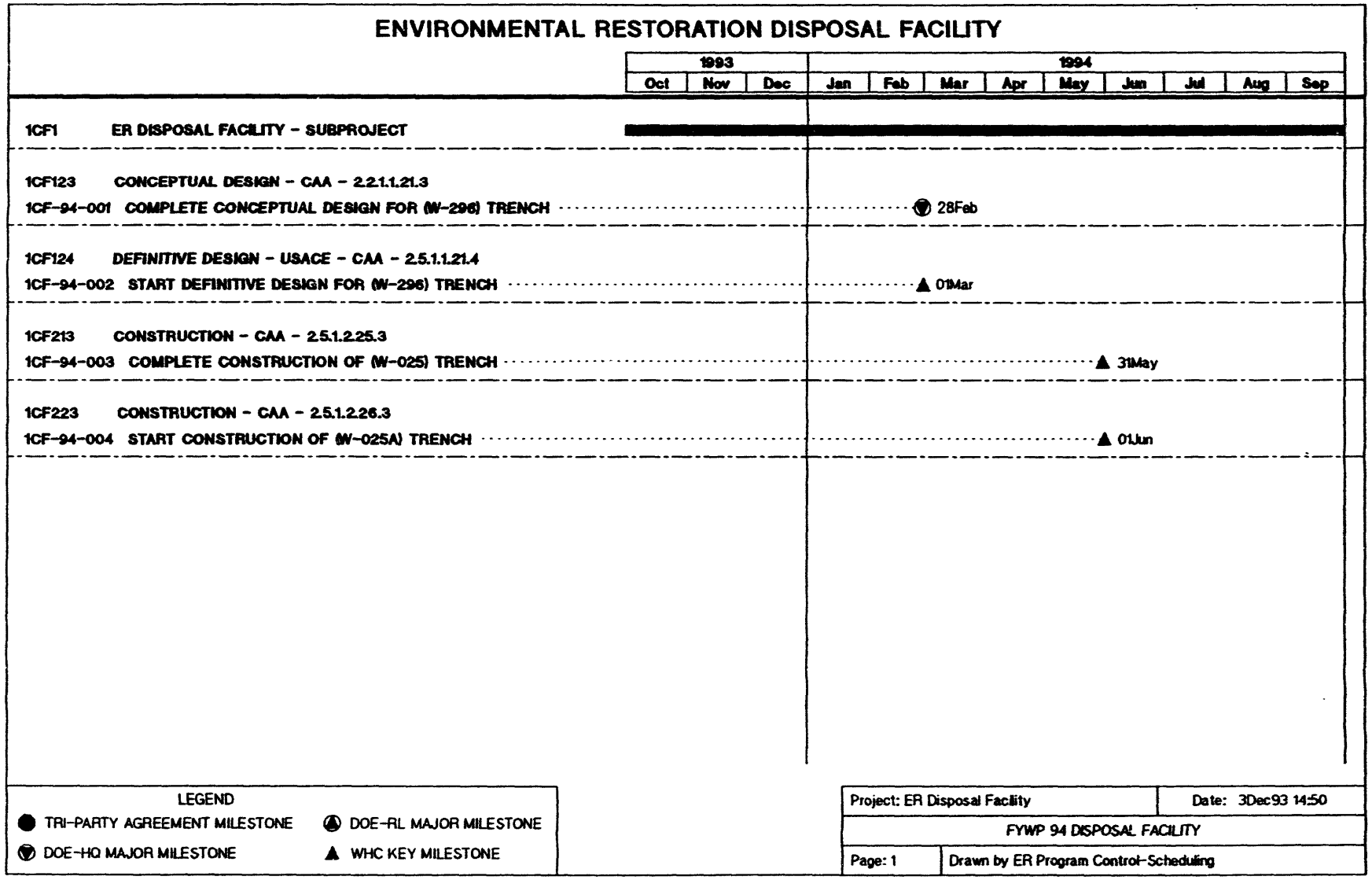

Figure 3-1. Mission Level Schedule--Disposal Facilities.

Table 3-1. Hanford Environmental Restoration Milestone Control Log.

Hanford Environmental Restoration Program Remedial Actions

TYPE	Milestone ID	RL WBS	WHC WBS	Milestone description	Original baseline due date	CIN change authority	Baseline revision date
RL	1PJ-94-001	2.1.1.2.20.1	1PJ221	COMPLETE THE REMOVAL OF FOUR ORPHAN (USTs)	09/30/94		
TPA	1PV-94-001	2.1.2.7.10.1	1PV711	M-20-31 SUBMIT 1301-N/1325-N CLOSURE PLAN TO EPA/ECOLOGY	05/31/94		
TPA	1PV-94-002	2.1.2.7.10.2	1PV712	M-20-35 SUBMIT 1324-N/1324-NA CLOSURE PLAN TO EPA/ECOLOGY	09/30/94		
RL	1PV-94-003	2.1.2.9.10.1	1PVB11	SUBMIT REV-1 CLOSURE PLAN TO EPA/ECOLOGY FOR CLEAN CLOSURE OF LOBES A, B & C FOR PUBLIC COMMENT	12/15/93		
TPA	1PV-94-004	2.1.2.16.10.1	1PVF11	M-20-32 SUBMIT 300 AREA PROCESS TRENCHES STORAGE AND TREATMENT CLOSURE PLAN TO EPA/ECOLOGY	08/15/94		
TPA	1PA-94-001	2.1.4.1.10.4	1PA114	M-15-07C SUBMIT 100-DR-1 FOCUSED FEASIBILITY STUDY REPORT TO EPA/ECOLOGY	09/30/94		
TPA	1PA-94-002	2.1.4.1.10.4	1PA114	M-15-07D SUBMIT 100-DR-1 INTERIM REMEDIAL MEASURES PROPOSED PLAN TO EPA/ECOLOGY	09/30/94		
TPA	1PA-94-003	2.1.4.2.10.2	1PA212	M-13-05 SUBMIT 100-DR-2 OPERABLE UNIT WORK PLAN TO EPA/ECOLOGY	10/31/93		
TPA	1PC-94-001	2.1.6.1.10.3	1PC113	M-15-10A SUBMIT 100-KR-1 VALIDATED DATA TO EPA/ECOLOGY	10/31/93		05/31/93
TPA	1PC-94-002	2.1.6.1.10.3	1PC113	M-15-10B SUBMIT 100-KR-1 LIMITED FIELD INVESTIGATION REPORT TO EPA/ECOLOGY	08/31/94		
RL	1PC-94-003	2.1.6.2.10.2	1PC212	SUBMIT 100-KR-2 OPERABLE UNIT WORK PLAN TO EPA/ECOLOGY	02/28/94		
TPA	1PC-94-004	2.1.6.4.10.3	1PC413	M-15-11B SUBMIT 100-KR-4 LIMITED FIELD INVESTIGATION TO EPA/ECOLOGY	01/12/94		
TPA	1PD-94-001	2.1.7.1.10.3	1PD113	M-15-13A SUBMIT 100-FR-1 VALIDATED DATA TO EPA/ECOLOGY	11/30/93		09/17/93
TPA	1PD-94-002	2.1.7.1.10.3	1PD113	M-15-13B SUBMIT 100-FR-1 LIMITED FIELD INVESTIGATION TO EPA/ECOLOGY	09/30/94		
TPA	1PD-94-003	2.1.7.3.10.3	1PD313	M-15-13F SUBMIT 100-FR-3 LIMITED FIELD INVESTIGATION TO EPA/ECOLOGY	04/30/94		
RL	1PD-94-004	2.1.7.4.20.2	1PD422	SUBMIT NORTH SLOPE - ERA - CLEANUP/CLOSEOUT DOCUMENTATION TO EPA/ECOLOGY	09/30/94		
TPA	1PE-94-001	2.1.8.1.10.4	1PE114	M-15-05C SUBMIT 100-HR-1 FOCUSED FEASIBILITY STUDY TO EPA/ECOLOGY	09/30/94		
TPA	1PE-94-002	2.1.8.1.10.4	1PE114	M-15-05D SUBMIT 100-HR-1 INTERIM REMEDIAL MEASURES PROPOSED PLAN TO EPA/ECOLOGY	09/30/94		
TPA	1PE-94-003	2.1.8.3.10.3	1PE313	M-15-06A SUBMIT 100-HR-3 LIMITED FIELD INVESTIGATION TO EPA/ECOLOGY	10/31/93		
TPA	1PE-94-004	2.1.8.3.10.4	1PE314	M-15-06C SUBMIT 100-HR-3 FOCUSED FEASIBILITY STUDY TO EPA/ECOLOGY	09/30/94		
TPA	1PE-94-005	2.1.8.3.10.4	1PE314	M-15-06D SUBMIT 100-HR-3 INTERIM REMEDIAL MEASURES PROPOSED PLAN TO EPA/ECOLOGY	09/30/94		
TPA	1PE-94-006	2.1.8.3.10.5	1PE315	M-15-06B COMPLETE 100-HR-3 TREATABILITY STUDY ACTIVITIES	11/30/93		

Table 3-1. Hanford Environmental Restoration Milestone Control Log.

Hanford Environmental Restoration Program Remedial Actions (cont)

TYPE	Milestone ID	RL WBS	WHC WBS	Milestone description	Original baseline due date	CIN change authority	Baseline revision date
TPA	1PE-94-007	2.1.8.3.10.6	1PE316	M-16-06E BEGIN 100-HR-3 PUMP & TREAT OPERATIONS	08/31/94		
TPA	1PE-94-008	2.1.8.7.10.6	1PE716	M-16-07B COMPLETE 100-DR-1 TREATABILITY STUDY ACTIVITIES	08/31/94		
TPA	1PE-94-009	2.1.8.7.10.6	1PE716	M-16-08C SUBMIT 100-BC-1 TREATABILITY STUDY TO EPA/ECOLOGY	01/31/94		
TPA	1PE-94-010	2.1.8.7.10.6	1PE716	M-16-06B COMPLETE 100-HR-1 TREATABILITY TEST ACTIVITIES	11/30/93		
TPA	1PL-94-001	2.1.10.1.10.6	1PL116	M-16-02E SUBMIT DRAFT CONSTRUCTABILITY REPORT ON THE HANFORD BARRIER PROTOTYPE DEMONSTRATION AT 216-B-57 CRIB	01/16/94		
TPA	1PL-94-002	2.1.10.5.10.6	1PL516	M-13-06 SUBMIT 200-BP-5 DRAFT TREATABILITY TEST PLAN TO EPA/ECOLOGY	01/31/94		
TPA	1PL-94-003	2.1.10.5.10.6	1PL516	M-13-06A INITIATE 200-BP-5 PILOT-SCALE PUMP AND TREAT OPERATIONS	08/31/94		
TPA	1PL-94-004	2.1.10.10.10.2	1PLA12	M-13-07 SUBMIT INTEGRATED 200-BP-11 SOURCE OU AND 216-B-3 POND WORK/CLOSURE PLAN TO EPA/ECOLOGY	04/30/94		
RL	1PN-94-001	2.1.12.1.10.2	1PN112	F-13-SUBMIT DRAFT 200-PO-1 LFI WORK PLAN TO EPA/ECOLOGY	08/31/94		
TPA	1PT-94-001	2.1.16.1.10.6	1PT116	M-13-02A INITIATE 200-UP-1 PILOT-SCALE PUMP AND TREAT OPERATIONS	03/31/94		
RL	1PT-94-002	2.1.16.2.10.3	1PT213	SUBMIT 200-UP-2 VALIDATED DATA TO EPA/ECOLOGY	07/07/94		
TPA	1PU-94-001	2.1.17.1.20.4	1PU124	M-13-04A INITIATE 200-ZP-1 PILOT-SCALE PUMP AND TREAT OPERATIONS	02/28/94		
TPA	1P2-94-001	2.1.22.1.10.4	1P2114	M-16-03C SUBMIT 300-FF-1 DRAFT FEASIBILITY STUDY PHASE III REPORT TO EPA/ECOLOGY	08/16/94		
TPA	1P2-94-002	2.1.22.1.10.6	1P2116	M-16-03B SUBMIT SOIL WASHING TREATABILITY TEST REPORT - REMEDIAL INVESTIGATIONS PHASE II DRAFT REPORT TO EPA/ECOLOGY	12/16/93		
TPA	1P2-94-003	2.1.22.2.10.2	1P2212	M-16-14 SUBMIT DRAFT 300-FF-2 LFI WORK PLAN TO EPA/ECOLOGY	09/30/94		
TPA	1P2-94-004	2.1.22.5.10.3	1P2513	M-16-04B SUBMIT 300-FF-5 DRAFT RI PHASE II REPORT TO EPA/ECOLOGY	08/16/94		
HQ	1P3-94-001	2.1.23.1.20.1	1P3121	F-16 SUBMIT 1100-EM-1 REMEDIATION PROPOSED PLAN TO EPA/ECOLOGY	12/31/93		
HQ	1P3-94-002	2.1.23.6.20.6	1P3626	CLEAN UP ARID LANDS ECOLOGY FACILITY AND PROVIDE CLOSEOUT DOCUMENTATION	09/30/94		

Table 3-1. Hanford Environmental Restoration Milestone Control Log.

Hanford Environmental Restoration Program Decontamination and Decommissioning

TYPE	Milestone ID	RL WBS	WHC WBS	Milestone description	Original baseline due date	CIN change authority	Baseline revision date
RL	1UV-94-001	2.2.1.1.20.1	1UV121	PROVIDE WORK PERFORMANCE REPORT AGAINST THE AAP (QUARTERLY)	QUARTERLY 09/30/94		
RL	1UV-94-002	2.2.1.1.20.1	1UV121	UPDATE THE AAP FOR FY 1995 AND SUBMIT TO RL FOR APPROVAL	08/15/94		
HQ	1UB-94-001	2.2.2.1.10.1	1UB111	ISSUE FINAL SURVEILLANCE AND MAINTENANCE REPORT FOR FY 1993	12/31/93		
RL	1UB-94-002	2.2.2.1.10.2	1UB112	ISSUE A PLAN TO IMPLEMENT PRIORITIZED CORRECTIVE ACTIONS	12/31/93		
TPA	1UB-94-003	2.2.2.1.10.5	1UB115	M-16-80 SUBMIT ENGINEERING EVALUATION/COST ANALYSIS FOR 100-AREA REACTOR EFFLUENT PIPELINE REMOVAL	09/30/94		
RL	1UB-94-004	2.2.2.1.20.2	1UB122	COMPLETE SAFETY DOCUMENTATION PROGRAM PLAN (C-REACTOR)	09/30/94		
RL	1UB-94-005	2.2.2.1.20.2	1UB122	INITIATE CONCEPTUAL DESIGN (C-REACTOR)	01/31/94		
RL	1UB-94-006	2.2.2.1.20.2	1UB122	COMPLETE CONCEPTUAL DESIGN (C-REACTOR)	09/30/94		
HQ	1UB-94-007	2.2.2.2.20.2	1UB222	COMPLETE DEMOLITION OF THE 185-B/190-B COMPLEX	01/28/94		
HQ	1UB-94-008	2.2.2.2.20.2	1UB222	COMPLETE MATERIAL PROCESSING	06/30/94		
RL	1UB-94-009	2.2.2.2.20.2	1UB222	ISSUE FINAL PROJECT CLOSEOUT REPORT TO RL	09/30/94		
HQ	1UB-94-010	2.2.2.4.20.2	1UB422	COMPLETE DEMOLITION OF THE 185-D, 189-D, 190-D AND 190-DA, 195-D COMPLEX	09/30/94		
TPA	1UB-94-011	2.2.2.4.20.2	1UB422	M-16-80 COMPLETE 100-D VENT PIPE REMOVAL, SURFACE DECONTAMINATION, AND RADIOLOGICAL SURVEY OF D-ISLAND	12/31/93		
RL	1UE-94-001	2.2.3.10.10.2	1UEA12	INITIATE 233-S SITE PREPARATION	04/30/94		
HQ	1UE-94-002	2.2.3.10.10.2	1UEA12	INITIATE 233-S EXTERIOR WORK	07/31/94		
HQ	1UE-94-003	2.2.3.15.10.2	1UEF12	OBTAIN REGULATORY APPROVAL	01/31/94		
RL	1UN-94-001	2.2.5.3.10.6	1UN316	TRANSMIT N-REACTOR SHORELINE DOSE REDUCTION ENVIRONMENTAL ASSESSMENT TO RL	07/31/94		

Table 3-1. Hanford Environmental Restoration Milestone Control Log.

Hanford Environmental Restoration Program Management Support

TYPE	Milestone ID	RL WBS	WHC WBS	Milestone description	Original baseline due date	CIN change authority	Baseline revision date
RL	1EA-94-001	2.3.1.1.01.1	1EA111	COMPLETE ANNUAL (FY94) UPDATE TO THE SURPLUS FACILITIES PROGRAM PLAN	30SEP94		
RL	1EA-94-002	2.3.1.1.01.2	1EA112	ISSUE FINAL FISCAL YEAR 1994 WORK PLAN TO RL	09/30/93	EEA-E93-071	12/22/93
RL	1EA-94-003	2.3.1.1.01.2	1EA112	SUBMIT DRAFT FISCAL YEAR 1995 WORK PLAN TO RL	08/26/94		
RL	1EA-94-004	2.3.1.1.01.2	1EA112	ISSUE FINAL FISCAL YEAR 1995 WORK PLAN TO RL	09/26/94		
KEY	1EA-94-005	2.3.1.1.01.3	1EA113	ENVIRONMENTAL RESTORATION PROJECT BASELINE DOCUMENT FOR ESAAB APPROVAL	03/03/94		
HQ	1EA-94-006	2.3.1.1.01.9	1EA119	FY94 HOLD SCHEDULED TPA PUBLIC MEETINGS	09/30/94		
RL	1EA-94-007	2.3.1.1.01.16	1EA11H	TRANSMIT DRAFT FY 1994 HMP VOL 2 INTEGRATION ANALYSIS TO RL	11/29/93		
RL	1EA-94-008	2.3.1.1.01.16	1EA11H	COMPLETE FY 1994 HMP VOL 2 INTEGRATION ANALYSIS	12/31/93		
RL	1EA-94-009	2.3.1.1.01.16	1EA11H	COMPLETE HANFORD STRATEGIC ANALYSIS	01/31/94		
RL	1EA-94-0010	2.3.1.1.01.16	1EA11H	TRANSMIT DRAFT FY 1995 HMP VOL 1, SITE GUIDANCE TO RL	02/16/94		
RL	1EA-94-011	2.3.1.1.01.16	1EA11H	COMPLETE FY 1995 HMP VOL 1, SITE GUIDANCE	03/31/94		
KEY	1EA-94-012	2.3.1.1.01.16	1EA11H	TRANSMIT DRAFT FY 1995 HMP VOL 2, PROGRAM INTEGRATION TO RL	08/19/94		
RL	1EA-94-013	2.3.1.1.01.16	1EA11H	COMPLETE HANFORD STRATEGIC ANALYSIS ADDENDUM	09/30/94		
RL	1EA-94-014	2.3.1.2.01.1	1EA211	DELIVERY OF DRAFT REVISIONS OF DOE/RL 90-28, (QASR) DOCUMENT TO THE USERS GROUP	08/29/94		
RL	1EA-94-015	2.3.1.4.01.2	1EA412	PUBLISH FEDERAL REGISTER NOTICE OF IMPLEMENTATION PLAN	02/28/94		
RL	1EA-94-016	2.3.1.4.01.2	1EA412	ISSUE DRAFT HRA-EIS TO RL	09/02/94		
RL	1EB-94-001	2.3.2.1.01.4	1EB114	REVIEW AND UPDATE THE HANFORD SURPLUS FACILITIES HAZARDS IDENTIFICATION DOCUMENT	09/30/94		
RL	1EB-94-002	2.3.2.1.01.4	1EB114	PROVIDE PROCUREMENT PLAN UPDATES/FORECASTS ON ALL ERO CENRTC ACTIVITIES	QUARTERLY 09/30/94		

Table 3-1. Hanford Environmental Restoration Milestone Control Log.

Hanford Environmental Restoration Program Disposal Facility

TYPE	Milestone ID	RL WBS	WHC WBS	Milestone description	Original baseline due date	CIN change authority	Baseline revision date
HQ	1CF-94-001	2.5.1.1.21.3	1CF123	COMPLETE CONCEPTUAL DESIGN REPORT FOR (W-296) TRENCH	02/28/94		
KEY	1CF-94-002	2.5.1.1.21.4	1CF124	START DEFINITIVE DESIGN FOR (W-296) TRENCH	03/01/94		
KEY	1CF-94-003	2.5.1.2.25.3	1CF213	COMPLETE CONSTRUCTION OF (W-025) TRENCH	05/31/94		
KEY	1CF-94-004	2.5.1.2.25.3	1CF223	START CONSTRUCTION OF (W-025A) TRENCH	06/31/94		

4.0 FISCAL YEAR 1994 MISSION COST BASELINE

The mission cost baselines are presented in this section. The shading in the tables is to assist in clarity and review only.

Indentation in Title Column displays the "roll-up" function within the program and provides line item identification.

4.1 CONTRACTOR COSTS

Table 4-1 presents FY 1994 contractor costs by ADS, excluding carryover. Table 4-2 presents FY 1994 contractor costs by ADS, including carryover.

4.2 DETAIL COSTS

Detailed cost information is determined at the program level with approved cost account authorizations and developed cost account plans.

4.3 PROGRAM COSTS

The respective program costs are presented in Appendices A through E.

Table 4-3 summarizes the deviations between the FYWP funding and the baseline. Section 1.5 of the respective appendix contain the specific narrative for these deviations.

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Table 4-1. Hanford Environmental Restoration Program Fiscal Year 1994 Program Dollars, Excluding Carryover, by Activity Data Sheets per Contractor ($000).

			FY 1994 $000 Excluding Carryover							
ADS #	WBS	Title	WHC	USACE	RL	PNL	GSSC	ASI	WA/IND	Total
3000	PF	Single-Shell Tank Closures	$408	$0	$0	$0	$0	$0	$0	$408
3010	PJ	RARA/USTs	$7,342	$0	$0	$0	$0	$0	$0	$7,342
3020	PV	RCRA Closures	$4,326	$0	$0	$0	$0	$0	$0	$4,326
3100	PA	100-DR	$1,193	$0	$0	$0	$0	$0	$0	$1,193
3105	PB	100-BC	$3,869	$0	$0	$0	$0	$0	$0	$3,869
3110	PC	100-KR	$2,084	$0	$0	$0	$0	$0	$0	$2,084
3115	PD	100-FR	$4,400	$1,976	$0	$0	$0	$0	$0	$6,376
3120	PE	100-HR	$17,764	$0	$0	$0	$0	$0	$0	$17,764
3125	PG	100-NR	$2,923	$0	$0	$0	$0	$0	$0	$2,923
3200	PL	200-BP	$11,258	$0	$0	$0	$0	$0	$0	$11,258
3210	PN	200-PO	$297	$0	$0	$0	$0	$0	$0	$297
3225	PS	200-TP	$0	$0	$0	$0	$0	$0	$0	$0
3230	PT	200-UP	$11,594	$0	$0	$0	$0	$0	$0	$11,594
3235	PU	200-ZP	$9,777	$0	$0	$0	$0	$0	$0	$9,777
3300	P2	300-FF	$4,827	$0	$0	$0	$0	$0	$0	$4,827
3390	P3	1100-EM	$0	$7,583	$0	$0	$0	$0	$0	$7,583
	P	Remedial Actions	$82,062	$9,559	$0	$0	$0	$0	$0	$91,621
3400	EA1	Program Management RA	$15,467	$1,446	$0	$0	$0	$0	$0	$16,913
3400	EA2	ER Program Self-Assessment and Development	$3,250	$0	$0	$0	$0	$0	$0	$3,250
3400	EA3	RL/State/Tribal Governments	$0	$1,874	$3,796	$0	$4,696	$0	$4,000	$14,366
3400	EA4	Technology Adaptations	$7,601	$1,664	$0	$1,270	$0	$1,900	$0	$12,435
3400	EA5	Laboratory Support	$4,824	$0	$0	$0	$0	$0	$0	$4,824
3400	EA6	Facilities, Systems, and Equipment Support	$18,605	$0	$0	$0	$0	$0	$0	$18,605
3400	EA	Program Management and Support RA	$49,747	$4,984	$3,796	$1,270	$4,696	$1,900	$4,000	$70,393
3410	EB	Program Management and Support D&D	$1,125	$0	$0	$0	$0	$0	$0	$1,125
	E	Program Management and Support	$50,872	$4,984	$3,796	$1,270	$4,696	$1,900	$4,000	$71,518
3500	UV	Asbestos Abatement	$2,085	$0	$0	$0	$0	$0	$0	$2,085
3510	UB	100 Area D&D	$12,090	$0	$0	$0	$0	$0	$0	$12,090
3520	UE	200 Area D&D	$6,793	$0	$0	$0	$0	$0	$0	$6,793
3600	UN	N Reactor	$20,963	$0	$0	$0	$0	$0	$0	$20,963
	U	D&D Facilities	$41,931	$0	$0	$0	$0	$0	$0	$41,931
3700	CF	Disposal Facilities	$8,156	$3,844	$0	$0	$0	$0	$0	$12,000
	C	Treatment, Storage, or Disposal	$8,156	$3,844	$0	$0	$0	$0	$0	$12,000
	HER	Richland Environmental Restoration Project	$183,021	$18,387	$3,796	$1,270	$4,696	$1,900	$4,000	$217,070

ADS# = activity data sheet number
ASI = Advanced Sciences, Incorporated
D&D = decontamination and decommissioning
ER = environmental restoration
FY = fiscal year
GSSC = General Support Services Contractor
PNL = Pacific Northwest Laboratory
RA = remedial actions
RARA = radiation area remedial actions
RCRA = Resource Conservation and Recovery Act of 1976
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
UST = Underground Storage Tank
WA/IND = Washington State/Indian Tribal Governments
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

Table 4-2. Hanford Environmental Restoration Program Fiscal Year 1994 Program Dollars, Including Carryover, by Activity Data Sheets per Contractor ($000).

			FY 1994 $000 Including Carryover							
ADS #	WBS	Title	WHC	USACE	RL	PNL	GSSC	ASI	WA/IND	Total
3000	PF	Single-Shell Tank Closures								
3010	PJ	RARA/USTs								
3020	PV	RCRA Closures								
3100	PA	100-DR								
3105	PB	100-BC								
3110	PC	100-KR								
3115	PD	100-FR								
3120	PE	100-HR								
3125	PG	100-NR								
3200	PL	200-BP								
3210	PN	200-PO								
3225	PS	200-TP								
3230	PT	200-UP								
3235	PU	200-ZP								
3300	P2	300-FF								
3390	P3	1100-EM								
	P	Remedial Actions								
3400	EA1	Program Management RA								
3400	EA2	ER Program Self-Assessment and Development								
3400	EA3	RL/State/Tribal Governments								
3400	EA4	Technology Adaptations								
3400	EA5	Laboratory Support								
3400	EA6	Facilities, Systems, and Equipment Support								
3400	EA	Program Management and Support RA								
3410	EB	Program Management and Support D&D								
	E	Program Management and Support								
3500	UV	Asbestos Abatement								
3510	UB	100 Area D&D								
3520	UE	200 Area D&D								
3600	UN	N Reactor								
	U	D&D Facilities								
3700	CF	Disposal Facilities								
	C	Treatment, Storage, or Disposal								
	HER	Richland Environmental Restoration Project								

This table will be completed upon approval of the carryover change request.

ADS# = activity data sheet number
ASI = Advanced Sciences, Incorporated
D&D = decontamination and decommissioning
ER = environmental restoration
FY = fiscal year
GSSC = General Support Services Contractor
PNL = Pacific Northwest Laboratory
RA = remedial actions
RARA = radiation area remedial actions
RCRA = Resource Conservation and Recovery Act of 1976
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
UST = Underground Storage Tank
WA/IND = Washington State/Indian Tribal Governments
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

Table 4-3. Hanford Site Environmental Restoration Program Fiscal Year 1994 Work Plan Versus Baseline Funding ($000).

			FY 1994 ($000)		
ADS #	WBS	Title	FWYP	Baseline	Change
3000	PF	Single-Shell Tank Closures	$408	$1,223	($815)
3010	PJ	RARA/USTs	$7,342	$7,709	($367)
3020	PV	RCRA Closures	$4,326	$4,145	$181
3100	PA	100-DR	$1,193	$5,077	($3,884)
3105	PB	100-BC	$3,869	$5,739	($1,870)
3110	PC	100-KR	$2,084	$4,113	($2,029)
3115	PD	100-FR	$6,376	$5,953	$423
3120	PE	100-HR	$17,764	$11,479	$6,285
3125	PG	100-NR	$2,923	$5,476	($2,553)
3200	PL	200-BP	$11,258	$18,631	($7,373)
3210	PN	200-PO	$297	$478	($181)
3225	PS	200-TP	$0	$78	($78)
3230	PT	200-UP	$11,594	$13,990	($2,396)
3235	PU	200-ZP	$9,777	$11,389	($1,612)
3300	P2	300-FF	$4,827	$5,820	($993)
3390	P3	1100-EM	$7,583	$7,583	$0
	P	Remedial Actions	$91,621	$108,883	($17,262)
3400	EA1	Program Management RA	$16,913	$18,953	($2,040)
3400	EA2	ER Program Self-Assessment and Development	$3,250	$3,211	$39
3400	EA3	RL/State/Tribal Governments	$14,366	$10,924	$3,442
3400	EA4	Technology Adaptations	$12,435	$13,023	($588)
3400	EA5	Laboratory Support	$4,824	$5,588	($764)
3400	EA6	Facilities, Systems, and Equipment Support	$18,605	$17,461	$1,144
3400	EA	Program Management and Support RA	$70,393	$69,160	$1,233
3410	EB	Program Management and Support D&D	$1,125	$2,179	($1,054)
	E	Program Management and Support	$71,518	$71,339	$179
3500	UV	Asbestos Abatement	$2,085	$2,611	($526)
3510	UB	100 Area D&D	$12,090	$7,792	$4,298
3520	UE	200 Area D&D	$6,793	$8,145	($1,352)
3600	UN	N Reactor	$20,963	$21,600	($637)
	U	D&D Facilities	$41,931	$40,148	$1,783
3700	CF	Disposal Facilities	$12,000	$3,400	$8,600
	C	Treatment, Storage, or Disposal	$12,000	$3,400	$8,600
	HER	Richland Environmental Restoration	$217,070	$223,770	($5,700)

ADS# = activity data sheet number
D&D = decontamination and decommissioning
ER = environmental restoration
FY = fiscal year
FYWP = fiscal year work plan
RA = remedial actions
RARA = radiation area remedial actions
RCRA = Resource Conservation and Recovery Act of 1976
RL = U.S. Department of Energy, Richland Operations Office
UST = Underground Storage Tank
WBS = work breakdown structure

5.0 FISCAL YEAR 1994 MISSION FUNDING BASELINE

This section presents the funding information for the ER mission.

Indentation in Title Column displays the "roll-up" function within the program and provides line item identification.

The questions marks (?) in the 3rd level of the WBS column indicate a summary of assessment (XX?1) or remediation (XX?2) dollars within an operable unit.

5.1 MISSION FUNDING

This section contains the funding summary. Funding is summarized to the mission level in Table 5-1. The funding by program is listed in Table 5-2.

5.2 PROGRAM FUNDING

Appendices A through E contain the funding information for the respective programs at the activity level.

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Table 5-1. Environmental Restoration Program Fiscal Year 1994 Funding Baseline ($000). (sheet 1 of 2)

			FYWP 1994 ($000)			
ADS #	WBS	Title	WHC	USACE	RL	Total
3700	CF	Disposal Facilities	$8,156	$3,844	$0	$12,000
	C	Treatment, Storage, or Disposal	$8,156	$3,844	$0	$12,000
3500	UV	Asbestos Abatement	$2,085	$0	$0	$2,085
3510	UB	100 Area D&D	$12,090	$0	$0	$12,090
3520	UE	200 Area D&D	$6,793	$0	$0	$6,793
3600	UN	N Reactor	$20,963	$0	$0	$20,963
	U	D&D Facilities	$41,931	$0	$0	$41,931
3000	PF	Single-Shell Tank Closures	$408	$0	$0	$408
3010	PJ	RARA/USTs	$7,342	$0	$0	$7,342
3020	PV	RCRA Closures	$4,326	$0	$0	$4,326
3100	PA	100-DR	$1,193	$0	$0	$1,193
3105	PB	100-BC	$3,869	$0	$0	$3,869
3110	PC	100-KR	$2,084	$0	$0	$2,084
3115	PD	100-FR	$4,400	$1,976	$0	$6,376
3120	PE	100-HR	$17,764	$0	$0	$17,764
3125	PG	100-NR	$2,923	$0	$0	$2,923
3200	PL	200-BP	$11,258	$0	$0	$11,258
3210	PN	200-PO	$297	$0	$0	$297
3225	PS	200-TP	$0	$0	$0	$0
3230	PT	200-UP	$11,594	$0	$0	$11,594
3235	PU	200-ZP	$9,777	$0	$0	$9,777
3300	P2	300-FF	$4,827	$0	$0	$4,827
3390	P3	1100-EM	$0	$7,583	$0	$7,583
	P	Remedial Actions	$82,062	$9,559	$0	$91,621
3400	EA1	Program Management RA	$15,467	$1,446	$0	$16,913
3400	EA2	ER Program Self-Assessment and Development	$3,250	$0	$0	$3,250
3400	EA3	RL/State/Tribal Governments	$0	$1,874	$12,492	$14,366
3400	EA4	Technology Adaptations	$7,601	$1,664	$3,170	$12,435
3400	EA5	Laboratory Support	$4,824	$0	$0	$4,824
3400	EA6	Facilities, Systems, and Equipment Support	$18,605	$0	$0	$18,605
3400	EA	Program Management and Support RA	$49,747	$4,984	$15,662	$70,393
3410	EB	Program Management and Support D&D	$1,125	$0	$0	$1,125
	E	Program Management and Support	$50,872	$4,984	$15,662	$71,518
	HER	Richland Environmental Restoration Project	$183,021	$18,387	$15,662	$217,070

ADS# = activity data sheet number
D&D = decontamination and decommissioning
ER = environmental restoration
FYWP = fiscal year work plan
RA = remedial actions
RARA = radiation area remedial actions
RCRA = Resource Conservation and Recovery Act of 1976
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
UST = Underground Storage Tank
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

Table 5-1. Environmental Restoration Program Fiscal Year 1994 Funding Baseline ($000). (sheet 2 of 2)

			FYWP 1994 ($000)			
ADS #	WBS	Title	WHC	USACE	RL	Total
	HER1	Richland Environmental Restoration - Assessment	$140,068	$6,900	$15,662	$162,630
	HER2	Richland Environmental Restoration - Remediation	$42,953	$11,427	$0	$54,380
	HER	Richland Environmental Restoration Project	$183,021	$18,367	$15,662	$217,070

ADS# = activity data sheet number
FYWP = fiscal year work plan
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

Table 5-2. Environmental Restoration Program Summary Fiscal Year 1994 Funding Baseline ($000).

Table 5-2a. Remedial Action Program. (sheet 1 of 3)

			FYWP 1994 ($000)			
ADS #	WBS	Title	WHC	USACE	RL	Total
3010	PJ12	RARA Common Activities - Remediation	$6,856	$0	$0	$6,856
3010	PJ22	UST Common Activities - Remediation	$486	$0	$0	$486
3010	PJ72	RARA/USTs - Remediation	$7,342	$0	$0	$7,342
3010	PJ	RARA/USTs	$7,342	$0	$0	$7,342
3020	PV11	RCRA Common Activities Assessment	$423	$0	$0	$423
3020	PV31	RCRA 100-DR Assessment	$337	$0	$0	$337
3020	PV71	RCRA 100-NR Assessment	$430	$0	$0	$430
3020	PVB1	RCRA 200 Area B (BP) Assessment	$1,577	$0	$0	$1,577
3020	PVB2	RCRA 200 Area B (BP) Remediation	$461	$0	$0	$461
3020	PVB	RCRA 200 Area B (BP)	$2,038	$0	$0	$2,038
3020	PVS1	RCRA 200 Area S (RO) Assessment	$244	$0	$0	$244
3020	PVU1	RCRA 200 Area UP Assessment	$242	$0	$0	$242
3020	PVI1	RCRA 200 Area IU Assessment	$219	$0	$0	$219
3020	PVF1	RCRA 200 Area FF Assessment	$393	$0	$0	$393
3020	PV71	RCRA Closures - Assessment	$3,865	$0	$0	$3,865
3020	PV72	RCRA Closures - Remediation	$461	$0	$0	$461
3020	PV	RCRA Closures	$4,326	$0	$0	$4,326
3000	PF11	SST Closure Common Activities Assessment	$0	$0	$0	$0
3000	PFA1	SST 200 Area A (PO) Assessment	$0	$0	$0	$0
3000	PFS1	SST 200 Area S (RO) Assessment	$0	$0	$0	$0
3000	PFT1	SST 200 Area T (TP) Assessment	$408	$0	$0	$408
3000	PF71	Single-Shell Tank Closures - Assessment	$408	$0	$0	$408
3000	PF	Single-Shell Tank Closures	$408	$0	$0	$408
3100	PA11	100-DR-1 Assessment	$615	$0	$0	$615
3100	PA21	100-DR-2 Assessment	$578	$0	$0	$578
3100	PA71	100-DR - Assessment	$1,193	$0	$0	$1,193
3100	PA	100-DR	$1,193	$0	$0	$1,193
3105	PB11	100-BC-1 - Assessment	$1,956	$0	$0	$1,956
3105	PB21	100-BC-2 Assessment	$466	$0	$0	$466
3105	PB51	100-BC-5 Assessment	$1,250	$0	$0	$1,250
3105	PB62	100-IU-1 Remediation	$197	$0	$0	$197
3105	PB71	100-BC - Assessment	$3,672	$0	$0	$3,672
3105	PB72	100-BC - Remediation	$197	$0	$0	$197
3105	PB	100-BC	$3,869	$0	$0	$3,869
3110	PC11	100-KR-1 Assessment	$0	$0	$0	$0
3110	PC21	100-KR-2 Assessment	$920	$0	$0	$920
3110	PC41	100-KR-4 Assessment	$694	$0	$0	$694
3110	PC71	100-KR - Assessment	$2,084	$0	$0	$2,084
3110	PC	100-KR	$2,084	$0	$0	$2,084

Table 5-2. Environmental Restoration Program Summary Fiscal Year 1994 Funding Baseline ($000).

Table 5-2a. Remedial Action Program. (sheet 2 of 3)

			FYWP 1994 ($000)			
ADS #	WBS	Title	WHC	USACE	RL	Total
3115	PD11	100-FR-1 Assessment	$471	$0	$0	$471
3115	PD31	100-FR-3 Assessment	$957	$0	$0	$957
3115	PD41	100-IU-3 Assessment	$0	$1,976	$0	$1,976
3115	PD42	100-IU-3 Remediation	$2,972	$0	$0	$2,972
3115	PD4	100-IU-3	$2,972	$1,976	$0	$4,948
3115	PD?1	100-FR - Assessment	$1,428	$1,976	$0	$3,404
3115	PD?2	100-FR - Remediation	$2,972	$0	$0	$2,972
3115	PD	100-FR	$4,400	$1,976	$0	$6,376
3120	PE11	100-HR-1 Assessment	$397	$0	$0	$397
3120	PE21	100-HR-2 Assessment	$754	$0	$0	$754
3120	PE31	100-HR-3 Assessment	$3,648	$0	$0	$3,648
3120	PE62	100-IU-5 Remediation	$50	$0	$0	$50
3120	PE71	100 NPL Common Assessment	$12,915	$0	$0	$12,915
3120	PE?1	100-HR - Assessment	$17,714	$0	$0	$17,714
3120	PE?2	100-HR - Remediation	$50	$0	$0	$50
3120	PE	100-HR	$17,764	$0	$0	$17,764
3125	PG11	100-NR-1 Assessment	$463	$0	$0	$463
3125	PG21	100-NR-2 Assessment	$669	$0	$0	$669
3125	PG22	100-NR-2 Remediation	$1,791	$0	$0	$1,791
3125	PG2	100-NR-2	$2,460	$0	$0	$2,460
3125	PG?1	100-NR - Assessment	$1,132	$0	$0	$1,132
3125	PG?2	100-NR - Remediation	$1,791	$0	$0	$1,791
3125	PG	100-NR	$2,923	$0	$0	$2,923
3200	PL11	200-BP-1 Assessment	$3,007	$0	$0	$3,007
3200	PL12	200-BP-1 Remediation	$2,355	$0	$0	$2,355
3200	PL1	200-BP-1	$5,362	$0	$0	$5,362
3200	PL41	200-BP-4 Assessment	$0	$0	$0	$0
3200	PL51	200-BP-5 Assessment	$4,781	$0	$0	$4,781
3200	PL71	200-BP-8 Assessment	$0	$0	$0	$0
3200	PLA1	200-BP-11 Assessment	$523	$0	$0	$523
3200	PLB1	200 NPL Common Assessment	$562	$0	$0	$562
3200	PLB2	200 NPL Common Remediation	$30	$0	$0	$30
3200	PLB	200 NPL Common Activities	$592	$0	$0	$592
3200	PL?1	200-BP - Assessment	$8,873	$0	$0	$8,873
3200	PL?2	200-BP - Remediation	$2,385	$0	$0	$2,385
3200	PL	200-BP	$11,258	$0	$0	$11,258
3210	PN11	200-PO-1 Assessment	$297	$0	$0	$297
3210	PN41	200-PO-5 Assessment	$0	$0	$0	$0
3210	PN?1	200-PO - Assessment	$297	$0	$0	$297
3210	PN	200-PO	$297	$0	$0	$297
3225	PS11	200-TP-1 Assessment	$0	$0	$0	$0
3225	PS?1	200-TP - Assessment	$0	$0	$0	$0
3225	PS	200-TP	$0	$0	$0	$0

Table 5-2. Environmental Restoration Program Summary Fiscal Year 1994 Funding Baseline ($000).

Table 5-2a. Remedial Action Program. (sheet 3 of 3)

			FYWP 199			
ADS #	WBS	Title	WHC	USACE	[illegible]	[illegible]
3230	PT11	200-UP-1 Assessment	$4,477	$0	[illegible]	[illegible]7
3230	PT21	200-UP-2 Assessment	$7,117	$0	[illegible]	$7,117
3230	PT?1	200-UP - Assessment	$11,594	$0	$0	$11,594
3230	PT	200-UP	$11,594	$0	$0	$11,594
3235	PU11	200-ZP-1 Assessment	$0	$0	$0	$0
3235	PU12	200-ZP-1 Remediation	$4,058	$0	$0	$4,058
3235	PU1	200-ZP-1	$4,058	$0	$0	$4,058
3235	PU22	200-ZP-2 Remediation	$5,719	$0	$0	$5,719
3235	PU?1	200-ZP - Assessment	$0	$0	$0	$0
3235	PU?2	200-ZP - Remediation	$9,777	$0	$0	$9,777
3235	PU	200-ZP	$9,777	$0	$0	$9,777
3300	P211	300-FF-1 Assessment	$2,027	$0	$0	$2,027
3300	P212	300-FF-1 Remediation	$0	$0	$0	$0
3300	P21	300-FF-1	$2,027	$0	$0	$2,027
3300	P221	300-FF-2 Assessment	$1,586	$0	$0	$1,586
3300	P251	300-FF-5 Assessment	$1,188	$0	$0	$1,188
3300	P262	300-IU-1 Remediation	$26	$0	$0	$26
3300	P2?1	300-FF - Assessment	$4,801	$0	$0	$4,801
3300	P2?2	300-FF - Remediation	$26	$0	$0	$26
3300	P2	300-FF	$4,827	$0	$0	$4,827
3390	P312	1100-EM-1 Remediation	$0	$1,001	$0	$1,001
3390	P322	1100-EM-2 Remediation	$0	$366	$0	$366
3390	P332	1100-EM-3 Remediation	$0	$310	$0	$310
3390	P342	1100-IU-1 Remediation	$0	$4,752	$0	$4,752
3390	P362	ALE Facility Remediation	$0	$1,154	$0	$1,154
3390	P3?2	1100-EM - Remediation	$0	$7,583	$0	$7,583
3390	P3	1100-EM	$0	$7,583	$0	$7,583
	P??1	Remedial Actions - Assessment	$57,061	$1,976	$0	$59,037
	P??2	Remedial Actions - Remediation	$25,001	$7,583	$0	$32,584
	P	Remedial Actions	$82,062	$9,559	$0	$91,621

ADS# = activity data sheet number
ALE = Arid Lands Ecology
ER = environmental restoration
FYWP = fiscal year work plan
NPL = "National Priorities List"
RARA = radiation area remedial actions
RCRA = Resource Conservation and Recovery Act of 1976
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
UST = Underground Storage Tank
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

Table 5-2. Environmental Restoration Program Summary Fiscal Year 1994 Funding Baseline ($000).

Table 5-2b. Program Management and Support.

			FYWP 1994 ($000)			
ADS #	WBS	Title	WHC	USACE	RL	Total
3400	EA1	Program Management RA	$15,467	$1,446	$0	$16,913
3400	EA2	ER Program Self-Assessment and Development	$3,250	$0	$0	$3,250
3400	EA3	RL/State/Tribal Governments	$0	$1,874	$12,492	$14,366
3400	EA4	Technology Adaptations	$7,601	$1,664	$3,170	$12,435
3400	EA5	Laboratory Support	$4,824	$0	$0	$4,824
3400	EA61	General Support	$7,311	$0	$0	$7,311
3400	EA62	Site Characterization	$769	$0	$0	$769
3400	EA63	ER Drilling Support	$10,525	$0	$0	$10,525
3400	EA6	Facilities, Systems, and Equipment Support	$18,605	$0	$0	$18,605
3400	EA	Program Management and Support RA	$49,747	$4,984	$15,662	$70,393
3410	EB1	Program Management D&D	$1,125	$0	$0	$1,125
3410	EB	Program Management and Support D&D	$1,125	$0	$0	$1,125
	E	Program Management and Support	$50,872	$4,984	$15,662	$71,518

ADS# = activity data sheet number
D&D = decontamination and decommissioning
ER = environmental restoration
FYWP = fiscal year work plan
RA = remedial actions
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

Table 5-2. Environmental Restoration Program Summary Fiscal Year 1994 Funding Baseline ($000).

Table 5-2c. Decontamination and Decommissioning Program.

			FYWP 1994 ($000)			
ADS #	WBS	Title	WHC	USACE	RL	Total
3500	UV12	Asbestos Abatement Common - Remediation	$2,085	$0	$0	$2,085
3500	UV?2	Asbestos Abatement - Remediation	$2,085	$0	$0	$2,085
3500	UV	Asbestos Abatement	$2,085	$0	$0	$2,085
3510	UB11	100 Area Common Activities Assessment	$6,928	$0	$0	$6,928
3510	UB12	100 Area Common Activities Remediation	$2,048	$0	$0	$2,048
3510	UB1	100 Area Common Activities	$8,976	$0	$0	$8,976
3510	UB22	D&D 100-BC-1 Remediation	$808	$0	$0	$808
3510	UB42	D&D 100-DR-1 Remediation	$2,306	$0	$0	$2,306
3510	UB62	D&D 100-FR-1 Remediation	$0	$0	$0	$0
3510	UB?1	100 Area D&D - Assessment	$6,928	$0	$0	$6,928
3510	UB?2	100 Area D&D - Remediation	$5,162	$0	$0	$5,162
3510	UB	100 Area D&D	$12,090	$0	$0	$12,090
3520	UE11	200 Area D&D Common Activities Assessment	$3,746	$0	$0	$3,746
3520	UEA1	D&D 200-RO-3 Assessment	$1,659	$0	$0	$1,659
3520	UEF1	D&D 200-ZP-1 Assessment	$1,388	$0	$0	$1,388
3520	UE?1	200 Area D&D - Assessment	$6,793	$0	$0	$6,793
3520	UE	200 Area D&D	$6,793	$0	$0	$6,793
3600	UN11	NR Program Management and Integration	$989	$0	$0	$989
3600	UN21	NR Deactivation Execution - Balance of Plant	$14,681	$0	$0	$14,681
3600	UN22	NR Deactivation Execution - N Basin	$2,530	$0	$0	$2,530
3600	UN2	NR Deactivation Planning and Execution	$17,211	$0	$0	$17,211
3600	UN31	NR Regulatory Response - Assessment	$2,763	$0	$0	$2,763
3600	UN?1	N Reactor - Assessment	$18,433	$0	$0	$18,433
3600	UN?2	N Reactor - Remediation	$2,530	$0	$0	$2,530
3600	UN	N Reactor	$20,963	$0	$0	$20,963
	U??1	D&D Facilities - Assessment	$32,154	$0	$0	$32,154
	U??2	D&D Facilities - Remediation	$9,777	$0	$0	$9,777
	U	D&D Facilities	$41,931	$0	$0	$41,931

ADS# = activity data sheet number
D&D = decontamination and decommissioning
FYWP = fiscal year work plan
NR = N Reactor
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

Table 5-2. Environmental Restoration Program Summary Fiscal Year 1994 Funding Baseline ($000).

Table 5-2d. Disposal Facilities Program.

			FYWP 1994 ($000)			
ADS #	WBS	Title	WHC	USACE	RL	Total
3700	CF11	LTD Technical Support and Engineering	$4,756	$0	$0	$4,756
3700	CF12	LTD Facilities Design and Construction	$0	$3,844	$0	$3,844
3700	CF1	Long-Term Disposal Facilities and Equipment - ERDF	$4,756	$3,844	$0	$8,600
3700	CF21	W-025 Disposal Facility	$3,222	$0	$0	$3,222
3700	CF22	W-025A Disposal Facility	$178	$0	$0	$178
3700	CF23	Future Disposal Facility	$0	$0	$0	$0
3700	CF2	Near-Term Disposal Facilities and Equipment	$3,400	$0	$0	$3,400
3700	CF	Disposal Facilities	$8,156	$3,844	$0	$12,000
	C	Treatment, Storage, or Disposal	$8,156	$3,844	$0	$12,000

ADS# = activity data sheet number
ERDF = environmental restoration disposal facility
FYWP = fiscal year work plan
LTD = long-term disposal
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

6.0 FISCAL YEAR 1994 MISSION STAFFING BASELINE

This section presents the full-time equivalent (FTE) information for the ER Mission.

Indentation in Title Column displays the "roll-up" function within the program and provides line item identification.

The question marks (?) in the 3rd level of the WBS column indicate a summary of assessment (XX?1) or remediation (XX?2) FTEs within an operable unit.

6.1 FULL-TIME EQUIVALENTS

This section contains the staffing FTEs. The FTEs are summarized to the mission level in Table 6-1. The FTEs by program are listed in Table 6-2.

6.2 PROGRAM FULL-TIME EQUIVALENTS

Appendices A through E contain the FTE information for the respective programs at the activity level.

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Table 6-1. Environmental Restoration Program Fiscal Year 1994 Work Force Full-Time Equivalents Mission Summary (FTE). (sheet 1 of 2)

			FYWP 1994 FTEs			
ADS #	WBS	Title	WHC	USACE	RL	Total
3700	CF	Disposal Facilities	16.6	30.8	0.0	47.4
	C	Treatment, Storage, or Disposal	16.6	30.8	0.0	47.4
3500	UV	Asbestos Abatement	9.6	0.0	0.0	9.6
3510	UB	100 Area D&D	59.9	0.0	0.0	59.9
3520	UE	200 Area D&D	47.5	0.0	0.0	47.5
3600	UN	N Reactor	151.3	0.0	0.0	151.3
	U	D&D Facilities	268.3	0.0	0.0	268.3
3000	PF	Single-Shell Tank Closures	1.2	0.0	0.0	1.2
3010	PJ	RARA/USTs	60.2	0.0	0.0	60.2
3020	PV	RCRA Closures	32.3	0.0	0.0	32.3
3100	PA	100-DR	1.9	0.0	0.0	1.9
3105	PB	100-BC	20.8	0.0	0.0	20.8
3110	PC	100-KR	6.0	0.0	0.0	6.0
3115	PD	100-FR	4.8	15.8	0.0	20.6
3120	PE	100-HR	64.4	0.0	0.0	64.4
3125	PG	100-NR	3.0	0.0	0.0	3.0
3200	PL	200-BP	23.9	0.0	0.0	23.9
3210	PN	200-PO	1.3	0.0	0.0	1.3
3225	PS	200-TP	0.0	0.0	0.0	0.0
3230	PT	200-UP	33.4	0.0	0.0	33.4
3235	PU	200-ZP	35.9	0.0	0.0	35.9
3300	P2	300-FF	11.5	0.0	0.0	11.5
3390	P3	1100-EM	0.0	60.8	0.0	60.8
	P	Remedial Actions	300.6	76.6	0.0	377.2
3400	EA1	Program Management RA	93.1	9.4	0.0	102.5
3400	EA2	ER Program Self-Assessment and Development	7.2	0.0	0.0	7.2
3400	EA3	RL/State/Tribal Governments	0.0	16.0	0.0	16.0
3400	EA4	Technology Adaptations	15.2	14.0	0.0	29.2
3400	EA5	Laboratory Support	8.8	0.0	0.0	8.8
3400	EA6	Facilities, Systems, and Equipment Support	61.3	0.0	0.0	61.3
3400	EA	Program Management and Support RA	185.6	39.4	0.0	225.0
3410	EB	Program Management and Support D&D	11.4	0.0	0.0	11.4
	E	Program Management and Support	197.0	39.4	0.0	236.4
	HER	Richland Environmental Restoration Project	782.5	146.8	0.0	929.3

ADS# = activity data sheet number
D&D = decontamination and decommissioning
ER = environmental restoration
FTE = full-time equivalent
FYWP = fiscal year work plan
RA = remedial actions
RARA = radiation area remedial actions
RCRA = Resource Conservation and Recovery Act of 1976
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
UST = Underground Storage Tank
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

Table 6-1. Environmental Restoration Program Fiscal Year 1994 Work Force Full-Time Equivalents Mission Summary (FTE). (sheet 2 of 2)

			FYWP 1994 FTEs			
ADS #	WBS	Title	WHC	USACE	RL	Total
	HER1	Richland Environmental Restoration – Assessment	591.2	55.2	0.0	646.4
	HER2	Richland Environmental Restoration – Remediation	191.3	91.6	0.0	282.9
	HER	Richland Environmental Restoration Project	782.5	146.8	0.0	929.3

ADS# = activity data sheet number
FTE = full-time equivalent
FYWP = fiscal year work plan
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

Table 6-2. Environmental Restoration Remedial Action Program
Fiscal Year 1994 Workforce Full-Time Equivalent (FTE).

Table 6-2a. Remedial Action Program. (sheet 1 of 3)

			FYWP 1994 FTEs			
ADS #	WBS	Title	WHC	USACE	RL	Total
3010	PJ12	RARA Common Activities - Remediation	58.5	0.0	0.0	58.5
3010	PJ22	UST Common Activities - Remediation	1.7	0.0	0.0	1.7
3010	PJ72	RARA/USTs - Remediation	60.2	0.0	0.0	60.2
3010	PJ	RARA/USTs	60.2	0.0	0.0	60.2
3020	PV11	RCRA Common Activities Assessment	1.5	0.0	0.0	1.5
3020	PV31	RCRA 100-DR Assessment	2.5	0.0	0.0	2.5
3020	PV71	RCRA 100-NR Assessment	3.0	0.0	0.0	3.0
3020	PVB1	RCRA 200 Area B (BP) Assessment	11.2	0.0	0.0	11.2
3020	PVB2	RCRA 200 Area B (BP) Remediation	0.8	0.0	0.0	0.8
3020	PVB	RCRA 200 Area B (BP)	12.0	0.0	0.0	12.0
3020	PVS1	RCRA 200 Area S (RO) Assessment	1.8	0.0	0.0	1.8
3020	PVU1	RCRA 200 Area UP Assessment	1.9	0.0	0.0	1.9
3020	PVI1	RCRA 200 Area IU Assessment	2.2	0.0	0.0	2.2
3020	PVF1	RCRA 200 Area FF Assessment	1.7	0.0	0.0	1.7
3020	PV71	RCRA Closures - Assessment	25.8	0.0	0.0	25.8
3020	PV72	RCRA Closures - Remediation	6.5	0.0	0.0	6.5
3020	PV	RCRA Closures	32.3	0.0	0.0	32.3
3000	PF11	SST Closure Common Activities Assessment	0.0	0.0	0.0	0.0
3000	PFA1	SST 200 Area A (PO) Assessment	0.0	0.0	0.0	0.0
3000	PFS1	SST 200 Area S (RO) Assessment	0.0	0.0	0.0	0.0
3000	PFT1	SST 200 Area T (TP) Assessment	1.2	0.0	0.0	1.2
3000	PF71	Single-Shell Tank Closures - Assessment	1.2	0.0	0.0	1.2
3000	PF	Single-Shell Tank Closures	1.2	0.0	0.0	1.2
3100	PA11	100-DR-1 Assessment	0.8	0.0	0.0	0.8
3100	PA21	100-DR-2 Assessment	1.1	0.0	0.0	1.1
3100	PA71	100-DR - Assessment	1.9	0.0	0.0	1.9
3100	PA	100-DR	1.9	0.0	0.0	1.9
3105	PB11	100-BC-1 - Assessment	16.6	0.0	0.0	16.6
3105	PB21	100-BC-2 Assessment	0.2	0.0	0.0	0.2
3105	PB51	100-BC-5 Assessment	2.8	0.0	0.0	2.8
3105	PB62	100-IU-1 Remediation	1.2	0.0	0.0	1.2
3105	PB71	100-BC - Assessment	19.6	0.0	0.0	19.6
3105	PB72	100-BC - Remediation	1.2	0.0	0.0	1.2
3105	PB	100-BC	20.8	0.0	0.0	20.8
3110	PC11	100-KR-1 Assessment	0.0	0.0	0.0	0.0
3110	PC21	100-KR-2 Assessment	3.3	0.0	0.0	3.3
3110	PC41	100-KR-4 Assessment	2.3	0.0	0.0	2.3
3110	PC71	100-KR - Assessment	6.0	0.0	0.0	6.0
3110	PC	100-KR	6.0	0.0	0.0	6.0

Table 6-2. Environmental Restoration Remedial Action Program
Fiscal Year 1994 Workforce Full-Time Equivalent (FTE).

Table 6-2a. Remedial Action Program. (sheet 2 of 3)

			FYWP 1994 FTEs			
ADS #	WBS	Title	WHC	USACE	RL	Total
3115	PD11	100-FR-1 Assessment	0.1	0.0	0.0	0.1
3115	PD31	100-FR-3 Assessment	2.0	0.0	0.0	2.0
3115	PD41	100-IU-3 Assessment	0.0	15.8	0.0	15.8
3115	PD42	100-IU-3 Remediation	2.7	0.0	0.0	2.7
3115	PD4	100-IU-3	2.7	15.8	0.0	18.5
3115	PD71	100-FR - Assessment	2.1	15.8	0.0	17.9
3115	PD72	100-FR - Remediation	2.7	0.0	0.0	2.7
3115	PD	100-FR	4.8	15.8	0.0	20.6
3120	PE11	100-HR-1 Assessment	0.0	0.0	0.0	0.0
3120	PE21	100-HR-2 Assessment	1.7	0.0	0.0	1.7
3120	PE31	100-HR-3 Assessment	12.4	0.0	0.0	12.4
3120	PE62	100-IU-5 Remediation	0.5	0.0	0.0	0.5
3120	PE71	100 NPL Common Assessment	49.8	0.0	0.0	49.8
3120	PE71	100-HR - Assessment	63.9	0.0	0.0	63.9
3120	PE72	100-HR - Remediation	0.5	0.0	0.0	0.5
3120	PE	100-HR	64.4	0.0	0.0	64.4
3125	PG11	100-NR-1 Assessment	0.2	0.0	0.0	0.2
3125	PG21	100-NR-2 Assessment	0.8	0.0	0.0	0.8
3125	PG22	100-NR-2 Remediation	2.0	0.0	0.0	2.0
3125	PG2	100-NR-2	2.8	0.0	0.0	2.8
3125	PG71	100-NR - Assessment	1.0	0.0	0.0	1.0
3125	PG72	100-NR - Remediation	2.0	0.0	0.0	2.0
3125	PG	100-NR	3.0	0.0	0.0	3.0
3200	PL11	200-BP-1 Assessment	1.2	0.0	0.0	1.2
3200	PL12	200-BP-1 Remediation	1.1	0.0	0.0	1.1
3200	PL1	200-BP-1	2.3	0.0	0.0	2.3
3200	PL41	200-BP-4 Assessment	0.0	0.0	0.0	0.0
3200	PL51	200-BP-5 Assessment	17.7	0.0	0.0	17.7
3200	PL71	200-BP-8 Assessment	0.0	0.0	0.0	0.0
3200	PLA1	200-BP-11 Assessment	1.9	0.0	0.0	1.9
3200	PLB1	200 NPL Common Assessment	1.8	0.0	0.0	1.8
3200	PLB2	200 NPL Common Remediation	0.2	0.0	0.0	0.2
3200	PLB	200 NPL Common Activities	2.0	0.0	0.0	2.0
3200	PL71	200-BP - Assessment	22.6	0.0	0.0	22.6
3200	PL72	200-BP - Remediation	1.3	0.0	0.0	1.3
3200	PL	200-BP	23.9	0.0	0.0	23.9
3210	PN11	200-PO-1 Assessment	1.3	0.0	0.0	1.3
3210	PN41	200-PO-5 Assessment	0.0	0.0	0.0	0.0
3210	PN71	200-PO - Assessment	1.3	0.0	0.0	1.3
3210	PN	200-PO	1.3	0.0	0.0	1.3
3225	PS11	200-TP-1 Assessment	0.0	0.0	0.0	0.0
3225	PS71	200-TP - Assessment	0.0	0.0	0.0	0.0
3225	PS	200-TP	0.0	0.0	0.0	0.0

Table 6-2. Environmental Restoration Remedial Action Program Fiscal Year 1994 Workforce Full-Time Equivalent (FTE).

Table 6-2a. Remedial Action Program. (sheet 3 of 3)

			FYWP 1994 FTEs			
ADS #	WBS	Title	WHC	USACE	RL	Total
3230	PT11	200-UP-1 Assessment	19.6	0.0	0.0	19.6
3230	PT21	200-UP-2 Assessment	13.8	0.0	0.0	13.8
3230	PT?1	200-UP - Assessment	33.4	0.0	0.0	33.4
3230	PT	200-UP	33.4	0.0	0.0	33.4
3235	PU11	200-ZP-1 Assessment	0.0	0.0	0.0	0.0
3235	PU12	200-ZP-1 Remediation	15.9	0.0	0.0	15.9
3235	PU1	200-ZP-1	15.9	0.0	0.0	15.9
3235	PU22	200-ZP-2 Remediation	20.0	0.0	0.0	20.0
3235	PU?1	200-ZP - Assessment	0.0	0.0	0.0	0.0
3235	PU?2	200-ZP - Remediation	35.9	0.0	0.0	35.9
3235	PU	200-ZP	35.9	0.0	0.0	35.9
3300	P211	300-FF-1 Assessment	4.8	0.0	0.0	4.8
3300	P212	300-FF-1 Remediation	0.0	0.0	0.0	0.0
3300	P21	300-FF-1	4.8	0.0	0.0	4.8
3300	P221	300-FF-2 Assessment	1.4	0.0	0.0	1.4
3300	P251	300-FF-5 Assessment	5.0	0.0	0.0	5.0
3300	P262	300-IU-1 Remediation	0.3	0.0	0.0	0.3
3300	P2?1	300-FF - Assessment	11.2	0.0	0.0	11.2
3300	P2?2	300-FF - Remediation	0.3	0.0	0.0	0.3
3300	P2	300-FF	11.5	0.0	0.0	11.5
3390	P312	1100-EM-1 Remediation	0.0	8.0	0.0	8.0
3390	P322	1100-EM-2 Remediation	0.0	3.0	0.0	3.0
3390	P332	1100-EM-3 Remediation	0.0	2.6	0.0	2.6
3390	P342	1100-IU-1 Remediation	0.0	38.0	0.0	38.0
3390	P362	ALE Facility Remediation	0.0	9.2	0.0	9.2
3390	P3?2	1100-EM - Remediation	0.0	60.8	0.0	60.8
3390	P3	1100-EM	0.0	60.8	0.0	60.8
	P??	Remedial Actions - Assessment	190.0	15.8	0.0	205.8
	P?2	Remedial Actions - Remediation	110.6	60.8	0.0	171.4
	P	Remedial Actions	300.6	76.6	0.0	377.2

ADS# = activity data sheet number
ALE = Arid Lands Ecology
ER = environmental restoration
FTE = full-time equivalent
FYWP = fiscal year work plan
NPL = "National Priorities List"
RARA = radiation area remedial actions
RCRA = Resource Conservation and Recovery Act of 1976
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
UST = Underground Storage Tank
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

Table 6-2. Environmental Restoration Remedial Action Program Fiscal Year 1994 Workforce Full-Time Equivalent (FTE).

Table 6-2b. Program Management and Support.

			FYWP 1994 FTEs			
ADS #	WBS	Title	WHC	USACE	RL	Total
3400	EA1	Program Management RA	93.1	9.4	0.0	102.5
3400	EA2	ER Program Self-Assessment and Development	7.2	0.0	0.0	7.2
3400	EA3	RL/State/Tribal Governments	0.0	16.0	0.0	16.0
3400	EA4	Technology Adaptations	15.2	14.0	0.0	29.2
3400	EA5	Laboratory Support	8.8	0.0	0.0	8.8
3400	EA61	General Support	37.6	0.0	0.0	37.6
3400	EA62	Site Characterization	2.9	0.0	0.0	2.9
3400	EA63	ER Drilling Support	20.8	0.0	0.0	20.8
3400	EA6	Facilities, Systems, and Equipment Support	61.3	0.0	0.0	61.3
3400	EA	Program Management and Support RA	185.6	39.4	0.0	225.0
3410	EB1	Program Management D&D	11.4	0.0	0.0	11.4
3410	EB	Program Management and Support D&D	11.4	0.0	0.0	11.4
	E	Program Management and Support	197.0	39.4	0.0	236.4

ADS# = activity data sheet number
D&D = decontamination and decommissioning
ER = environmental restoration
FTE = full-time equivalent
FYWP = fiscal year work plan
RA = remedial actions
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

Table 6-2. Environmental Restoration Remedial Action Program
Fiscal Year 1994 Workforce Full-Time Equivalent (FTE).

Table 6-2c. Decontamination and Decommissioning Program.

			FYWP 1994 FTEs			
ADS #	WBS	Title	WHC	USACE	RL	Total
3500	UV12	Asbestos Abatement Common - Remediation	9.6	0.0	0.0	9.6
3500	UV?2	Asbestos Abatement - Remediation	9.6	0.0	0.0	9.6
3500	UV	Asbestos Abatement	9.6	0.0	0.0	9.6
3510	UB11	100 Area Common Activities Assessment	32.4	0.0	0.0	32.4
3510	UB12	100 Area Common Activities Remediation	2.5	0.0	0.0	2.5
3510	UB1	100 Area Common Activities	34.9	0.0	0.0	34.9
3510	UB22	D&D 100-BC-1 Remediation	5.9	0.0	0.0	5.9
3510	UB42	D&D 100-DR-1 Remediation	18.2	0.0	0.0	18.2
3510	UB62	D&D 100-FR-1 Remediation	0.9	0.0	0.0	0.9
3510	UB?1	100 Area D&D - Assessment	32.4	0.0	0.0	32.4
3510	UB?2	100 Area D&D - Remediation	27.5	0.0	0.0	27.5
3510	UB	100 Area D&D	59.9	0.0	0.0	59.9
3520	UE11	200 Area D&D Common Activities Assessment	33.7	0.0	0.0	33.7
3520	UEA1	D&D 200-RO-3 Assessment	4.3	0.0	0.0	4.3
3520	UEF1	D&D 200-ZP-1 Assessment	9.5	0.0	0.0	9.5
3520	UE?1	200 Area D&D - Assessment	47.5	0.0	0.0	47.5
3520	UE	200 Area D&D	47.5	0.0	0.0	47.5
3600	UN11	NR Program Management and Integration	9.8	0.0	0.0	9.8
3600	UN21	NR Deactivation Execution - Balance of Plant	101.9	0.0	0.0	101.9
3600	UN22	NR Deactivation Execution - N Basin	27.0	0.0	0.0	27.0
3600	UN2	NR Deactivation Planning and Execution	128.9	0.0	0.0	128.9
3600	UN31	NR Regulatory Response - Assessment	12.6	0.0	0.0	12.6
3600	UN?1	N Reactor - Assessment	124.3	0.0	0.0	124.3
3600	UN?2	N Reactor - Remediation	27.0	0.0	0.0	27.0
3600	UN	N Reactor	151.3	0.0	0.0	151.3
	U?71	D&D Facilities - Assessment	204.2	0.0	0.0	204.2
	U?72	D&D Facilities - Remediation	64.1	0.0	0.0	64.1
	U	D&D Facilities	268.3	0.0	0.0	268.3

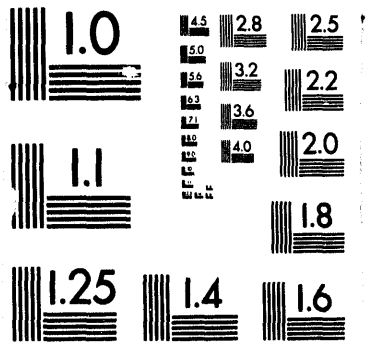
ADS# = activity data sheet number
D&D = decontamination and decommissioning
FTE = full-time equivalent
FYWP = fiscal year work plan
NR = N Reactor
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

Table 6-2. Environmental Restoration Remedial Action Program
Fiscal Year 1994 Workforce Full-Time Equivalent (FTE).

Table 6-2d. Disposal Facilities Program.

			FYWP 1994 FTEs			
ADS #	WBS	Title	WHC	USACE	RL	Total
3700	CF11	LTD Technical Support and Engineering	12.4	0.0	0.0	12.4
3700	CF12	LTD Facilities Design and Construction	0.0	30.8	0.0	30.8
3700	CF1	Long-Term Disposal Facilities and Equipment - ERDF	12.4	30.8	0.0	43.2
3700	CF21	W-025 Disposal Facility	4.0	0.0	0.0	4.0
3700	CF22	W-025A Disposal Facility	0.2	0.0	0.0	0.2
3700	CF23	Future Disposal Facility	0.0	0.0	0.0	0.0
3700	CF2	Near-Term Disposal Facilities and Equipment	4.2	0.0	0.0	4.2
3700	CF	Disposal Facilities	16.6	30.8	0.0	47.4
	C	Treatment, Storage, or Disposal	16.6	30.8	0.0	47.4

ADS# = activity data sheet number
ERDF = environmental restoration disposal facility
FTE = full-time equivalent
FYWP = fiscal year work plan
LTD = long-term disposal
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
WBS = work breakdown structure
WHC = Westinghouse Hanford Company


1.0
4.5
2.8
2.5
5.0
3.2
2.2
5.6
6.3
3.6
7.1
8.0
4.0
2.0
9.0
1.1
1.8
1.25
1.4
1.6

2 of 6

7.0 FISCAL YEAR 1994 MISSION WORKSCOPE CARRYOVER

The ER Mission workscope carryover information will be provided after the close of the fiscal year. A change request package documenting carryover workscope, milestones, and funds will be submitted.

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8.0 REFERENCES

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WHC, 1993, *Hanford Surface Soil Radioactive Contamination Control Plan*, WHC-EP-0489-2, Richland, Washington.

10 CFR 1021, *National Environmental Policy Act Implementing Procedures*.

APPENDICES

The appendices and their corresponding DOE, Hanford Site, and Participant WBS numbers are:

A	Remedial Action	(1.4.10.1.1)	(2.1)	(P)
B	Decontamination and Decommissioning Program	(1.4.10.1.2)	(2.2)	(U)
C	Program Management and Support Program	(1.4.10.1.3)	(2.3)	(E)
D	Surveillance and Maintenance (not part of the FY 1994 workscope)	(1.4.10.1.4)	(2.4)	(S)
E	Disposal Facilities	(1.4.10.1.6)	(2.5)	(C)

The appendices to the FY 1994 ER Mission FYWP are in an identical format as the main structure with information detailed to the MSA activity level. The respective appendices can be used as independent working documents.

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APPENDIX A

REMEDIAL ACTION

APPENDIX A

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GLOSSARY

AAMS	aggregate area management study
AAP	affirmative action plan
ACM	asbestos containing material
Admin	Administration
ADS	activity data sheet
AIP	agreement in principal
AIU	agreement in understanding
ALE	Arid Lands Ecology (Reserve)
ARAR	applicable or relevant and appropriate requirements
ASI	Advanced Sciences, Incorporated
ATSDR	Agency for Toxic Substances and Disease Registry
BAM	baseline analysis matrix
BDAT	best demonstrated available technology
BOP	balance of plant
CAMU	corrective action management unit
CDR	conceptual design report
CERCLA	*Comprehensive Environmental Response, Compensation, and Liability Act of 1980*
CFR	Code of Federal Regulations
CLP	contract laboratory program
CMP	configuration management plan
CRADA	Cooperative Research and Development Agreement
CY	calendar year
D&D	decontamination and decommissioning
DCP	document control plan
DF	disposal facilities
DOE	U.S. Department of Energy
DOE-HQ	U.S. Department of Energy, Headquarters
DOE-RL	U.S. Department of Energy, Richland Operations Office
DOW	description of work
Ecology	Washington State Department of Ecology
EE/CA	engineering evaluation/cost analysis
EGW	200 East Area groundwater
EII	environmental investigation instruction
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
equip	equipment
ER	environmental restoration
ERA	expedited response action
ERB	engineering review board
ERDF	Environmental Restoration Disposal Facility
ERMC	environmental restoration management contractor
ERO	environmental restoration operations
ERPO	environmental restoration program office
ERSDF	environmental restoration storage and disposal facility

GLOSSARY (cont)

FDB	functional design basis
FDC	functional design criteria
FDS	financial data system
FEMP	facility effluent monitoring plan(s)
FFS	focused feasibility study
FS	feasibility study
FSPRD	Final Surplus Production Reactor Decommissioning
FTE	full-time equivalent
FY	fiscal year
FYP	fiscal year plan
FYWP	fiscal year work plan
G&A	general and administrative
GAO	General Accounting Office
GIS	geographic information system
govt	government
HASM	Hanford Analytical Services Management
HEIS	Hanford Environmental Information System
HGP	Hanford Generating Plant
HEHF	Hanford Environmental Health Facility
HLAN	Hanford Local Area Network
HRA	Hanford remedial action
HSAAP	Hanford Site Asbestos Abatement Program
IMS	information management system
IMSP	information management system plan
IROD	interim record of decision
IRM	interim response measure
ISV	in-situ vitrification
JCS	job control system
KEH	Kaiser Engineers Hanford Company
lab	laboratory
LDR	land disposal restrictions
LFI	limited field investigation
LIMS	laboratory information management system
LRPP	long-range planning program
M&O	maintenance and operations
MCL	milestone control log
MDS	milestone description sheets
mgmt	management

GLOSSARY (cont)

MOU	memorandum of understanding
MSA	major system acquisition
MYPP	multi-year program plan
NEPA	*National Environmental Policy Act of 1969*
NOD	notice of deficiency
NPC	notice of project closeout
NPL	National Priorities List
NRDA	National Resource Damage Assessment
NRDWL	nonradioactive dangerous waste landfill
NW	northwest
OMB	Office of Management and Budget
OU	operable unit
PAS	preliminary assessment screening
PFP	plutonium finishing plant
PM&S	program management and support
PNL	Pacific Northwest Laboratory
Pu Conc	plutonium concentration
PUREX	plutonium-uranium extraction
QA	quality assurance
QASR	quality assurance system requirements
QTR	quality training requirement
RA	remedial action
RAM	responsibility assignment matrix
RARA	radiation area remedial action
RCRA	*Resource Conservation and Recovery Act of 1976*
REDOX	reduction oxidation
RFI-CMS	RCRA facility investigation/corrective measure studies
RFP	request for proposal
RI	remedial investigation
RIDS	record inventory disposition schedule
RI/FS	remedial investigation/feasibility study
RL	U.S. Department of Energy, Richland Operations Office
RLID	Richland implementation document
RLP	Richland procurement instruction
RMP	records management plan
RMWDF	radioactive mixed waste disposal facility
ROD	record of decision
S&M	surveillance and maintenance
SEMP	systems engineering management plan
SMS	site management system
SPRD	Surplus Production Reactor Decommissioning
SST	single-shell tank

GLOSSARY (cont)

SWEC	Stone & Webster Engineering Corporation
Sys. Eng	systems engineering
TPA	Tri-Party Agreement
TRU	transuranic
Tri-Party Agreement	*Hanford Federal Facility Agreement and Consent Order*
TSD	treatment, storage, and/or disposal
USACE	U.S. Army Corps of Engineers
USACE/PM	U.S. Army Corps of Engineers/Program Manager
USGS	U.S. Geological Survey
UST	underground storage tank
WAC	Washington Administrative Code
WBS	work breakdown structure
Westinghouse Hanford	Westinghouse Hanford Company
WGW	200 West Area groundwater
WHC	Westinghouse Hanford Company
WIDS	waste information data system

A1.0 REMEDIAL ACTION PROGRAM DESCRIPTION

This appendix contains the program statement, objectives, priorities, assumptions and constraints, and major deviations from the baseline.

A1.1 REMEDIAL ACTION PROGRAM STATEMENT

The RA Program is responsible for the interim management and disposition of past-practice environmental contamination on the Hanford Site. This includes contaminated soils, contaminated groundwater, and solid waste contained in past-practice units that have been inactive since March 1, 1987. The identification and completion of interim stabilization actions to mitigate the potential for the expansion of contaminated zones, remediation of SST waste structures and residual waste on conclusion of the SST waste disposal activities, and deactivation of any facilities operated to accomplish the remedial action mission area goals are included in this program.

A majority of the work entails waste identification and characterization feasibility studies for remedial design and cleanup, technology development and demonstration, and postclosure activities. The emphasis is to bring all known waste sites on the Hanford Site into compliance with applicable federal, state, and local environmental laws and regulations. The Tri-Party Agreement (Ecology et al. 1992) is the major regulatory driver. Figure A1-1 portrays planned FY 1994 RA work.

EXPEDITED RESPONSE ACTIONS

The expedited response action (ERA) process was developed for accelerating decision making by maximizing the use of existing data, consistent with data quality objectives, and to remove threats to human health and the environment by reducing toxicity mobility or the volume of contaminants. Since 1991, a total of 9 expedited response actions have been initiated through the Environmental Restoration Division. Five have been completed (618-9, 300 Area Process Trenches, sodium dichromate, pickling acid crib, riverland rail wash pit), one is scheduled to be completed in FY 1994 (North Slope), and three will continue into FY 1995 (carbon tetrachloride, N Springs, and 618-11). Figure A1-2 portrays planned FY 1994 ERA activities on the Hanford Site. The ERAs that are to be continued in FY 1994 are as follows.

- N Springs--The engineering evaluation/cost analysis (EE/CA) for N Springs was submitted to the regulators the last quarter of FY 1993. The EE/CA lists the proposed alternatives for reducing strontium-90 migration to the Columbia River. During FY 1994 the EPA and Ecology will review the EE/CA and submit the document for public review. Following the review period, the regulators will issue an Action Memorandum that will list the preferred alternative to be used for contaminate reduction. Based on the preferred alternative, a contract will be prepared and awarded to conduct the field remediation

activities. It is anticipated that field activities will begin by the end of FY 1994.

- North Slope--The EE/CA for the North Slope remediation will be submitted for public comment in late October 1993. Four alternatives are proposed in the EE/CA. The Action Memorandum is not expected from the regulators until early December 1993. The length of time to complete the remediation is reliant upon the selected remediation alternative. However, activities will comments in early first quarter FY 1994 to continue characterization work by exhuming one of the ten landfills.

- Riverland Rail Wash Pit--Remediation activities were initiated at the Riverland Rail Wash Pit during the last quarter of FY 1993. Remediation activities are expected to be completed by the end of FY 1993; however, documentation to closeout the ERA will continue into FY 1994. This documentation will summarize activities and will initiate the process to delist the OU from the NPL listing.

- Carbon Tetrachloride--Vapor extraction activities at the carbon tetrachloride ERA will continue in FY 1994. The 3,000 cubic feet per minute extraction capacity will be used and optimized throughout 1994. Additional vapor extraction wells will be drilled to enhance well field extraction capacity and efficiency.

- 618-11 Burial Ground--The 618-11 burial ground EE/CA (drafted in FY 1993) will be completed in FY 1994. Monitoring activity at the surface and the groundwater will be conducted via site surface radiation monitoring and construction of groundwater wells.

A1.2 REMEDIAL ACTION PROGRAM OBJECTIVES

The RA objectives for FY 1994 are as follow:

- Identify, assess, and remediate past-practice waste sites inactive since March 1, 1987

- Identify, assess, and remediate SST structures and residual SST waste materials that meet established criteria for in-place disposition

- Identify, assess, and remediate all solid and ancillary systems within the SST OUs

- Develop and implement management support systems, and capabilities necessary for RA product and mission success

- Ensure the safety of operations

- Comply with laws and regulations intended to protect human health and the environment.

A1.3 REMEDIAL ACTION PROGRAM PRIORITIES

The RA priorities for FY 1994 are addressed in the ER Mission portion of this document.

A1.4 REMEDIAL ACTION PROGRAM ASSUMPTIONS AND CONSTRAINTS

The following are the assumptions and constraints for the RA Program.

- A streamlined RI/FS process (past-practice strategy) will be implemented for assessment of all OUs with the exception of those with approved work plans.
- Selected DF facilities will be closed as part of the past-practice strategy.
- Infrastructure will be in place to support all activities.
- The past-practices strategy focuses on removal actions at priority waste sites; other remedial measures might require additional characterization.
- M-13-OU Priorities for CY 1994 are in accordance with DOE guidance.
- Sufficient laboratory capacity will be available to support analysis needs.
- All field activities will be conducted within the existing Hanford Site practices and bargaining agreements.
- RODs will consider the use of best demonstrated available technology (BDAT).
- No IRM or ERA will be included before completion of characterization scope as outlined in the applicable OU work plans.
- Field screening and mobile laboratories will be used to expedite analysis and to reduce the number of samples sent to offsite laboratories.
- The RCRA closure plans and NODs will be submitted to Ecology in accordance with the Tri-Party Agreement.
- It is assured that the method of analysis [SW-846 (EPA 1986) versus contract laboratory program (CLP)] for clean closures will be agreed upon between RL and Ecology. The regulations call for SW-846 but Ecology requires CLP.
- The RCRA RAs will be integrated with the CERCLA work.

- Approximately five 'orphan' USTs will be removed each year. A minimum of one 'orphan' UST will be assumed to be a potential 'leaker' and therefore will require some level of remediation.

- CERCLA and NRDA activities will be integrated.

- Current ER S&M activities will prevent existing surface contamination under ER responsibility from increasing. The S&M of deactivated ER sites will continue until remediation is complete.

- The RARA stabilization activities will be completed in accordance with the RARA management plan.

- Past-practice activities that have approved work plans should be planned to meet the current approved Tri-Party Agreement milestones (Ecology et al. 1992). All other past-practice remediation activities should be planned in accordance with the scope being renegotiated with the EPA and Ecology.

- The USACE will be involved with ER Program activities consistent with the Interagency Agreement.

- An ERSDF will be available to support 100, 200, and 300 Areas interim records of decision (IROD).

- The ER Program will be able to work with the Agency for Toxic Substances and Disease Registry (ATSDR) and provide all the information necessary for ATSDR to complete required health assessments without causing delays to current Tri-Party Agreement milestones.

SST specific assumptions and constraints are as follow.

- The ER Program is not responsible for funding tank waste characterization and retrieval within the SSTs beyond FY 1993.

- The disposal decision for wastes within the SSTs must be made before remediation decisions on contaminated soils and ancillary equipment within the SST OUs.

- If the decision is made to retrieve all waste from inside the tank, characterization of the vadose zone around the SSTs will be required to support the SST EIS and closure plan.

- Current planning supports only closeout of the GAO investigation finding.

A1.5 MAJOR DEVIATIONS FROM THE BASELINE

Major deviations between the FYWP and the baseline, as identified in Section A4.0, Table A4-1, are summarized as follows ($000):

ADS 3000 (SSTs) FYWP $408 Baseline $1,223 Change -$815

All of the SST workscope beyond FY 1993 included in the FYWP was deleted because the ER Program is not responsible for funding tank waste characterization and retrieval within the SSTs beyond FY 1993. Funding to support those activities required to complete the final report on findings of the T106 borehole in response to GAO Audit GAO/RCED-89-157 was authorized in DOE-RL letter 94-EPB-001, Mr. Freeberg to Mr. Anderson, dated October 22, 1993 (unfunded list item).

ADS 3010 (RARA) FYWP $7,342 Baseline $7,709 Change -$367

No scope change. Change due to repricing and revised estimates.

ADS 3020 (RCRA) FYWP $4,326 Baseline $4,145 Change +$181

Change due to the inclusion of the 1301/1325-N Liquid Waste Disposal Facilities and the 1324/1324NA Surface Impoundment/Percolation Pond closure plans in the RCRA Closure ADS that were previously included in the N Reactor ADS. The impact of this change was reduced because of repricing and revised estimates.

ADS 3100 (100-DR) FYWP $1,193 Baseline $5,077 Change -$3,884

100-DR-1

100-DR-1 OU does not require nine intrusive confirmatory tests pits or boreholes as originally planned and the estimates to prepare the FFSs and proposed plans are slightly lower than defined in the original baseline. Treatability tests within the 100 Areas take a systematic 100 Area-wide approach that integrates source unit treatability tests under one cost account. Treatability studies scope, as defined by agreements and milestones with the regulators, is located in ADS 3120, 100-HR Subproject.

100-DR-2

100-DR-2 OU work plan revision estimate is less than planned because of the implementation of the work plan streamline approach. 100-DR-2 work plan scope of work was agreed to with the regulators and implemented in FY 1993. The original baseline discussed the potential for six boreholes where the final agreed upon scope called for only one borehole and one test pit. Intrusive activities occurred in FY 1993 with the remaining nonintrusive work to be completed in FY 1994. The cost avoidance is $1,884K. As a result of the

accelerated schedule, the preparation of the FFS, scheduled to begin in FY 1995, will be initiated in FY 1994.

ADS 3105 (100-BC) FYWP $3,869 Baseline $5,739 Change -$1,870

100-BC-1

100-BC-1 OU does not require the installation of eight confirmatory boreholes as defined in the baseline. A total of two tests pits are planned in FY 1994 resulting in a $804K cost avoidance. Treatability studies scope, as defined by agreements and milestones with the regulators, is located in ADS 3120, 100-HR Subproject, 100 Area Common Treatability Account. Large-scale remediation was not included in the original baseline but has been partially funded as directed by DOE-RL.

100-BC-2

100-BC-2 OU work plan revision is being performed by the 100-BC-2 RI coordinator rather than a subcontractor, resulting in a cost avoidance of $123K. 100-BC-2 OU does not require additional characterization activities in FY 1994, resulting in a cost avoidance of $2,106K. Preparation of the FFS will be initiated earlier in FY 1994 than planned; therefore, additional funding is required.

100-BC-5

100-BC-5 OU characterization requires the installation of additional groundwater wells, and samples to be taken. Analytical sample costs are higher than originally estimated. Estimates to prepare the FFS is lower than planned in the baseline, resulting in a cost avoidance of $91K.

ADS 3110 (100-KR) FYWP $2,084 Baseline $4,113 Change -$2,029

100-KR-1

100-KR-1 requires only limited nonintrusive characterization in FY 1994 instead of the planned installation of one vadose zone borehole. Additionally, preparation of the qualitative risk assessments and the LFI report are estimated to be less than planned. The preparation of the FFS report has been accelerated; therefore, additional funding is required in FY 1994.

100-KR-2

100-KR-2 work plan will be prepared using the streamlined approach that references existing work plans. Less funding is required to prepare the work plans and incorporate comments, resulting in a cost avoidance of $304K. Intrusive characterization for 100-KR-2 is anticipated to be less than what was planned. The Baseline called for seven vadose zone boreholes and the

current plans will be for the drilling of one vadose zone borehole and three test pits.

100-KR-4

100-KR-4 does not require the installation of additional two confirmatory wells, resulting in a cost avoidance of $393K. Additionally, estimates to prepare the FFS are less than planned.

ADS 3115 (100-FR) FYWP $6,376 Baseline $5,953 Change +$423

100-FR-1

100-FR-1 does not require the drilling of six confirmatory vadose zone boreholes as planned in the baseline; however, nonintrusive characterization will continue in FY 1994. The acceleration of the 100-FR-1 schedule resulted in the FFS being initiated earlier than planned, requiring additional funds to prepare the report in FY 1994.

100-FR-3

100-FR-3 estimates for the installation of three confirmatory wells and the preparation of the are less than planned for in the baseline.

North Slope Expedited Response Action

Estimates for remediation of the North Slope vary from 2 million to 25 million, depending on the preferred alternative selected. It is anticipated that additional funds will be required. Therefore, additional funding was added to the North Slope ERA.

ADS 3120 (100-HR) FYWP $17,764 Baseline $11,479 Change +$6,285

100-HR-1

100-HR-1 requires limited nonintrusive confirmatory field activities in FY 1994. The baseline called for three vadose zone boreholes that are no longer required. Estimates for the preparation of the FFS report are lower than planned. Treatability studies scope, as defined by agreements and milestones with the regulators, is located in ADS 3120, 100-HR Subproject, 100 Area Common Treatability Account.

100-HR-2

100-HR-2 OU work plan revision estimate is less than planned because of the implementation of the work plan streamline approach. 100-HR-2 work plan scope of work was agreed to with the regulators and implemented in FY 1993. The original baseline discussed the potential for five boreholes where the current proposed scope calls for only nonintrusive characterization with the option for one test pit. Nonintrusive activities were initiated in FY 1993 with the

remaining work to be completed in FY 1994. The cost avoidance is $1,819K. As a result of the accelerated schedule, the FFS will be initiated sooner than planned in FY 1994, requiring additional funds.

100-HR-3

100-HR-3 OU characterization requires the installation of three additional groundwater wells, and samples to be taken. The baseline planned for six wells. The estimate to prepare the FFS is lower than planned in the baseline, resulting in a cost avoidance of $51K. Estimates for the 100-HR-3 chrome and nitrate removal pump and treat are higher than planned in the baseline.

100-IU-5

100-IU-5 (Pickling Acid Crib) funding was added to the ERA to prepare a final report and close out the OU. No resources had been allocated to this activity in the baseline.

100 Common

100-Area Common account includes the 100 Area Project Management account. Project Management was planned in the baseline on an OU by OU basis. Those resources have been transferred from the individual OU accounts into 100 Area Common account. Comment disposition and revisions to the risk evaluation of remedial alternatives methodology will continue in addition to the next update of the Hanford Site Baseline Risk Assessment Methodology. FY 1994 100 Areas-wide characterization activities call for two less boreholes and reduced general ecological investigations than was planned in the baseline, resulting in a cost avoidance of $685K. The 100 Area FFS report will need to be revised during the later part of FY 1994. Revising the 100 Areas FFS had not been planned for in the baseline.

Treatability studies scope, as defined by agreements and milestones with the regulators, is located in ADS 3120, 100-HR Subproject, 100 Areas Common Treatability Account. During the budget baseline process, required funds were removed from the 100 Area Common account to reduce the budget, resulting in a deficit. To ensure adequate funding in FY 1994 for source treatability, funding was added into the account from the General Account.

ADS 3125 (100-NR) FYWP $2,923 Baseline $5,476 Change -$2,553

100-NR-1

100-NR-1 work plan has not been approved by the regulators. Comments and changes to the document continue, which were not planned in the baseline. No confirmatory boreholes were planned in FY 1994 to fill data gaps, which results in a reduction in required funding.

100-NR-2

100-NR-2 work plan has not been approved by the regulators. Comments and changes to the document continue, which were not planned in the baseline. No confirmatory boreholes were planned in FY 1994 to fill data gaps, which result in a reduction in required funding.

N Springs Expedited Response Action

N Springs ERA funding was removed from the budget for the first 6 months of FY 1994. The preferred alternative will have been identified and planning for field activities will be initiated at that time.

ADS 3200 (200-BP) FYWP $11,258 Baseline $18,631 Change -$7,373

200-BP-1

Significant changes to the assumptions in the FYP have resulted from preparation of the RI Phase 1 report, the FS Phase 1, 2, and 3 report, and completion of final design and acceleration of the prototype barrier construction into FY 1993. These include (1) elimination of any additional characterization of low priority sites or associated reporting (no additional work was identified in the RI report) and (2) funding prototype barrier construction in FY 1993 due to acceleration of the award of the contract for building the barrier. Assumptions for implementing the final remedial action (ROD to be issued in FY 1994) have not changed. In total, funding levels for the 200-BP-1 OU presently are at $5.362 million versus a baseline total of $10.178 million.

200-BP-4

Per Tri-Party Agreement negotiations , the 200-BP-4 OU has not been selected for assessment activities (assumed to become active in FY 1994) to support Tri-Party Agreement Milestone M-13-00 (six work plans per year). Therefore, no funding has been allocated for this task versus a baseline total of $0.235 million.

200-BP-5

Significant changes to the assumptions in the FYP have resulted from recent negotiations with the regulators and resulting changes to the Tri-Party Agreement. These include (1) designation of 200-BP-5 as a groundwater OU (the FYP assumed 200-BP-5 to be a source OU commencing assessment activities); (2) de-emphasizing near-term characterization and resulting data collection, analysis, and reporting; (3) implementation of pump and treat treatability testing at two locations in groundwater plumes in the OU; and (4) generation of documentation and reporting of the pump and treat activities. In total, funding levels for the 200-BP-5 OU are presently at $4.781 million versus a baseline total of $3.968 million.

200-BP-8

Per Tri-Party Agreement negotiations with the regulators, the 200-BP-8 OU (assumed to be a groundwater OU commencing assessment activities in the FYP) has been designated a source OU not selected for assessment activities to support Tri-Party Agreement Milestone M-13-00 (six work plans per year). Therefore, no funding has been allocated for this task versus a baseline total of $1.137 million.

200-BP-11

Significant changes to the assumptions in the FYP resulted from recent negotiations with the regulators and subsequent approval of a change request for 200-BP-11 OU. The change request requires implementation of field assessment activities in FY 1995 (the FYP assumed field assessment commencing in FY 1994). Therefore, only planning documentation for the assessment work is planned for FY 1994. In total, funding levels for the 200-BP-11 OU are presently at $0.523 million versus a baseline total of $3.113 million.

200 COMMON

As a result of continued area-wide assessments or strategy development activities resulting from negotiations with the regulators, 200 Areas-wide studies have been initiated that were not identified in the FYP. These include (1) development of a sitewide groundwater remediation/management plan; (2) completion of an area-wide ecological study; and (3) participation in waste management strategy development, volume projection, and oversight. In total, funding levels for the 200 Common are presently at $0.592 million versus a baseline total of $0.0.

ADS 3210 (200-PO) FYWP $297 Baseline $478 Change -$181

200-PO-1

No significant change between the FYP and the FYWP occurs. Funding level for the 200-PO-1 OU is presently $0.297 million versus a baseline total of $0.322 million.

200-PO-5

Per Tri-Party Agreement negotiations, the 200-PO-5 OU has not been selected for assessment activities (assumed in the FYP to become active in FY 1994) to support Tri-Party Agreement Milestone M-13-00 (six work plans per year). Therefore, no funding has been allocated for task versus a baseline total of $0.157 million.

ADS 3225 (200-TP) FYWP $0 Baseline $78 Change +$78

200-TP-1

Per Tri-Party Agreement negotiations, the 200-TP-1 OU has not been selected for assessment activities (assumed in the FYP to become active in FY 1994) to support Tri-Party Agreement Milestone M-13-00 (six work plans per year). Therefore, no funding has been allocated for task versus a baseline total of $0.078 million.

ADS 3230 (200-UP) FYWP $11,594 Baseline $13,990 Change -$2,396

200-UP-1

Significant changes to the assumptions in the FYP have resulted from refinement of the 200-UP-1 workscope per recent Tri-Party Agreement negotiations with the regulators. These are: (1) De-emphasizing near-term characterization and resulting data collection, analysis and reporting activities (the number of boreholes has been reduced from nine to six), and (2) initiate and continue operation of a pump and treat system treatability test in the uranium and technetium groundwater plume. In total, funding levels for the 200-UP-1 OU are presently at $4.477 million versus a baseline of $6.662 million.

200-UP-2

Only minor changes exist between the FYP and the FYWP. These result from refinement of the number of samples to be taken and additional knowledge of the anticipated radiation levels of the samples. In total, funding levels for the 200-UP-2 OU are presently at $7.117 million versus a baseline of $7.328 million.

ADS 3235 (200-ZP) FYWP $9,777 Baseline $11,389 Change -$1,612

200-ZP-1

Significant changes to the assumptions in the FYP resulted from recent Tri-Party Agreement negotiations. These include (1) de-emphasizing large-scale characterization effort and resulting data collection based on the agreement among the Tri-Party Agreement negotiations that existing data would support an IROD; (2) accelerating the IROD for the carbon tetrachloride, trichloroethylene, chloroform plume into FY 1994; (3) preparation of a proposed plan for remediation; and (4) initiation of pilot-scale pump and treat activities in the OU. In total, funding levels for the 200-ZP-1 OU are presently at $4.058 million versus a baseline total of $5.414 million.

200-ZP-2

Only minor changes exist between the FYP and the FYWP. These result primarily from refinement of overhead rates for this highly labor intensive activity. In total, funding levels for the 200-ZP-2 OU are presently at $5.719 million versus a baseline total of $5.975 million.

ADS 3300 (300-FF) FYWP $4,827 Baseline $5,820 Change +$993

300-FF-1

Significant changes to the assumptions in the FYP have resulted from ongoing treatability testing activities (soil washing) in the OU. These are (1) discovery of a clay-like material within the soil requiring additional testing to remove the heavy metals, (2) need to provide funding to procure vendor equipment should it become contaminated and not be releasable offsite, and (3) additional soil wash testing generated more waste water for treatment than planned. In total, funding levels for the 300-FF-1 OU are presently at $2.027 million versus a baseline total of $0.777 million.

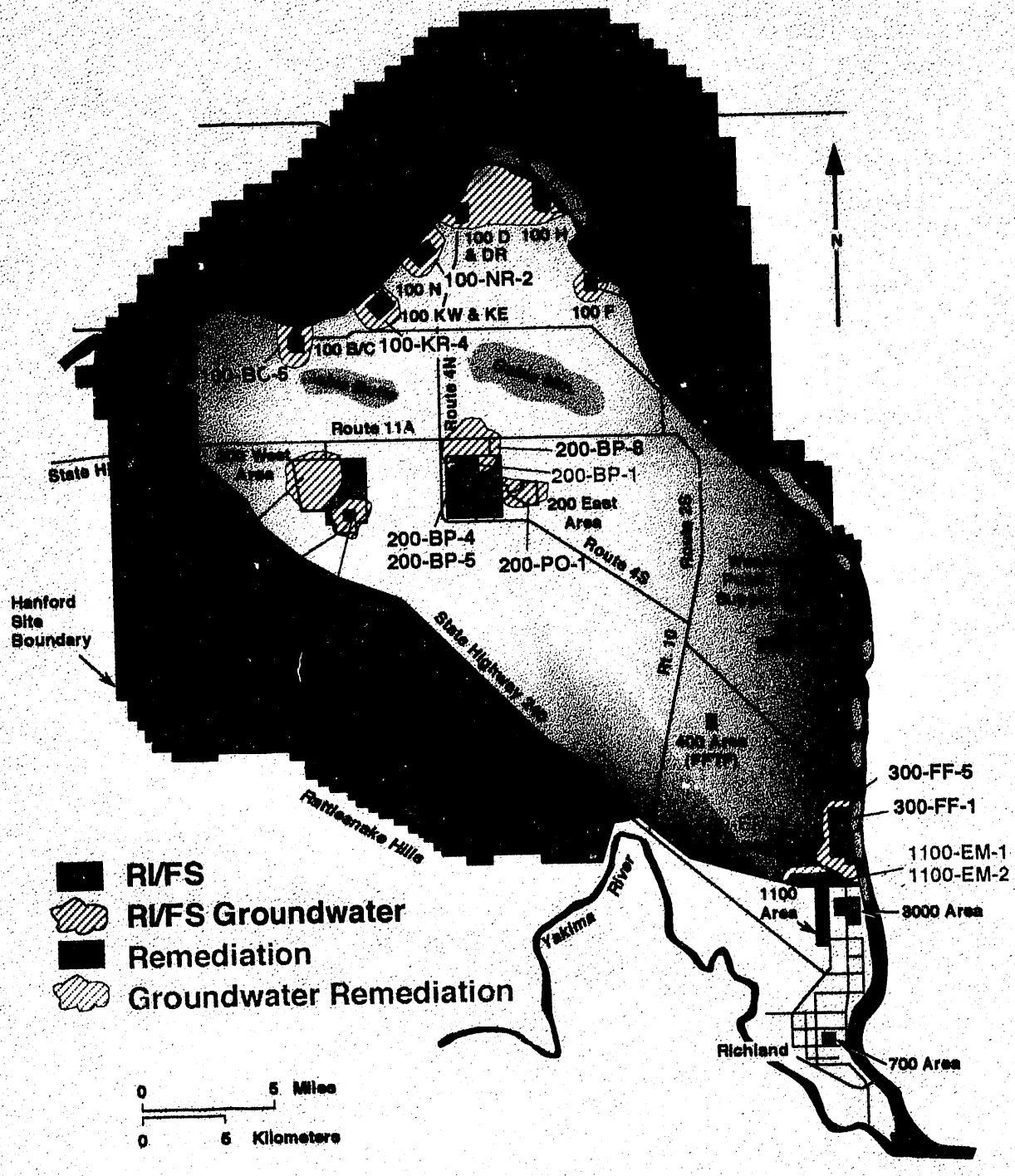
300-FF-2

Significant changes to the assumptions in the FYP have resulted from recent Tri-Party Agreement negotiations. Agreement was reached to combine the remaining source OUs in the 300 Area into one, designated 300-FF-2 OU. Assessment activities including preparation of a work plan and development of monitoring capabilities at the 618-11 Burial Ground would commence in FY 1994. No activities were assumed in the 300-FF-2 FYP. In total, funding levels for the 300-FF-2 OU are presently at $1.587 million versus a baseline total of $0.0.

300-FF-5

Significant changes to the assumptions in the FYP have resulted from preparation of the RI Phase 1 and FS Phase 1 and 2 reports for the 300-FF-5 OU. These include (1) elimination of essentially all Phase 2 characterization and associated planning activities because of findings and/or conclusions from Phase 1 assessment, (2) determination that uranium levels in the groundwater are decreasing because of the 300 Area Process Trench ERA requiring less plume delineation than planned, and (3) reduction in wells being sampled and reduction in analysis requirements because of knowledge gained from Phase 1. In total, funding levels for the 300-FF-5 OU are presently at $1.187 million versus a baseline total of $2.795 million.

Fiscal Year 1994 Planned Environmental Restoration Activities



*** Operable Unit designations and priorities in the 200 Area are changing**

Figure A1-1. Fiscal Year 1994 Planned Environmental Restoration Activities.

Fiscal Year 1994 Planned Expedited Response Actions

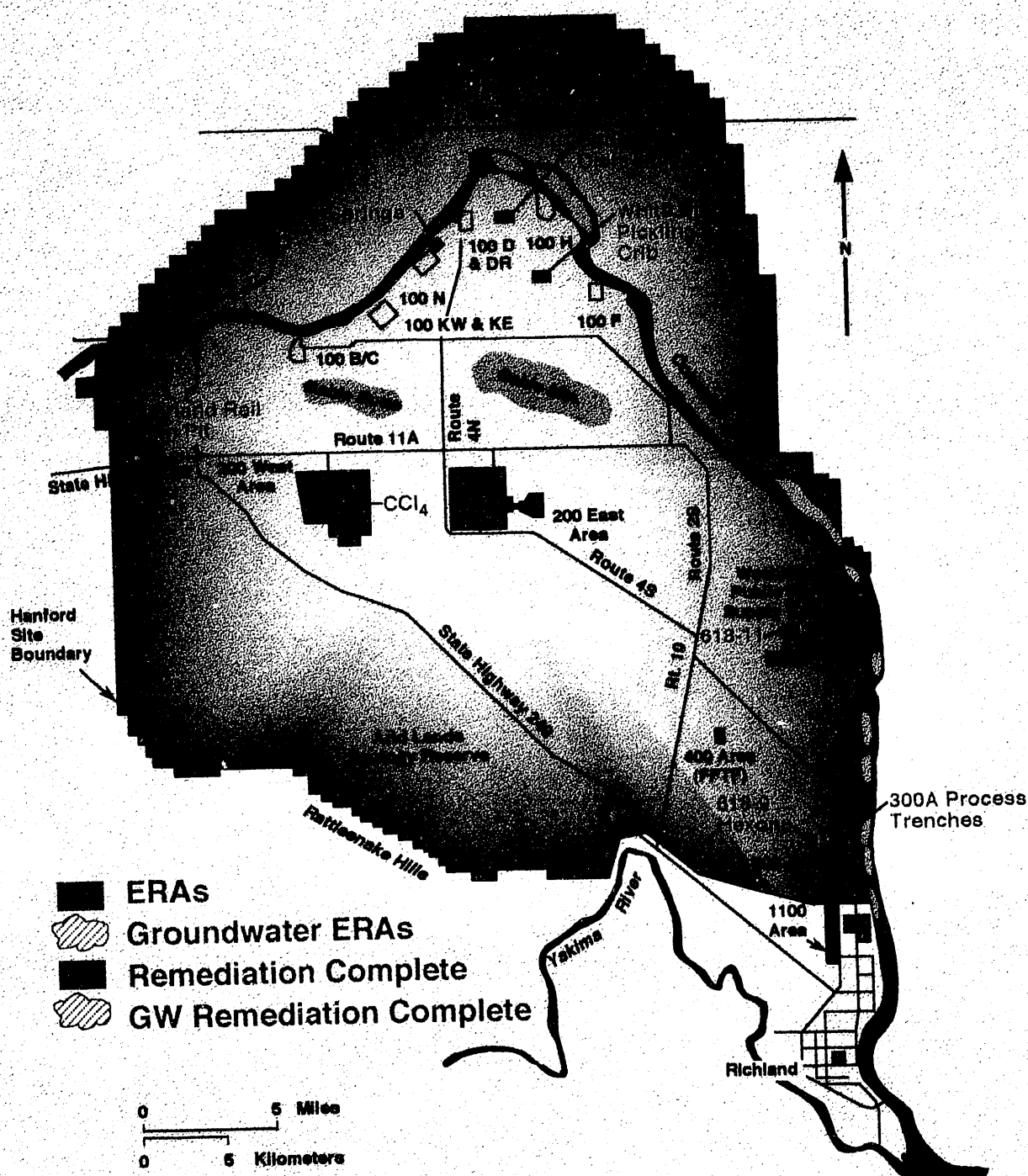


Figure A1-2. Fiscal Year 1994 Planned Expedited Response Actions.

A2.0 PROGRAM TECHNICAL BASELINE

This section contains the WBS and RAM for the RA Program.

A2.1 WORK BREAKDOWN STRUCTURE

The WBS charts for this program have been excluded per a waiver from the DOE-RL Office of Planning and Integration. The WBS is displayed by line number in Table A2-1 of this appendix.

A2.2 WORK BREAKDOWN STRUCTURE DICTIONARY

The WBS Dictionary is developed to the cost account level in the Part I-Index, Table A2-1. The complete RA WBS structure, including outyear activities, is displayed to portray the range of effort that these activities cover. The activities that are not part of the FY 1994 workscope are shaded to differentiate the FY efforts from the total workscope. Applicable pages of the Part I-Index are extracted for this appendix.

Table A2-2 contains the WBS Dictionary, Part II-Element Definition work sheets. Work sheets are included for RA activities at the MSA subproject and MSA activity WBS levels for WHC and USACE directed workscope. In addition, work sheets to the cost account level are included for RA activities under the direction of the USACE in lieu of cost account authorizations. While the WBS Part II-Element Definition worksheets at the subproject level could depict workscope beyond FY 1994, the worksheets included at the activity level address only FY 1994 workscope.

A2.3 RESPONSIBILITY ASSIGNMENT MATRIX

The RA Program RAM is shown in Table A2-3. The title, SMS and FDS WBS to the cost account level, as well as the responsible manager and DOE-RL contact, are identified.

A2.4 REMEDIAL ACTION LOGIC DIAGRAMS

Three logic diagrams (groundwater, soil, and SST disposition), Logic Diagrams A2-1 to A2-3, depict the overall logic for the RA Program, from start to finish. Each of the OUs in the program would be subjected to basically the identical process of assessment and remediation.

It is impractical at this time to attempt to show each activity in a separate logic flow and to further display the flow in a FY block sequence. The detailed schedules, milestones, and cost account activities presented in this appendix provide the FY time phasing, and correlate to the logic as presented.

The past-practice process is in its early stages and is continuing to evolve. In lieu of presenting individual diagrams for each OU, three diagrams representing groups of OUs and/or Aggregate Area Management Studies (AAMS) were incorporated into the past-practice logic diagrams based on similarities in the particular process and are to be used in processing the OUs that are represented.

The logic diagram shown in the SST Logic Diagram is the same as that shown in a SST roadmap. Major responsibility for the SST program resides with Waste Management. The ER Program, however, retains the responsibility for completing the closure of all 149 SSTs in accordance with the Tri-Party Agreement Milestone M-09-000, and will carry out some of the activities shown on the logic diagram.

Within the RA Program logic diagrams, the functional elements building the paths are as follows:

- Remedial Actions (excluding SST Closures Subproject)

  - Interim management and monitoring
  - Site characterization
  - In situ characterization and treatment
  - Retrieval
  - Transportation
  - Interim storage
  - Retrieved material partitioning
  - Disposal form conversion
  - In situ site closure
  - Retrieval site closure
  - Transportation to offsite disposal facility

- SST Closures (Subproject)

  - Interim management and monitoring
  - Site characterization
  - Retrieve SST soils, etc.
  - Ex situ treatment
  - Tank retrieval, treatment, and packaging
  - Interim storage
  - Partition waste
  - Interim storage of greater than Class C, transuranic, and high-level treated waste
  - Solid and low-level waste disposal
  - Onsite disposal
  - Transportation to offsite disposal facility
  - Fill and stabilize
  - In situ treatment
  - Barrier installation
  - SST OU closure
  - Environmental monitoring.

The WBS charts for this program have been excluded per a waiver from the DOE-RL Office of Planning and Integration. The WBS is displayed by line number in Table A2-1 of this appendix.

Figure A2-1. Work Breakdown Structure Charts.

U. S. DEPARTMENT OF ENERGY

Table A2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
PART I - INDEX

DOE F1332.10
(11-84)

FORM APPROVED
OMB NO. 1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
232		X					Remedial Actions	1.4.10.1.1	(P)	EW201030	2.1	3010
233			X				RARA/USTs	1.4.10.1.1.1	(PJ)	EW201030	2.1.1	3010
234				X			RARA Common Activities	1.4.10.1.1.1.1	(PJ1)	EW201030	2.1.1.1	3010
235					X		RARA Common Activities-Remediation	1.4.10.1.1.1.1.2	(PJ12)	EW2010302	2.1.1.1.20	3010
236						X	Acreage Decontamination and Stabilization	1.4.10.1.1.1.1.2.1	(PJ121)	EW2010302	2.1.1.1.20.1	3010
237						X	RARA Surveillance	1.4.10.1.1.1.1.2.2	(PJ122)	EW2010302	2.1.1.1.20.2	3010
238						X	Vegetation Management	1.4.10.1.1.1.1.2.3	(PJ123)	EW2010302	2.1.1.1.20.3	3010
239				X			UST Common Activities	1.4.10.1.1.1.2	(PJ2)	EW2010302	2.1.1.2	3010
240					X		UST Common Activities - Remediation	1.4.10.1.1.1.2.2	(PJ22)	EW2010302	2.1.1.2.20	
241						X	UST Removal/Regulatory Compliance	1.4.10.1.1.1.2.2.1	(PJ221)	EW2010302	2.1.1.2.20.1	3010
242			X				RCRA Closures	1.4.10.1.1.2	(PV)	EW201020	2.1.2	3020
243				X			RCRA Common Activities	1.4.10.1.1.2.1	(PV1)	EW201020	2.1.2.1	3020
244					X		Assessment	1.4.10.1.1.2.1.1	(PV11)	EW2010201	2.1.2.1.10	3020
245						X	Vegetation Studies	1.4.10.1.1.2.1.1.1	(PV111)	EW2010201	2.1.2.1.10.1	3020
246						X	Inactive Underground Tanks	1.4.10.1.1.2.1.1.2	(PV112)	EW2010301	2.1.2.1.10.2	3020
247					X		Remediation	1.4.10.1.1.2.1.2	(PV12)	EW2010202	2.1.2	3020
248				X			RCRA 100-BC	1.4.10.1.1.2.2	(PV2)	EW201020	2.1.2.2	3020
249					X		Assessment	1.4.10.1.1.2.2.1	(PV21)	EW2010201	2.1.2.2.10	3020
250					X		Remediation	1.4.10.1.1.2.2.2	(PV22)	EW2010202	2.1.2.2.20	3020
251				X			RCRA 100-DR	1.4.10.1.1.2.3	(PV3)	EW201020	2.1.2.3	3020
252					X		Assessment	1.4.10.1.1.2.3.1	(PV31)	EW2010201	2.1.2.3.10	3020
253						X	100-D Pond Planning Document	1.4.10.1.1.2.3.1.1	(PV311)	EW2010201	2.1.2.3.10.1	3020
254					X		Remediation	1.4.10.1.1.2.3.2	(PV32)	EW2010202	2.1.2.3.20	3020
255						X	100-D Pond	1.4.10.1.1.2.3.2.1	(PV321)	EW2010202	2.1.2.3.20.1	3020
256				X			RCRA 100-FR	1.4.10.1.1.2.4	(PV4)	EW201020	2.1.2.4	3020
257					X		Assessment	1.4.10.1.1.2.4.1	(PV41)	EW2010201	2.1.2.4.10	3020
258					X		Remediation	1.4.10.1.1.2.4.2	(PV42)	EW2010202	2.1.2.4.20	3020
259				X			RCRA 100-HR	1.4.10.1.1.2.5	(PV5)	EW201020	2.1.2.5	3020
260					X		Assessment	1.4.10.1.1.2.5.1	(PV51)	EW2010201	2.1.2.5.10	3020
261					X		Remediation	1.4.10.1.1.2.5.2	(PV52)	EW2010202	2.1.2.5.20	3020
262						X	183-H Solar Evaporation Basins	1.4.10.1.1.2.5.2.1	(PV521)	EW2010202	2.1.2.5.20.1	3020
263				X			RCRA 100-KR	1.4.10.1.1.2.6	(PV6)	EW201020	2.1.2.6	3020
264					X		Assessment	1.4.10.1.1.2.6.1	(PV61)	EW2010201	2.1.2.6.10	3020
265					X		Remediation	1.4.10.1.1.2.6.2	(PV62)	EW2010202	2.1.2.6.20	3020
266				X			RCRA 100-NR	1.4.10.1.1.2.7	(PV7)	EW2010201	2.1.2.7	3020
267					X		Assessment	1.4.10.1.1.2.7.1	(PV71)	EW2010201	2.1.2.7.10	3020
268						X	1301-N/1325-N Closure Plan	1.4.10.1.1.2.7.1.1	(PV711)	EW2010201	2.1.2.7.10.1	3020
268a						X	1324-N/1324-NA Closure Plan	1.4.10.1.1.2.7.1.2	(PV712)	EW2010201	2.1.2.7.10.2	3020
269					X		Remediation	1.4.10.1.1.2.7.2	PV72)	EW2020202	2.1.2.7.20	3020
270				X			RCRA 200 Area A (PO)	1.4.10.1.1.2.8	(PVA)	EW201020	2.1.2.8	3020
271					X		Assessment	1.4.10.1.1.2.8.1	(PVA1)	EW2010201	2.1.2.8.10	3020
272						X	216-A-36B Crib	1.4.10.1.1.2.8.1.1	(PVA11)	EW2010201	2.1.2.8.10.1	3020
273						X	216-A-10 Crib	1.4.10.1.1.2.8.1.2	(PVA12)	EW2010201	2.1.2.8.10.2	3020
274						X	216-A-29 Ditch	1.4.10.1.1.2.8.1.3	(PVA13)	EW2010201	2.1.2.8.10.3	3020

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Table A2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
PART I - INDEX

DOE F1332.10
(11-84)

FORM APPROVED
OMB NO. 1901 1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
275					X		Remediation	1.4.10.1.1.2.8.2	(PVA2)	EW2010202	2.1.2.8.20	3020
276						X	216-A-38B Crib	1.4.10.1.1.2.8.2.1	(PVA21)	EW2010202	2.1.2.8.20.1	3020
277						X	216-A-10 Crib	1.4.10.1.1.2.8.2.2	(PVA22)	EW2010202	2.1.2.8.20.2	3020
278						X	216-A-29 Ditch	1.4.10.1.1.2.8.2.3	(PVA23)	EW2010202	2.1.2.8.20.3	3020
279				X			RCRA 200 Area B (BP)	1.4.10.1.1.2.9	(PVB)	EW201020	2.1.2.9	3020
280					X		Assessment	1.4.10.1.1.2.9.1	(PVB1)	EW2010201	2.1.2.9.10	3020
281						X	B-Pond Closure	1.4.10.1.1.2.9.1.1	(PVB11)	EW2010201	2.1.2.9.10.1	3020
282						X	216-B-63 Trench	1.4.10.1.1.2.9.1.2	(PVB12)	EW2010201	2.1.2.9.10.2	3020
283						X	X-009 By Pass Lobe	1.4.10.1.1.2.9.1.3	(PVB13)	EW2010201	2.1.2.9.10.3	3020
284					X		Remediation	1.4.10.1.1.2.9.2	(PVB2)	EW2010202	2.1.2.9.20	3020
285						X	B-Pond Closure	1.4.10.1.1.2.9.2.1	(PVB21)	EW2010202	2.1.2.9.20.1	3020
286						X	216-B-63 Trench	1.4.10.1.1.2.9.2.2	(PVB22)	EW2010202	2.1.2.9.20.2	3020
287					X		200-BP Remediation	1.4.10.1.1.2.9.2	7PVB2	EW2010202	2.1.2.9.20	3020
288						X	X-009 BYPass Lobe -Construction	1.4.10.1.1.2.9.2.3	7PVB23	EW2010202	2.1.2.9.20.3	3020
289				X			RCRA 200 Area C (CP)	1.4.10.1.1.2.10	(PVC)	EW201020	2.1.2.10	3020
290					X		Assessment	1.4.10.1.1.2.10.1	(PVC1)	EW2010201	2.1.2.10.10	3020
291					X		Remediation	1.4.10.1.1.2.10.2	(PVC2)	EW2010202	2.1.2.10.20	3020
292				X			RCRA 200 Area S (RO)	1.4.10.1.1.2.11	(PVS)	EW201020	2.1.2.11	3020
293					X		Assessment	1.4.10.1.1.2.11.1	(PVS1)	EW2010201	2.1.2.11.10	3020
294						X	216-S-10 Pond	1.4.10.1.1.2.11.1.1	(PVS11)	EW2010201	2.1.2.11.10.1	3020
295						X	Hexone	1.4.10.1.1.2.11.1.2	(PVS12)	EW2010201	2.1.2.11.10.2	3020
296					X		Remediation	1.4.10.1.1.2.11.2	(PVS2)	EW2010202	2.1.2.11.20	3020
297						X	216-S-10 Pond	1.4.10.1.1.2.11.2.1	(PVS21)	EW2010202	2.1.2.11.20.1	3020
298						X	Hexone	1.4.10.1.1.2.11.2.2	(PVS22)	EW2010202	2.1.2.11.20.2	3020
299				X			RCRA 200 Area TP	1.4.10.1.1.2.12	(PVT)	EW201020	2.1.2.12	3020
300					X		Assessment	1.4.10.1.1.2.12.1	(PVT1)	EW2010201	2.1.2.12.10	3020
301					X		Remediation	1.4.10.1.1.2.12.2	(PVT2)	EW2010202	2.1.2.12.20	3020
302				X			RCRA 200 Area UP	1.4.10.1.1.2.13	(PVU)	EW201020	2.1.2.13	3020
303					X		Assessment	1.4.10.1.1.2.13.1	(PVU1)	EW2010201	2.1.2.13.10	3020
304						X	216-U-12 Crib	1.4.10.1.1.2.13.1.1	(PVU11)	EW2010201	2.1.2.13.10.1	3020
305					X		Remediation	1.4.10.1.1.2.13.2	(PVU2)	EW2010202	2.1.2.13.20	3020
306						X	216-U-12 Crib	1.4.10.1.1.2.13.2.1	(PVU21)	EW2010202	2.1.2.13.20.1	3020
307				X			RCRA 200 Area ZP	1.4.10.1.1.2.14	(PVZ)	EW201020	2.1.2.14	3020
308					X		Assessment	1.4.10.1.1.2.14.1	(PVZ1)	EW2010201	2.1.2.14.10	3020
309					X		Remediation	1.4.10.1.1.2.14.1	(PVZ2)	EW2010202	2.1.2.14.20	3020
310				X			RCRA 200 Area IU	1.4.10.1.1.2.15	(PVI)	EW201020	2.1.2.15	3020
311					X		Assessment	1.4.10.1.1.2.15.1	(PVI1)	EW2010201	2.1.2.15.10	3020
312						X	NRDWL	1.4.10.1.1.2.15.1.1	(PVI11)	EW2010201	2.1.2.15.10.1	3020
313					X		Remediation	1.4.10.1.1.2.15.2	(PVI2)	EW2010202	2.1.2.15.20	3020
314						X	NRDWL	1.4.10.1.1.2.15.2.1	(PVI21)	EW2010202	2.1.2.15.20.1	3020
315				X			RCRA 300 Area FF	1.4.10.1.1.2.16	(PVF)	EW201020	2.1.2.16	3020
316					X		Assessment	1.4.10.1.1.2.16.1	(PVF1)	EW2010201	2.1.2.16.10	3020
317						X	300 Area Process Trenches	1.4.10.1.1.2.16.1.1	(PVF11)	EW2010201	2.1.2.16.10.1	3020
318					X		Remediation	1.4.10.1.1.2.16.2	(PVF2)	EW2010202	2.1.2.16.20	3020
319						X	300 Area Process Trenches	1.4.10.1.1.2.16.2.1	(PVF21)	EW2010202	2.1.2.16.20.1	3020
320			X				SST Closures	1.4.10.1.1.3	(PF)	EW201020	2.1.3	3000

U. S. DEPARTMENT OF ENERGY

Table A2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
PART I - INDEX

DOE F1332.10
(11-84)

FORM APPROVED
OMB NO. 1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
321				X			SST Closures-Common Activities	1.4.10.1.1.3.1	(PF1)	EW201020	2.1.3.1	3000
322					X		Assessment	1.4.10.1.1.3.1.1	(PF11)	EW2010201	2.1.3.1.10	3000
323						X	SST Field Assessment	1.4.10.1.1.3.1.1.1	(PF111)	EW2010201	2.1.3.1.10.1	3000
324						X	SST Engineering Activities	1.4.10.1.1.3.1.1.2	(PF112)	EW2010201	2.1.3.1.10.2	3000
325					X		Remediation	1.4.10.1.1.3.1.2	(PF12)	EW2010202	2.1.3.1.20	3000
326						X	SST Closures-Common Activities	1.4.10.1.1.3.1.2.1	(PF121)	EW2010202	2.1.3.1.20.1	3000
327				X			SST 200 East Aggregate Area	1.4.10.1.1.3.2	(PFE)	EW201020	2.1.3.2	3000
328					X		Assessment	1.4.10.1.1.3.2.1	(PFE1)	EW2010201	2.1.3.2.10	3000
329				X			SST 200 West Aggregate Area	1.4.10.1.1.3.3	(PFW)	EW201020	2.1.3.3	3000
330					X		Assessment	1.4.10.1.1.3.3.1	(PFW1)	EW2010201	2.1.3.3.10	3000
331				X			SST 200 Area A (PO)	1.4.10.1.1.3.4	(PFA)	EW201020	2.1.3.4	3000
332					X		Assessment	1.4.10.1.1.3.4.1	(PFA1)	EW2010201	2.1.3.4.10	3000
333						X	SST (A, AX, C - 200-PO-3)	1.4.10.1.1.3.4.1.1	(PFA11)	EW2010201	2.1.3.4.10.1	3000
334					X		Remediation	1.4.10.1.1.3.4.2	(PFA2)	EW2010202	2.1.3.4.20	3000
335						X	SST (A, AX, C - 200-PO-3)	1.4.10.1.1.3.4.2.1	(PFA21)	EW2010202	2.1.3.4.20.1	3000
336				X			SST 200 Area B (BP)	1.4.10.1.1.3.5	(PFB)	EW201020	2.1.3.5	3000
337					X		Assessment	1.4.10.1.1.3.5.1	(PFB1)	EW2010201	2.1.3.5.10	3000
338						X	SST, (B, BY, BX - 200-BP-7)	1.4.10.1.1.3.5.1.1	(PFB11)	EW2010201	2.1.3.5.10.1	3000
339					X		Remediation	1.4.10.1.1.3.5.2	(PFB2)	EW2010202	2.1.3.5.20	3000
340						X	SST, (B, BY, BX - 200-BP-7)	1.4.10.1.1.3.5.2.1	(PFB21)	EW2010202	2.1.3.5.20.1	3000
341				X			SST 200 Area S (RO)	1.4.10.1.1.3.6	(PFS)	EW201020	2.1.3.6	3000
342					X		Assessment	1.4.10.1.1.3.6.1	(PFS1)	EW2010201	2.1.3.6.10	3000
343						X	SST (S,SX Farm-200-RO-4)	1.4.10.1.1.3.6.1.1	(PFS11)	EW2010201	2.1.3.6.10.1	3000
344					X		Remediation	1.4.10.1.1.3.6.2	(PFS2)	EW2010202	2.1.3.6.20	3000
345						X	SST (S,SX Farm-200-RO-4)	1.4.10.1.1.3.6.2.1	(PFS21)	EW2010202	2.1.3.6.20.1	3000
346				X			SST 200 Area T (TP)	1.4.10.1.1.3.7	(PFT)	EW201020	2.1.3.7	3000
347					X		Assessment	1.4.10.1.1.3.7.1	(PFT1)	EW2010201	2.1.3.7.10	3000
348						X	SST (T - 200-TP-6) (T106)	1.4.10.1.1.3.7.1.1	(PFT11)	EW2010201	2.1.3.7.10.1	3000
349						X	SST (T, TX Farm - 200-TP-5)	1.4.10.1.1.3.7.1.2	(PFT12)	EW2010201	2.1.3.7.10.2	3000
350						X	SST (T - 200-TP-6)	1.4.10.1.1.3.7.1.3	(PFT13)	EW2010201	2.1.3.7.10.3	3000
351					X		Remediation	1.4.10.1.1.3.7.2	(PFT2)	EW2010202	2.1.3.7.20	3000
352						X	SST (T - 200-TP-6) (T106)	1.4.10.1.1.3.7.2.1	(PFT21)	EW2010202	2.1.3.7.20.1	3000
353						X	SST (T, TX Farm - 200-TP-5)	1.4.10.1.1.3.7.2.2	(PFT22)	EW2010202	2.1.3.7.20.2	3000
354						X	SST (T - 200-TP-6)	1.4.10.1.1.3.7.2.3	(PFT23)	EW2010202	2.1.3.7.20.3	3000
355				X			SST 200 Area U (UP)	1.4.10.1.1.3.8	(PFU)	EW201020	2.1.3.8	3000
356					X		Assessment	1.4.10.1.1.3.8.1	(PFU1)	EW2010201	2.1.3.8.10	3000
357						X	SST (U Farm - 200-UP-3)	1.4.10.1.1.3.8.1.1	(PFU11)	EW2010201	2.1.3.8.10.1	3000
358					X		Remediation	1.4.10.1.1.3.8.2	(PFU2)	EW2010202	2.1.3.8.20	3000
359						X	SST (U Farm - 200-UP-3)	1.4.10.1.1.3.8.2.1	(PFU21)	EW2010202	2.1.3.8.20.1	3000
360			X				100-DR	1.4.10.1.1.4	(PA)	EW201030	2.1.4	3100
361				X			100-DR-1	1.4.10.1.1.4.1	(PA1)	EW201030	2.1.4.1	3100
362					X		Assessment	1.4.10.1.1.4.1.1	(PA11)	EW2010301	2.1.4.1.10	3100
363						X	100-DR-1 General	1.4.10.1.1.4.1.1.1	(PA111)	EW2010301	2.1.4.1.10.1	3100
364						X	100-DR-1 Characterization	1.4.10.1.1.4.1.1.3	(PA113)	EW2010301	2.1.4.1.10.3	3100
365						X	100-DR-1 Feasibility Studies	1.4.10.1.1.4.1.1.4	(PA114)	EW2010301	2.1.4.1.10.4	3100
366						X	100-DR-1 Treatability	1.4.10.1.1.4.1.1.5	(PA115)	EW2010301	2.1.4.1.10.5	3100

U. S. DEPARTMENT OF ENERGY

Table A2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
PART I - INDEX

DOE F1332.10
(11-84)

FORM APPROVED
OMB NO. 1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
367					X		Remediation	1.4.10.1.1.4.1.2	(PA12)	EW2010302	2.1.4.1.20	3100
368				X			100-DR-2	1.4.10.1.1.4.2	(PA2)	EW201030	2.1.4.2	3100
369					X		Assessment	1.4.10.1.1.4.2.1	(PA21)	EW2010301	2.1.4.2.10	3100
370						X	100-DR-2 General	1.4.10.1.1.4.2.1.1	(PA211)	EW2010301	2.1.4.2.10.1	3100
371						X	100-DR-2 Planning Document	1.4.10.1.1.4.2.1.2	(PA212)	EW2010301	2.1.4.2.10.2	3100
372						X	100-DR-2 Characterization	1.4.10.1.1.4.2.1.3	(PA213)	EW2010301	2.1.4.2.10.3	3100
373						X	100-DR-2 Feasibility Studies	1.4.10.1.1.4.2.1.4	(PA214)	EW2010301	2.1.4.2.10.4	3100
374						X	Treatability	1.4.10.1.1.4.2.1.5	(PA215)	EW2010301	2.1.4.2.10.5	3100
375					X		Remediation	1.4.10.1.1.4.2.2	(PA22)	EW2010302	2.1.4.2.20	3100
376				X			100-DR-3	1.4.10.1.1.4.3	(PA3)	EW201030	2.1.4.3	3100
377					X		Assessment	1.4.10.1.1.4.3.1	(PA31)	EW2010301	2.1.4.3.10	3100
378					X		Remediation	1.4.10.1.1.4.3.2	(PA32)	EW2010302	2.1.4.3.20	3100
379			X				100-BC	1.4.10.1.1.5	(PB)	EW201030	2.1.5	3105
380				X			100-BC-1	1.4.10.1.1.5.1	(PB1)	EW201030	2.1.5.1	3105
381					X		Assessment	1.4.10.1.1.5.1.1	(PB11)	EW2010301	2.1.5.1.10	3105
382						X	100-BC-1 General	1.4.10.1.1.5.1.1.1	(PB111)	EW2010301	2.1.5.1.10.1	3105
383						X	100-BC-1 Characterization	1.4.10.1.1.5.1.1.3	(PB113)	EW2010301	2.1.5.1.10.3	3105
384						X	100-BC-1 Feasibility Studies	1.4.10.1.1.5.1.1.4	(PB114)	EW2010301	2.1.5.1.10.4	3105
385						X	100-BC-1 Treatability	1.4.10.1.1.5.1.1.5	(PB115)	EW2010301	2.1.5.1.10.5	3105
386						X	100-BC-1 Treatability Engineering	1.4.10.1.1.5.1.1.6	(PB116)	EW2010301	2.1.5.1.10.6	3105
387					X		Remediation	1.4.10.1.1.5.1.2	(PB12)	EW2010302	2.1.5.1.20	3105
388				X			100-BC-2	1.4.10.1.1.5.2	(PB2)	EW201030	2.1.5.2	3105
389					X		Assessment	1.4.10.1.1.5.2.1	(PB21)	EW2010301	2.1.5.2.10	3105
390						X	100-BC-2 General	1.4.10.1.1.5.2.1.1	(PB211)	EW2010301	2.1.5.2.10.1	3105
391						X	100-BC-2 Characterization	1.4.10.1.1.5.2.1.3	(PB213)	EW2010301	2.1.5.2.10.3	3105
392						X	100-BC-2 Feasibility Studies	1.4.10.1.1.5.2.1.4	(PB214)	EW2010301	2.1.5.2.10.4	3105
393				X			100-BC-5	1.4.10.1.1.5.5	(PB5)	EW201030	2.1.5.5	3105
394					X		Assessment	1.4.10.1.1.5.5.1	(PB51)	EW2010301	2.1.5.5.10	3105
395						X	100-BC-5 General	1.4.10.1.1.5.5.1.1	(PB511)	EW2010301	2.1.5.5.10.1	3105
396						X	100-BC-5 Characterization	1.4.10.1.1.5.5.1.3	(PB513)	EW2010301	2.1.5.5.10.3	3105
397						X	100-BC-5 Feasibility Studies	1.4.10.1.1.5.5.1.4	(PB514)	EW2010301	2.1.5.5.10.4	3105
398						X	100-BC-5 Treatability	1.4.10.1.1.5.5.1.5	(PB515)	EW2010301	2.1.5.5.10.5	3105
399					X		Remediation	1.4.10.1.1.5.5.2	(PB52)	EW2010302	2.1.5.5.20	3105
400				X			100-IU-1	1.4.10.1.1.5.6	(PB6)	EW201030	2.1.5.6	3105
401					X		Assessment	1.4.10.1.1.5.6.1	(PB61)	EW2010301	2.1.5.6.10	3105
402					X		Remediation	1.4.10.1.1.5.6.2	(PB62)	EW2010302	2.1.5.6.20	3105
403						X	Riverland Wash Pit - ERA	1.4.10.1.1.5.6.2.2	(PB622)	EW2010302	2.1.5.6.20.2	3105
404			X				100-KR	1.4.10.1.1.6	(PC)	EW201030	2.1.6	3110
405				X			100-KR-1	1.4.10.1.1.6.1	(PC1)	EW201030	2.1.6.1	3110
406					X		Assessment	1.4.10.1.1.6.1.1	(PC11)	EW2010301	2.1.6.1.10	3110
407						X	100-KR-1 General	1.4.10.1.1.6.1.1.1	(PC111)	EW2010301	2.1.6.1.10.1	3110
408						X	100 KR-1 Characterization	1.4.10.1.1.6.1.1.3	(PC113)	EW2010301	2.1.6.1.10.3	3110
409						X	100-KR-1 Feasibility Studies	1.4.10.1.1.6.1.1.4	(PC114)	EW2010301	2.1.6.1.10.4	3110
410					X		Remediation	1.4.10.1.1.6.1.2	(PC12)	EW2010302	2.1.6.1.20	3110
411				X			100-KR-2	1.4.10.1.1.6.2	(PC2)	EW201030	2.1.6.2	3110
412					X		Assessment	1.4.10.1.1.6.2.1	(PC21)	EW2010301	2.1.6.2.10	3110

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Table A2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
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DOE F1332.10
(11-84)

FORM APPROVED
OMB NO. 1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
413						X	100-KR-2 General	1.4.10.1.1.6.2.1.1	(PC211)	EW2010301	2.1.6.2.10.1	3110
414						X	100-KR-2 Planning Document	1.4.10.1.1.6.2.1.2	(PC212)	EW2010301	2.1.6.2.10.2	3110
415						X	100-KR-2 Characterization	1.4.10.1.1.6.2.1.3	(PC213)	EW2010301	2.1.6.2.10.3	3110
416						X	100-KR-2 Feasibility Studies	1.4.10.1.1.6.2.1.4	(PC214)	EW2010301	2.1.6.2.10.4	3110
417						X	100-KR-2 Treatability	1.4.10.1.1.6.2.1.5	(PC215)	EW2010301	2.1.6.2.10.5	3110
418					X		Remediation	1.4.10.1.1.6.2.2	(PC22)	EW2010302	2.1.6.2.20	3110
419				X			100-KR-3	1.4.10.1.1.6.3	(PC3)	EW201030	2.1.6.3	3110
420					X		Assessment	1.4.10.1.1.6.3.1	(PC31)	EW2010301	2.1.6.3.10	3110
421					X		Remediation	1.4.10.1.1.6.3.2	(PC32)	EW2010302	2.1.6.3.20	3110
422				X			100-KR-4	1.4.10.1.1.6.4	(PC4)	EW201030	2.1.6.4	3110
423					X		Assessment	1.4.10.1.1.6.4.1	(PC41)	EW2010301	2.1.6.4.10	3115
424						X	100-KR-4 General	1.4.10.1.1.6.4.1.1	(PC411)	EW2010301	2.1.6.4.10.1	3115
425						X	100-KR-4 Characterization	1.4.10.1.1.6.4.1.3	(PC413)	EW2010301	2.1.6.4.10.3	3115
426						X	100-KR-4 Feasibility Studies	1.4.10.1.1.6.4.1.4	(PC414)	EW2010301	2.1.6.4.10.4	3115
427					X		Remediation	1.4.10.1.1.6.4.2	(PC42)	EW2010302	2.1.6.4.20	3115
428			X				100-FR	1.4.10.1.1.7	(PD)	EW201030	2.1.7	3115
429				X			100-FR-1	1.4.10.1.1.7.1	(PD1)	EW201030	2.1.7.1	3115
430					X		Assessment	1.4.10.1.1.7.1.1	(PD11)	EW2010301	2.1.7.1.10	3115
431						X	100-FR-1 General	1.4.10.1.1.7.1.1.1	(PD111)	EW2010301	2.1.7.1.10.1	3115
432						X	100-FR-1 Characterization	1.4.10.1.1.7.1.1.3	(PD113)	EW2010301	2.1.7.1.10.3	3115
433						X	100-FR-1 Feasibility Studies	1.4.10.1.1.7.1.1.4	(PD114)	EW2010301	2.1.7.1.10.4	3115
434					X		Remediation	1.4.10.1.1.7.1.2	(PD12)	EW2010302	2.1.7.1.20	3115
435				X			100-FR-2	1.4.10.1.1.7.2	(PD2)	EW201030	2.1.7.2	3115
436					X		Assessment	1.4.10.1.1.7.2.1	(PD21)	EW2010301	2.1.7.2.10	3115
437					X		Remediation	1.4.10.1.1.7.2.2	(PD22)	EW2010302	2.1.7.2.20	3115
438				X			100-FR-3	1.4.10.1.1.7.3	(PD3)	EW201030	2.1.7.3	3115
439					X		Assessment	1.4.10.1.1.7.3.1	(PD31)	EW2010301	2.1.7.3.10	3115
440						X	100-FR-3 General	1.4.10.1.1.7.3.1.1	(PD311)	EW2010301	2.1.7.3.10.1	3115
441						X	100-FR-3 Characterization	1.4.10.1.1.7.3.1.3	(PD313)	EW2010301	2.1.7.3.10.3	3115
442						X	100-FR-3 Feasibility Studies	1.4.10.1.1.7.3.1.4	(PD314)	EW2010301	2.1.7.3.10.4	3115
443					X		Remediation	1.4.10.1.1.7.3.2	(PD32)	EW2010302	2.1.7.3.20	3115
444				X			100-IU-3	1.4.10.1.1.7.4	(PD4)	EW201030	2.1.7.4	3115
445					X		Assessment	1.4.10.1.1.7.4.1	(PD41)	EW2010301	2.1.7.4.10	3115
445a						X	100-IU-3 North Slope Characterization	1.4.10.1.1.7.4.1.3	(PD413)	EW2010301	2.1.7.4.10.3	3115
446					X		Remediation	1.4.10.1.1.7.4.2	(PD42)	EW2010302	2.1.7.4.20	3115
446a						X	100-IU-3 North Slope Design	1.4.10.1.1.7.4.2.1	(PD421)	EW2010302	2.1.7.4.20.1	3115
447						X	100-IU-3 North Slope - ERA	1.4.10.1.1.7.4.2.2	(PD422)	EW2010302	2.1.7.4.20.2	3115
448			X				100-HR	1.4.10.1.1.8	(PE)	EW201030	2.1.8	3120
449				X			100-HR-1	1.4.10.1.1.8.1	(PE1)	EW201030	2.1.8.1	3120
450					X		Assessment	1.4.10.1.1.8.1.1	(PE11)	EW2010301	2.1.8.1.10	3120
451						X	100-HR-1 General	1.4.10.1.1.8.1.1.1	(PE111)	EW2010301	2.1.8.1.10.1	3120
452						X	100-HR-1 Characterization	1.4.10.1.1.8.1.1.3	(PE113)	EW2010301	2.1.8.1.10.3	3120
453						X	100-HR-1 Feasibility Studies	1.4.10.1.1.8.1.1.4	(PE114)	EW2010301	2.1.8.1.10.4	3120
454					X		Remediation	1.4.10.1.1.8.1.2	(PE12)	EW2010302	2.1.8.1.20	3120
455				X			100-HR-2	1.4.10.1.1.8.2	(PE2)	EW201030	2.1.8.2	3120

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4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
456					X		Assessment	1.4.10.1.1.8.2.1	(PE21)	EW2010301	2.1.8.2.10	3120
457						X	100-HR-2 General	1.4.10.1.1.8.2.1.1	(PE211)	EW2010301	2.1.8.2.10.1	3120
458						X	100-HR-2 Planning Document	1.4.10.1.1.8.2.1.2	(PE212)	EW2010301	2.1.8.2.10.2	3120
459						X	100-HR-2 Characterization	1.4.10.1.1.8.2.1.3	(PE213)	EW2010301	2.1.8.2.10.3	3120
460						X	100-HR-2 Feasibility Studies	1.4.10.1.1.8.2.1.4	(PE214)	EW201301	2.1.8.2.10.4	3120
461					X		Remediation	1.4.10.1.1.8.2.2	(PE22)	EW2010302	2.1.8.2.20	3120
462				X			100-HR-3	1.4.10.1.1.8.3	(PE3)	EW201030	2.1.8.3	3120
463					X		Assessment	1.4.10.1.1.8.3.1	(PE31)	EW2010301	2.1.8.3.10	3120
464						X	100-HR-3 General	1.4.10.1.1.8.3.1.1	(PE311)	EW2010301	2.1.8.3.10.1	3120
465						X	100-HR-3 Characterization	1.4.10.1.1.8.3.1.3	(PE313)	EW2010301	2.1.8.3.10.3	3120
466						X	100-HR-3 Feasibility Studies	1.4.10.1.1.8.3.1.4	(PE314)	EW2010301	2.1.8.3.10.4	3120
467						X	100-HR-3 Treatability	1.4.10.1.1.8.3.1.5	(PE315)	EW2010301	2.1.8.3.10.5	3120
468					X		Remediation	1.4.10.1.1.8.3.2	(PE32)	EW2010302	2.1.8.3.20	3120
469				X			100-IU-2	1.4.10.1.1.8.4	(PE4)	EW201030	2.1.8.4	3120
470					X		Assessment	1.4.10.1.1.8.4.1	(PE41)	EW2010301	2.1.8.4.10	3120
471					X		Remediation	1.4.10.1.1.8.4.2	(PE42)	EW2010302	2.1.8.4.20	3120
472				X			100-IU-4	1.4.10.1.1.8.5	(PE5)	EW201030	2.1.8.5	3120
473					X		Assessment	1.4.10.1.1.8.5.1	(PE51)	EW2010301	2.1.8.5.10	3120
474					X		Remediation	1.4.10.1.1.8.5.2	(PE52)	EW2010302	2.1.8.5.20	3120
475				X			100-IU-5	1.4.10.1.1.8.6	(PE6)	EW201030	2.1.8.6	3120
476					X		Assessment	1.4.10.1.1.8.6.1	(PE61)	EW2010301	2.1.8.6.10	3120
477					X		Remediation	1.4.10.1.1.8.6.2	(PE62)	EW2010302	2.1.8.6.20	3120
478						X	ERA-(Design)	1.4.10.1.1.8.6.2.1	(PE621)	EW2010302	2.1.8.6.20.1	3120
479						X	ERA-(Implementation)	1.4.10.1.1.8.6.2.2	(PE622)	EW2010302	2.1.8.6.20.2	3120
480				X			100 NPL-Common Activities	1.4.10.1.1.8.7	(PE7)	EW201030	2.1.8.7	3120
481					X		Assessment	1.4.10.1.1.8.7.1	(PE71)	EW2010301	2.1.8.7.10	3120
482						X	General	1.4.10.1.1.8.7.1.1	(PE711)	EW2010301	2.1.8.7.10.1	3120
483						X	Planning Document	1.4.10.1.1.8.7.1.2	(PE712)	EW2010301	2.1.8.7.10.2	3120
484						X	Characterization	1.4.10.1.1.8.7.1.3	(PE713)	EW2010301	2.1.8.7.10.3	3120
485						X	Feasibility Studies	1.4.10.1.1.8.7.1.4	(PE714)	EW2010301	2.1.8.7.10.4	3120
486						X	Treatability	1.4.10.1.1.8.7.1.5	(PE715)	EW2010301	2.1.8.7.10.5	3120
487					X		Remediation	1.4.10.1.1.8.7.2	(PE72)	EW2010302	2.1.8.7.20	3120
488			X				100-NR	1.4.10.1.1.9	(PG)	EW201030	2.1.9	3125
489				X			100-NR-1	1.4.10.1.1.9.1	(PG1)	EW201030	2.1.9.1	3125
490					X		Assessment	1.4.10.1.1.9.1.1	(PG11)	EW2010301	2.1.9.1.10	3125
491						X	100-NR-1 General	1.4.10.1.1.9.1.1.1	(PG111)	EW2010301	2.1.9.1.10.1	3125
492						X	100-NR-1 Planning Document	1.4.10.1.1.9.1.1.2	(PG112)	EW2010301	2.1.9.1.10.2	3125
493						X	100-NR-1 Characterization	1.4.10.1.1.9.1.1.3	(PG113)	EW2010301	2.1.9.1.10.3	3125
494						X	100-NR-1 Feasibility Studies	1.4.10.1.1.9.1.1.4	(PG114)	EW2010301	2.1.9.1.10.4	3125
495						X	100-NR-1 Treatability	1.4.10.1.1.9.1.1.5	(PG115)	EW2010301	2.1.9.1.10.5	3125
496					X		Remediation	1.4.10.1.1.9.1.2	(PG12)	EW2010302	2.1.9.1.20	3125
497				X			100-NR-2	1.4.10.1.1.9.2	(PG2)	EW201030	2.1.9.2	3125
498					X		Assessment	1.4.10.1.1.9.2.1	(PG21)	EW2010301	2.1.9.2.10	3125
499						X	100-NR-2 General	1.4.10.1.1.9.2.1.1	(PG211)	EW2010301	2.1.9.2.10.1	3125
500						X	100-NR-2 Planning Document	1.4.10.1.1.9.2.1.2	(PG212)	EW2010301	2.1.9.2.10.2	3125
501						X	100-NR-2 Characterization	1.4.10.1.1.9.2.1.3	(PG213)	EW2010301	2.1.9.2.10.3	3125

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4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
502						X	100-NR-2 Feasibility Studies	1.4.10.1.1.9.2.1.4	(PG214)	EW2010301	2.1.9.2.10.4	3125
503						X	100-NR-2 Treatability	1.4.10.1.1.9.2.1.5	(PG215)	EW2010301	2.1.9.2.10.5	3125
504					X		Remediation	1.4.10.1.1.9.2.2	(PG22)	EW2010302	2.1.9.2.20	3125
505						X	100-NR-2 N-Springs-ERA	1.4.10.1.1.9.2.2.1	(PG221)	EW2010302	2.1.9.2.20.1	3125
506			X				200-BP	1.4.10.1.1.10	(PL)	EW201030	2.1.10	3200
507				X			200-BP-1	1.4.10.1.1.10.1	(PL1)	EW201030	2.1.10.1	3200
508					X		Assessment	1.4.10.1.1.10.1.1	(PL11)	EW2010301	2.1.10.1.10	3200
509						X	200-BP-1 General	1.4.10.1.1.10.1.1.1	(PL111)	EW2010301	2.1.10.1.10.1	3200
510						X	200-BP-1 Feasibility Studies	1.4.10.1.1.10.1.1.4	(PL114)	EW2010301	2.1.10.1.10.4	3200
511						X	200-BP-1 Treatability	1.4.10.1.1.10.1.1.5	(PL115)	EW2010301	2.1.10.1.10.5	3200
512					X		Remediation	1.4.10.1.1.10.1.2	(PL12)	EW2010302	2.1.10.1.20	3200
513						X	200-BP-1 Remedial Actions Design	1.4.10.1.1.10.1.2.5	(PL125)	EW2010302	2.1.10.1.20.5	3200
514				X			200-BP-2	1.4.10.1.1.10.2	(PL2)	EW201030	2.1.10.2	3200
515					X		Assessment	1.4.10.1.1.10.2.1	(PL21)	EW2010301	2.1.10.2.10	3200
516					X		Remediation	1.4.10.1.1.10.2.2	(PL22)	EW2010302	2.1.10.2.20	3200
517				X			200-BP-3	1.4.10.1.1.10.3	(PL3)	EW201030	2.1.10.3	3200
518					X		Assessment	1.4.10.1.1.10.3.1	(PL31)	EW2010301	2.1.10.3.10	3200
519					X		Remediation	1.4.10.1.1.10.3.2	(PL32)	EW2010302	2.1.10.3.20	3200
520				X			200-BP-4	1.4.10.1.1.10.4	(PL4)	EW201030	2.1.10.4	3200
521					X		Assessment	1.4.10.1.1.10.4.1	(PL41)	EW2010301	2.1.10.4.10	3200
522					X		Remediation	1.4.10.1.1.10.4.2	(PL42)	EW2010302	2.1.10.4.20	3200
523				X			200-BP-5	1.4.10.1.1.10.5	(PL5)	EW201030	2.1.10.5	3200
524					X		Assessment	1.4.10.1.1.10.5.1	(PL51)	EW2010301	2.1.10.5.10	3200
525						X	200-BP-5 General	1.4.10.1.1.10.5.1.1	(PL511)	EW2010301	2.1.10.5.10.1	3200
526						X	200-BP-5 Characterization	1.4.10.1.1.10.5.1.3	(PL513)	EW2010301	2.1.10.5.10.3	3200
527						X	200-BP-5 Treatability	1.4.10.1.1.10.5.1.5	(PL515)	EW2010301	2.1.10.5.10.5	3200
528					X		Remediation	1.4.10.1.1.10.5.2	(PL52)	EW2010302	2.1.10.5.20	3200
529				X			200-BP-6	1.4.10.1.1.10.6	(PL6)	EW201030	2.1.10.6	3200
530					X		Assessment	1.4.10.1.1.10.6.1	(PL61)	EW2010301	2.1.10.6.10	3200
531					X		Remediation	1.4.10.1.1.10.6.2	(PL62)	EW2010302	2.1.10.6.20	3200
532				X			200-BP-8	1.4.10.1.1.10.7	(PL7)	EW201030	2.1.10.7	3200
533					X		Assessment	1.4.10.1.1.10.7.1	(PL71)	EW2010301	2.1.10.7.10	3200
534					X		Remediation	1.4.10.1.1.10.7.2	(PL72)	EW2010302	2.1.10.7.20	3200
535				X			200-BP-9	1.4.10.1.1.10.8	(PL8)	EW201030	2.1.10.8	3200
536					X		Assessment	1.4.10.1.1.10.8.1	(PL81)	EW2010301	2.1.10.8.10	3200
537					X		Remediation	1.4.10.1.1.10.8.2	(PL82)	EW2010302	2.1.10.8.20	3200
538				X			200-BP-10	1.4.10.1.1.10.9	(PL9)	EW201030	2.1.10.9	3200
539					X		Assessment	1.4.10.1.1.10.9.1	(PL91)	EW2010301	2.1.10.9.10	3200
540					X		Remediation	1.4.10.1.1.10.9.2	(PL92)	EW2010302	2.1.10.9.20	3200
541				X			200-BP-11	1.4.10.1.1.10.10	(PLA)	EW201030	2.1.10.10	3200
542					X		Assessment	1.4.10.1.1.10.10.1	(PLA1)	EW2010301	2.1.10.10.10	3200
543						X	200-BP-11 General	1.4.10.1.1.10.10.1.1	(PLA11)	EW2010301	2.1.10.10.10.1	3200
544						X	200-BP-11 Planning Documents	1.4.10.1.1.10.10.1.2	(PLA12)	EW2010301	2.1.10.10.10.2	3200
545						X	200-BP-11 Characterization	1.4.10.1.1.10.10.1.3	(PLA13)	EW2010301	2.1.10.10.10.3	3200
546					X		Remediation	1.4.10.1.1.10.10.2	(PLA2)	EW2010302	2.1.10.10.20	3200
547				X			200 NPL Common Activities	1.4.10.1.1.10.11	(PLB)	EW201030	2.1.10.11	3200

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE	7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
548					X		Assessment	1.4.10.1.1.10.11.1 (PLB1)	EW2010301	2.1.10.11.10	3205
549						X	200 Areas General	1.4.10.1.1.10.11.1.1 (PLB11)	EW2010301	2.1.10.11.10.1	3205
549a						X	Groundwater Remediation Strategy	1.4.10.1.1.10.11.1.2 (PLB12)	EW2010301	2.1.10.11.10.2	3205
550						X	Common Characterizationn	1.4.10.1.1.10.11.1.3 (PLB13)	EW2010301	2.1.10.11.10.3	3205
551					X		Remediation	1.4.10.1.1.10.11.2 (PLB2)	EW2010302	2.1.10.11.20	3205
552						X	WHC Support to ER Pipeline	1.4.10.1.1.10.11.2.10(PLB2A)	EW2010302	2.1.10.11.20.10	3205
553						X	ER Pipeline in W-094-H Trench	1.4.10.1.1.10.11.2.117PLB2B	EW2010302	2.1.10.11.20.11	3205
554			X				200-NO	1.4.10.1.1.11 (PM)	EW201030	2.1.11	3205
555				X			200-NO-1	1.4.10.1.1.11.1 (PM1)	EW201030	2.1.11.1	3205
556					X		Assessment	1.4.10.1.1.11.1.1 (PM11)	EW2010301	2.1.11.1.10	3205
557					X		Remediation	1.4.10.1.1.11.1.2 (PM12)	EW2010302	2.1.11.1.20	3205
558			X				200-PO	1.4.10.1.1.12 (PN)	EW201030	2.1.12	3210
559				X			200-PO-1	1.4.10.1.1.12.1 (PN1)	EW201030	2.1.12.1	3210
560					X		Assessment	1.4.10.1.1.12.1.1 (PN11)	EW2010301	2.1.12.1.10	3210
561						X	200-PO-1 General	1.4.10.1.1.12.1.1.1 (PN111)	EW2010301	2.1.12.1.10.1	3210
562						X	200-PO-1 Planning Documents	1.4.10.1.1.12.1.1.2 (PN112)	EW2010301	2.1.12.1.10.2	3210
563					X		Remediation	1.4.10.1.1.12.1.2 (PN12)	EW2010302	2.1.12.1.20	3210
564				X			200-PO-2	1.4.10.1.1.12.2 (PN2)	EW201030	2.1.12.2	3210
565					X		Assessment	1.4.10.1.1.12.2.1 (PN21)	EW2010301	2.1.12.2.10	3210
566					X		Remediation	1.4.10.1.1.12.2.2 (PN22)	EW2010302	2.1.12.2.20	3210
567				X			200-PO-4	1.4.10.1.1.12.3 (PN3)	EW201030	2.1.12.3	3210
568					X		Assessment	1.4.10.1.1.12.3.1 (PN31)	EW2010301	2.1.12.3.10	3210
569					X		Remediation	1.4.10.1.1.12.3.2 (PN32)	EW2010302	2.1.12.3.2	3210
570				X			200-PO-5	1.4.10.1.1.12.4 (PN4)	EW201030	2.1.12.4	3210
571					X		Assessment	1.4.10.1.1.12.4.1 (PN41)	EW2010301	2.1.12.4.10	3210
572					X		Remediation	1.4.10.1.1.12.4.2 (PN42)	EW2010302	2.1.12.4.20	3210
573				X			200-PO-6	1.4.10.1.1.12.5 (PN5)	EW201030	2.1.12.5	3210
574					X		Assessment	1.4.10.1.1.12.5.1 (PN51)	EW2010301	2.1.12.5.10	3210
575					X		Remediation	1.4.10.1.1.12.5.2 (PN52)	EW2010302	2.1.12.5.20	3210
576			X				200-RO	1.4.10.1.1.13 (PP)	EW201030	2.1.13	3215
577				X			200-RO-1	1.4.10.1.1.13.1 (PP1)	EW201030	2.1.13.1	3215
578					X		Assessment	1.4.10.1.1.13.1.1 (PP11)	EW2010301	2.1.13.1.10	3215
579					X		Remediation	1.4.10.1.1.13.1.2 (PP12)	EW2010302	2.1.13.1.20	3215
580				X			200-RO-2	1.4.10.1.1.13.2 (PP2)	EW201030	2.1.13.2	3215
581					X		Assessment	1.4.10.1.1.13.2.1 (PP21)	EW2010301	2.1.13.2.10	3215
582					X		Remediation	1.4.10.1.1.13.2.2 (PP22)	EW2010302	2.1.13.2.20	3215
583				X			200-RO-3	1.4.10.1.1.13.3 (PP3)	EW201030	2.1.13.3	3215
584					X		Assessment	1.4.10.1.1.13.3.1 (PP31)	EW2010301	2.1.13.3.10	3215
585					X		Remediation	1.4.10.1.1.13.3.2 (PP32)	EW2010302	2.1.13.3.20	3215
586			X				200-SO	1.4.10.1.1.14 (PR)	EW201030	2.1.14	3220
587				X			200-SO-1	1.4.10.1.1.14.1 (PR1)	EW201030	2.1.14.1	3220
588					X		Assessment	1.4.10.1.1.14.1.1 (PR11)	EW2010301	2.1.14.1.10	3220
589					X		Remediation	1.4.10.1.1.14.1.2 (PR12)	EW2010302	2.1.14.1.20	3220
590			X				200-TP	1.4.10.1.1.15 (PS)	EW201030	2.1.15	3225
591				X			200-TP-1	1.4.10.1.1.15.1 (PS1)	EW201030	2.1.15.1	3225
592					X		Assessment	1.4.10.1.1.15.1.1 (PS11)	EW2010301	2.1.15.1.10	3225

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Table A2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
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(11-84)

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OMB NO. 1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
593					X		Remediation	1.4.10.1.1.15.1.2	(PS12)	EW2010302	2.1.15.1.20	3225
594				X			200-TP-2	1.4.10.1.1.15.2	(PS2)	EW201030	2.1.15.2	3225
595					X		Assessment	1.4.10.1.1.15.2.1	(PS21)	EW2010301	2.1.15.2.10	3225
596					X		Remediation	1.4.10.1.1.15.2.2	(PS22)	EW2010302	2.1.15.2.20	3225
597				X			200-TP-3	1.4.10.1.1.15.3	(PS3)	EW201030	2.1.15.3	3225
598					X		Assessment	1.4.10.1.1.15.3.1	(PS31)	EW2010301	2.1.15.3.10	3225
599					X		Remediation	1.4.10.1.1.15.3.2	(PS32)	EW2010302	2.1.15.3.20	3225
600				X			200-TP-4	1.4.10.1.1.15.4	(PS4)	EW201030	2.1.15.4	3225
601					X		Assessment	1.4.10.1.1.15.4.1	(PS41)	EW2010301	2.1.15.4.10	3225
602					X		Remediation	1.4.10.1.1.15.4.2	(PS42)	EW2010302	2.1.15.4.20	3225
603			X				200-UP	1.4.10.1.1.16	(PT)	EW201030	2.1.16	3230
604				X			200-UP-1	1.4.10.1.1.16.1	(PT1)	EW201030	2.1.16.1	3230
605					X		Assessment	1.4.10.1.1.16.1.1	(PT11)	EW2010301	2.1.16.1.10	3230
606						X	200-UP-1 General	1.4.10.1.1.16.1.1.1	(PT111)	EW2010301	2.1.16.1.10.1	3230
607						X	200-UP-1 Planning Documents	1.4.10.1.1.16.1.1.2	(PT112)	EW2010301	2.1.16.1.10.2	3220
608						X	200-UP-1 Characterization	1.4.10.1.1.16.1.1.3	(PT113)	EW2010301	2.1.16.1.10.3	3230
609						X	200-UP-1 Feasibility Studies	1.4.10.1.1.16.1.1.4	(PT114)	EW2010301	2.1.16.1.10.4	3230
610						X	200-UP-1 Treatability	1.4.10.1.1.16.1.1.5	(PT115)	EW2010301	2.1.16.1.10.5	3230
611					X		Remediation	1.4.10.1.1.16.1.2	(PT12)	EW2010302	2.1.16.1.20	3230
612				X			200-UP-2	1.4.10.1.1.16.2	(PT2)	EW201030	2.1.16.2	3230
613					X		Assessment	1.4.10.1.1.16.2.1	(PT21)	EW2010301	2.1.16.2.10	3230
614						X	200-UP-2 General	1.4.10.1.1.16.2.1.1	(PT211)	EW2010301	2.1.16.2.10.1	3230
615						x	200-UP-2 Characterization	1.4.10.1.1.16.2.1.3	(PT213)	EW2010301	2.1.16.2.10.3	3230
616						X	200-UP-2 Treatability	1.4.10.1.1.16.2.1.5	(PT215)	EW2010301	2.1.16.2.10.5	3230
617					X		Remediation	1.4.10.1.1.16.2.2	(PT22)	EW2010302	2.1.16.2.20	3230
618			X				200-ZP	1.4.10.1.1.17	(PU)	EW201030	2.1.17	3235
619				X			200-ZP-1	1.4.10.1.1.17.1	(PU1)	EW201030	2.1.17.1	3235
620					X		Assessment	1.4.10.1.1.17.1.1	(PU11)	EW2010301	2.1.17.1.10	3235
621						X	200-ZP-1 General	1.4.10.1.1.17.1.1.1	(PU111)	EW2010301	2.1.17.1.10.1	3235
622					X		Remediation	1.4.10.1.1.17.1.2	(PU12)	EW2010302	2.1.17.1.20	3235
623						X	200-ZP-1 IRM Design	1.4.10.1.1.17.1.2.3	(PU123)	EW2010302	2.1.17.1.20.3	3235
624						X	200-ZP-1 IRM Implementation	1.4.10.1.1.17.1.2.4	(PU124)	EW2010302	2.1.17.1.20.4	3235
625				X			200-ZP-2	1.4.10.1.1.17.2	(PU2)	EW201030	2.1.17.2	3235
626					X		Assessment	1.4.10.1.1.17.2.1	(PU21)	EW2010301	2.1.17.2.10	3235
627					X		Remediation	1.4.10.1.1.17.2.2	(PU22)	EW2010302	2.1.17.2.20	3235
628						X	200-ZP-2 ERA Implementation	1.4.10.1.1.17.2.2.2	(PU222)	EW2010302	2.1.17.2.20.2	3235
629				X			200-ZP-3	1.4.10.1.1.17.3	(PU3)	EW201030	2.1.17.3	3235
630					X		Assessment	1.4.10.1.1.17.3.1	(PU31)	EW2010301	2.1.17.3.10	3235
631					X		Remediation	1.4.10.1.1.17.3.2	(PU32)	EW2010302	2.1.17.3.20	3235
632			X				200-IU	1.4.10.1.1.18	(PY)	EW201030	2.1.18	3240
633				X			200-IU-1	1.4.10.1.1.18.1	(PY1)	EW201030	2.1.18.1	3240
634					X		Assessment	1.4.10.1.1.18.1.1	(PY11)	EW2010301	2.1.18.1.10	3240
635					X		Remediation	1.4.10.1.1.18.1.2	(PY12)	EW2010302	2.1.18.1.20	3240
636				X			200-IU-2	1.4.10.1.1.18.2	(PY2)	EW201030	2.1.18.2	3240
637					X		Assessment	1.4.10.1.1.18.2.1	(PY21)	EW2010301	2.1.18.2.10	3240
638					X		Remediation	1.4.10.1.1.18.2.2	(PY22)	EW2010302	2.1.18.2.20	3240

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
639				X			200-IU-3	1.4.10.1.1.18.3	(PY3)	EW201030	2.1.18.3	3240
640					X		Assessment	1.4.10.1.1.18.3.1	(PY31)	EW2010301	2.1.18.3.10	3240
641					X		Remediation	1.4.10.1.1.18.3.2	(PY32)	EW2010302	2.1.18.3.20	3240
642				X			200-IU-4	1.4.10.1.1.18.4	(PY4)	EW201030	2.1.18.4	3240
643					X		Assessment	1.4.10.1.1.18.4.1	(PY41)	EW2010301	2.1.18.4.10	3240
644					X		Remediation	1.4.10.1.1.18.4.2	(PY42)	EW2010302	2.1.18.4.20	3240
645				X			200-IU-5	1.4.10.1.1.18.5	(PY5)	EW201030	2.1.18.5	3240
646					X		Assessment	1.4.10.1.1.18.5.1	(PY51)	EW2010301	2.1.18.5.10	3240
647					X		Remediation	1.4.10.1.1.18.5.2	(PY52)	EW2010302	2.1.18.5.20	3240
648				X			200-IU-6	1.4.10.1.1.18.6	(PY6)	EW201030	2.1.18.6	3240
649					X		Assessment	1.4.10.1.1.18.6.1	(PY61)	EW2010301	2.1.18.6.10	3240
650					X		Remediation	1.4.10.1.1.18.6.2	(PY62)	EW2010302	2.1.18.6.20	3240
651			X				200-SS	1.4.10.1.1.19	(PW)	EW201030	2.1.19	324
652				X			200-SS-1	1.4.10.1.1.19.1	(PW1)	EW201030	2.1.19.1	3245
653					X		Assessment	1.4.10.1.1.19.1.1	(PW11)	EW2010301	2.1.19.1.10	3245
654					X		Remediation	1.4.10.1.1.19.1.2	(PW12)	EW2010302	2.1.19.1.20	3245
655				X			200-SS-2	1.4.10.1.1.19.2	(PW2)	EW201030	2.1.19.2	3245
656					X		Assessment	1.4.10.1.1.19.2.1	(PW21)	EW2010301	2.1.19.2.10	3250
657					X		Remediation	1.4.10.1.1.19.2.2	(PW22)	EW2010302	2.1.19.2.20	3250
658			X				200-EGW	1.4.10.1.1.20	(PX)	EW201030	2.1.20	3250
659				X			200-EGW	1.4.10.1.1.20.1	(PX1)	EW201030	2.1.20.1	3250
660					X		Assessment	1.4.10.1.1.20.1.1	(PX11)	EW2010301	2.1.20.1.10	3250
661					X		Remediation	1.4.10.1.1.20.1.2	(PX12)	EW2010302	2.1.20.1.20	3250
662			X				200-WGW	1.4.10.1.1.21	(P1)	EW201030	2.1.21	3255
663				X			200-WGW	1.4.10.1.1.21.1	(P11)	EW201030	2.1.21.1	3255
664					X		Assessment	1.4.10.1.1.21.1.1	(P111)	EW2010301	2.1.21.1.10	3255
665					X		Remediation	1.4.10.1.1.21.1.2	(P112)	EW2010302	2.1.21.1.20	3255
666			X				300-FF	1.4.10.1.1.22	(P2)	EW201030	2.1.22	3300
667				X			300-FF-1	1.4.10.1.1.22.1	(P21)	EW201030	2.1.22.1	3300
668					X		Assessment	1.4.10.1.1.22.1.1	(P211)	EW2010301	2.1.22.1.10	3300
669						X	300-FF-1 General	1.4.10.1.1.22.1.1.1	(P2111)	EW2010301	2.1.22.1.10.1	3300
670						X	300-FF-1 Characterization	1.4.10.1.1.22.1.1.3	(P2113)	EW2010301	2.1.22.1.10.3	3300
671						X	300-FF-1 Feasibility Studies	1.4.10.1.1.22.1.1.4	(P2114)	EW2010301	2.1.22.1.10.4	3300
672						X	300-FF-1 Treatability	1.4.10.1.1.22.1.1.5	(P2115)	EW2010301	2.1.22.1.10.5	3300
673					X		Remediation	1.4.10.1.1.22.1.2	(P212)	EW2010302	2.1.22.1.20	3300
674				X			300-FF-2	1.4.10.1.1.22.2	(P22)	EW201030	2.1.22.2	3300
675					X		Assessment	1.4.10.1.1.22.2.1	(P221)	EW2010301	2.1.22.2.10	3300
676						X	300-FF-2 Planning Documents	1.4.10.1.1.22.2.1.2	(P2212)	EW2010301	2.1.22.2.10.2	3300
677						X	300-FF-2 Characterization	1.4.10.1.1.22.2.1.3	(P2213)	EW2010301	2.1.22.2.10.3	3300
678					X		Remediation	1.4.10.1.1.22.2.2	(P222)	EW2010302	2.1.22.2.20	3300
679				X			300-FF-3	1.4.10.1.1.22.3	(P23)	EW201030	2.1.22.3	3300
680					X		Assessment	1.4.10.1.1.22.3.1	(P231)	EW2010301	2.1.22.3.10	3300
681					X		Remediation	1.4.10.1.1.22.3.2	(P232)	EW2010302	2.1.22.3.20	3300
682				X			300-FF-4	1.4.10.1.1.22.4	(P24)	EW201030	2.1.22.4	3300
683					X		Assessment	1.4.10.1.1.22.4.1	(P241)	EW2010301	2.1.22.4.10	3300
684					X		Remediation	1.4.10.1.1.22.4.2	(P242)	EW2010302	2.1.22.4.20	3300

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(11-84)

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
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4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
685				X			300-FF-5	1.4.10.1.1.22.5	(P25)	EW201030	2.1.22.5	3300
686					X		Assessment	1.4.10.1.1.22.5.1	(P251)	EW2010301	2.1.22.5.10	33087
687						X	300-FF-5 General	1.4.10.1.1.22.5.1.1	(P2511)	EW2010301	2.1.22.5.10.1	3300
688						X	300-FF-5 Characterization	1.4.10.1.1.22.5.1.3	(P2513)	EW2010301	2.1.22.5.10.3	3300
689						X	300-FF-5 Feasibility Studies	1.4.10.1.1.22.5.1.4	(P2514)	EW2010301	2.1.22.5.10.4	3300
690					X		Remediation	1.4.10.1.1.22.5.2	(P252)	EW2010302	2.1.22.5.20	3300
691				X			300-IU-1	1.4.10.1.1.22.6	(P26)	EW201030	2.1.22.6	3300
692					X		Assessment	1.4.10.1.1.22.6.1	(P261)	EW2010301	2.1.22.6.10	3300
693					X		Remediation	1.4.10.1.1.22.6.2	(P262)	EW2010302	2.1.22.6.20	3300
694						X	300-IU-1 ERA Implementation	1.4.10.1.1.22.6.2.1	(P2621)	EW2010302	2.1.22.6.20.1	3300
695				X			300 NPL-Common Activities	1.4.10.1.1.22.7	(P27)	EW201030	2.1.22.7	3300
696					X		Assessment	1.4.10.1.1.22.7.1	(P271)	EW2010301	2.1.22.7.10	3300
697					X		Remediation	1.4.10.1.1.22.7.2	(P272)	EW2010302	2.1.22.7.20	3300
698			X				1100-EM	1.4.10.1.1.23	(P3)	EW201030	2.1.23	3390
699				X			1100-EM-1	1.4.10.1.1.23.1	(P31)	EW201030	2.1.23.1	3390
700					X		Assessment	1.4.10.1.1.23.1.1	(P311)	EW2010301	2.1.23.1.10	3390
701					X		Remediation	1.4.10.1.1.23.1.2	(P312)	EW2010302	2.1.23.1.20	3390
702				X			1100-EM-2	1.4.10.1.1.23.2	(P32)	EW201030	2.1.23.2	3390
703					X		Assessment	1.4.10.1.1.23.2.1	(P321)	EW2010301	2.1.23.2.10	3390
704					X		Remediation	1.4.10.1.1.23.2.2	(P322)	EW2010302	2.1.23.2.20	3390
705				X			1100-EM-3	1.4.10.1.1.23.3	(P33)	EW201030	2.1.23.3	3390
706					X		Assessment	1.4.10.1.1.23.3.1	(P331)	EW2010301	2.1.23.3.10	3390
707					X		Remediation	1.4.10.1.1.23.3.2	(P332)	EW2010302	2.1.23.3.20	3390
708				X			1100-IU-1	1.4.10.1.1.23.4	(P34)	EW201030	2.1.23.4	3390
709					X		Assessment	1.4.10.1.1.23.4.1	(P341)	EW2010301	2.1.23.4.10	3390
710					X		Remediation	1.4.10.1.1.23.4.2	(P342)	EW2010302	2.1.23.4.20	3390
711				X			1100 NPL-Common Activities	1.4.10.1.1.23.5	(P35)	EW201030	2.1.23.5	3390
712					X		Assessment	1.4.10.1.1.23.5.1	(P351)	EW2010301	2.1.23.5.10	3390
713					X		Remediation	1.4.10.1.1.23.5.2	(P352)	EW2010302	2.1.23.5.20	3390
714				X			ALE Reserve	1.4.10.1.1.23.6	(P36)	EW201030	2.1.23.6	3390
715					X		ALE Assessment	1.4.10.1.1.23.6.1	(P361)	EW2010301	2.1.23.6.10	3390
716						X	ALE Preliminary Assessment Screening	1.4.10.1.1.23.6.1.6	(P3616)	EW2010301	2.1.23.6.10.6	3390
717					X		ALE Remediation	1.4.10.1.1.23.6.2	(P362)	EW2010302	2.1.23.6.20	3390
718						X	ALE Remedial Action Design	1.4.10.1.1.23.6.2.5	(P3625)	EW2010302	2.1.23.6.20.5	3390
719						X	ALE Remedial Action Implement	1.4.10.1.1.23.6.2.6	(P3626)	EW2010302	2.1.23.6.20.6	3390

**	Surveillence and Maintenance (S) is not a part of the FY 1994 work breakdown structure
◆	P3 - 1100-EM Operable Units and UC - 300 Area D&D are non-FDS work breakdown structures.
ALE	-Arid Lands Ecology (Reserve)
BOP	-balance of plant
CENTRC	-capital equipment not related to construction
CRADA	-Cooperative Research and Development Agreement
D&D	-decontamination and decommissioning
EGW	-200 East Area groundwater
ER	-environmental restoration
ERA	-expedited response actions
ERDF	-environmental restoration disposal facility
ERMC	-environmental restoration management contractor
FDS	-financial data system
JCS	-job control system
GIS	-geographic information system
HASM	-Hanford Analytical Services Management
HGP	-Hanford Generating Plant
HEIS	-Hanford Environmental Information System
HRA-EIS	-Hanford remedial actions- environmental impact statement
IMS	-information management system
ISV	-in situ vitrification
IRM	-interim response measure
LIMS	-laboratory information management system
NEPA	*-National Environmental Policy Act of 1969*
NPL	-national priorities list
NRDWL	-nonradioactive dangerous waste landfill
NW	-northwest
OU	-operable unit-(The initials-PO,BP, CP, TP, UP,ZP,RO,IU, and FF are OU designators).
PNL	-Pacific Northwest Laboratory
Pu Conc	-plutonium concentration
PUREX	-Plutonium-Uranium Extraction Plant
QA	-quality assurance
RA	-remedial actions
RARA	-radiation area remedial action
RCRA	*-Resource Conservation and Recovery Act of 1976*
REDOX	-Reduction Oxidation Plant
RI/FS	-remedial investigation/feasibility study
S&M	-surveillance and maintenance
SST	-single-shell tank
TPA	-Tri-party Agreement (*Hanford Federal Facility Agreement and Consent Order*)
UST	-underground storage tank
WIDS	-waste information data system
WHC	-Westinghouse Hanford Company
WGW	-200 West Area groundwater

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.1 (PJ)	RARA/USTs	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
233	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to manage the inactive waste sites to minimize any spread of surface soil contamination and to remove remaining orphaned USTs in accordance with WAC 173-360. Work is coordinated to support the goals of overall site characterization for cleanup.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

There are approximately 380 inactive waste sites and approximately 8 orphaned USTs. The inactive waste sites include cribs, trenches, ponds, and burial grounds. The USTs are primarily petroleum tanks that have been removed from service before 1988.

C. Work Statement

The following actions will be performed:

- Prevent migration of contaminated soil beyond control boundaries
- Provide S&M of sites
- Conduct interim stabilization until final remediation of the sites
- Maintain sites in an environmentally safe manner
- Revegetate sites
- Conduct a weed spray program
- Issue reports on work completed
- Close old tanks
- Remediate leaks and spills.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.1.1.20 (PJ12)	RARA Common Activities - Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
235	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Conduct an aggressive interim stabilization S&M program on inactive outdoor contaminated waste sites. These sites will be managed to prevent further contamination migration and possible exposure to workers or the public.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontractors.

B. Technical Content

There are approximately 380 inactive waste sites. These sites include unplanned release sites, cribs, ponds, and ditches. These sites must be controlled, maintained, and monitored to prevent additional acreage from becoming contaminated.

C. Work Statement

The following actions will be performed:

- Conduct interim stabilization activities to reduce contaminated surface areas
- Provide S&M to RARA sites
- Monitor sites for possible contamination migration
- Revegetate and maintain appropriate postings on RARA sites
- Conduct a vegetation management program to control deep rooted weeds.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.1.2.20 (PJ22)	UST Common Activities - Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
240	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Locate, remove, decontaminate, and dispose of inactive abandoned USTs in accordance with WAC-173-360 "Underground Storage Tank Regulations".

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

Although several orphan USTs have been discovered and removed, it is presumed that several more USTs might still exist. Because these tanks were used primarily for petroleum products, it is important that these tanks be removed to prevent the possibility of future leaks.

C. Work Statement

The following actions will be performed:

- Remove four orphan USTs
- Decontaminate tanks as required
- Dispose of tanks
- Document and report status to satisfy legal requirements
- Do minor remediation at the excavation site as required.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.2 (PV)	RCRA Closures	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
242	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW201020	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of the RCRA closures is to comply with the Tri-Party Agreement (Ecology et. al 1992) in providing a plan and implement closure of certain treatment, storage, and/or disposal (TSD) units.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The inactive RCRA TSD units include landfills, cribs, ditches, ponds, and miscellaneous other units.

C. Work Statement

The following actions will be performed:

- Prepare closure plan for each unit
- Submit plan for Ecology review and acceptance
- Resolve comments on the closure plans
- Prepare detailed cost estimate for implementing the closure plan
- Begin fulfilling the requirements of the closure plan
- Close out the unit.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.2.1.10 (PV11)	RCRA Common Activities Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
244	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010201	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

To conduct a 5-year vegetation study under diverse but controlled conditions. The objective of this study is to develop improved methods for revegetating disturbed sites.

Prepare a corrective action plan to address potential problems with the miscellaneous inactive USTs in the 200 Areas.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The soil and arid climate on the Hanford Site makes planting and growing desirable grasses on disturbed sites extremely difficult. A study was initiated in FY 1992 to determine the most effective ways to improve the vegetation efforts in the different soil types. These data will be used in the stabilization of inactive waste sites and will have application in the development of RCRA covers.

There are approximately 50 miscellaneous USTs located in the 200 Areas. These tanks are all inactive but, at one time were associated with the various chemical separation operations. A corrective action plan is required to address possible safety issues, characterization activities, and program ownership.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.2.1.10 (Continued) (PV11)	RCRA Common Activities Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010201	

12. ELEMENT TASK DESCRIPTION

C. Work Statement

The following actions will be performed.

Efforts will continue to monitor and examine the various methods to improve the revegetation practice on the Hanford Site. This study evaluates various means of increasing soil fertilization, moisture retention, and different seed combinations for enhanced ground cover.

Two additional test plats will be developed in FY 1994 to investigate the potential of a polysaccloride as a soil additives for enhanced development and growth of planted grasses.

An interim report will be issued detailing current status of developments.

Program will be completed in FY 1996 and a final report will be issued. The following actions will be performed:

- Evaluate data associated with inactive USTs
- Develop corrective action plan
- Resolve comments
- Complete and issue a final corrective action plan for the miscellaneous inactive underground tanks.

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DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT Hanford Environmental Restoration	2. DATE December 22, 1993	3. IDENTIFICATION NUMBER DE-AC06-87RL10930
4. WBS ELEMENT CODE 2.1.2.7.10 (PV71)	5. WBS ELEMENT TITLE RCRA 100-NR Assessment	
6. INDEX LINE NO. 267	7. REVISION NO. AND AUTHORIZATION N/A	8. DATE N/A
9. APPROVED CHANGES N/A		
10. SYSTEM DESIGN DESCRIPTION	11. BUDGET AND REPORTING NUMBER EW2010201	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

To provide the support required for the review, preparation, and approval of RCRA permits and closure plans and related activities, including environmental monitoring.

A. Cost Content:

Cost content includes some or all of the following cost types: M&O labor, overhead, G&A/CSP, materials, equipment, utilities, engineering services, and subcontractor support (PNL, KEH, HEHF).

B. Technical Content:

Preparation, review, and submittal for approval of RCRA permits and closure plans and to ensure regulatory compliance during the deactivation process.

C. Work Statement:

Prepare RCRA closure plans for 1301-N Liquid Waste Disposal Facility/Tri-Party Agreement #M-20-31, 1325 Liquid Waste Disposal Facility/Tri-Party Agreement #M-30-21, and 1324N/NA Surface Impoundment/Percolation Pond/Tri-Party Agreement #M-20-35.

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.2.3.10 (PV31)	RCRA 100 DR Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
252	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW20102021	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Develop an approved closure plan that will allow clean closure of the 100-D Ponds.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

Closure plan was submitted to Ecology in February 1993 to comply with Tri-Party Agreement Milestone M-20-40 and WAC 173-303.

C. Work Statement

The following actions will be performed:

- Continue to respond to NODs from Ecology
- Pursue approval to allow clean closure of 100-D Ponds.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.2.5.20 (PV52)	RCRA 100 HR Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
261	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010202	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

To complete final demolition of the basins.

A. Cost Content (NOTE): This activity will be funded with carryover dollars)

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

Basins will be decontaminated by a scabbing process and the resultant contaminated waste will be packaged and disposed of.

C. Work Statement

The following actions will be performed.

- Decontamination of the basins surface areas will be completed during FY 1994.
- Basins will be removed from the dangerous waste category.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.2.9.10 (PVB1)	RCRA 200 Area B(BP) Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
280	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010201	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Complete closure plan that will integrate the B Pond Closure with OU 200-BP-11.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The proposed closure strategy is to clean close the A, B, and C lobes based on analytical data from three phases of surface and subsurface sampling.

C. Work Statement

The following actions will be performed:

- Continue to work on the revised closure plan for a December 15, 1993 delivery to Ecology and resolve any NODs.
- Interim stabilize the main pond and the B-3 Ditch.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.2.9.20 (PVB2)	RCRA 200 Area B(BP) Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
284	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010202	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Construct a bypass pipeline to divert waste water from the first lobe of the 216-B-3 Pond System to the second and third lobes (B and C lobes).

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

By routing the waste water through the pipeline and around the main pond to the B and C lobes, the main pond can be isolated, drained, and stabilized. This work will support Tri-Party Agreement Milestone M-17-10.

C. Work Statement

The following actions will be performed.

A fixed-price contractor will excavate the ditch, install the 30 inch pipeline and control structures and backfill. Construction will be completed by May 13, 1994.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.2.11.10 (PVS1)	RCRA 200 Area S(RO) Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
293	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010201	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

To develop an approved closure plan to complete the remediation of hexone storage tanks (216-S-141 and 276-S-142)

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

Remediation of the hexone site includes the exhumation, decontamination, and disposal of the tanks. Also included in the remedial activities are sampling, analysis, interim stabilization, and clean closure verification.

C. Work Statement

The following actions will be performed.

Closure plan was submitted to Ecology in November 1992 to satisfy Tri-Party Agreement Milestone M-20-27. Work is continueing to provide resolution to NODs comments. It is anticipated that the NOD cycles will continue in FY 1994.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.2.13.10 (PVU1)	RCRA 200 Area UP Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
303	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010201	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Develop a closure plan that will allow final remediation of the 216-U-12 Crib.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 216-U-12 Crib is a TSD unit located in OU 200-UP-2. Development of a closure plan to comply with Tri-Party Agreement Milestone M-20-37 and WAC 173-303.

C. Work Statement

The following actions will be performed.

Development of a closure strategy and plan will be initiated. Closure plan is to be submitted to Ecology by November 30, 1994. This will comply with Tri-Party Agreement Milestone M-20-37.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.2.15.10 (PVI1)	RCRA 200 Area IU Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
311	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010201	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Develop an approved closure plan that will, when implemented, cause permanent closure of this nonradioactive dangerous waste landfill (NRDWL).

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

This dangerous waste landfill is located in OU 200-IU-3. The landfill was used from 1975 to 1985 and received dangerous chemicals regulated under WAC 173-303. In addition, the landfill received asbestos waste materials.

C. Work Statement

The following actions will be performed:

- Continue to respond to NODs from Ecology
- Implement tracer tests
- Complete the installation of deep soil-gas probes between NRDWL and the SWL
- Issue final report for shallow probe soil-gas characterization.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.2.16.10 (PVF1)	RCRA 300 Area FF Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
316	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010201	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Develop an approved closure plan that will form the basis for the remediation and final closure of the 300 Areas Process Trenches.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 300 Area Process Trenches are located within the fuels fabrication area of the 300-FF-1 OU. Because this RCRA TSD unit is considered to be a possible source of groundwater contamination, the unit will undergo a separate closure/post closure action from the remedial action of the OU.

C. Work Statement

The following actions will be performed:

- Complete closure plan and submit to Ecology by August 15, 1994. Satisfies Tri-Party Agreement Milestone M-20-32.
- Respond to NODs from Ecology as required.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.4 (PA)	100-DR Operable Units	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
360	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
100-D Reactor area past-practice sites--remedial actions	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the Hanford Site ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

- Operable units included are as follows:
  - 100-DR-1
  - 100-DR-2
  - 100-DR-3.
- Total number of waste sites is 34.
- Total site example types are as follows:
  - Soil and groundwater
  - Trenches
  - Basins
  - Cribs
  - Burial grounds.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.4 (Continued) (PA)	100-DR Operable Units	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
360	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
100-D Reactor area past-practice sites--remedial actions	EW201030	

12. ELEMENT TASK DESCRIPTION

C. Work Statement

The following will be developed: a work plan, remedial investigation report, feasibility study report, low-priority sites proposed plan, IRM, ROD, IROD, and remedial design. The following actions will be performed: project management, source investigations, focused feasibility studies, risk assessments, vadose zone investigations, limited field investigations, groundwater investigation and monitoring, treatability studies, expedited response actions, remedial actions, and site closure.

Note: The work plan has been prepared and some characterization work has started (e.g., source characterization and vadose zone and groundwater monitoring well drilling).

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11 (11-84)

FORM APPROVED OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.4.1.10 (PA11)	100-DR-1 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
362	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the Hanford Site ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 100-DR-1 OU is located in the northern portion of the Hanford Site. The OU contains approximately 28 waste sites, which consists of cribs, trenches, french drains, solid waste burial grounds, and outfall structures. These waste sites received predominately liquid wastes from reactor operations. Contaminants of concern are primarily chromium, sodium dichromate, strontium-90, and tritium.

These sites will be characterized through the RI/FS process as defined per EPA guidance. Technical scope includes management, planning, field investigations, alternatives selection through focused feasibility studies, qualitative risk assessments, and preparation of data and evaluation reports. Assessment and characterization activities include efforts to describe the hydrologic and geologic settings, the characteristics, contents, and extent of contamination on and beneath the OU's. All actions lead to preparation of documentation that supports a ROD.

C. Work Statement

Continue 100-DR-1 remedial investigations per approved work plan and Descriptions of work. Validate and evaluate field sample data from five test pits and conduct surface GPR. Complete limited field investigation report and QRA review and comment incorporation. Issue qualitative risk assessment to regulators. Continue focused feasibility study on characterized waste sites based on sample analysis and data evaluation derived from investigations. Prepare focused feasibility study report and proposed plan and issue to regulators

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11 (11-84)

FORM APPROVED OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.4.2.10 (PA21)	100-DR-2 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
369	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the Hanford Site ER RA work scope consistent with the operable unit work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, procurement acquisition, utilities, engineering services, and subcontracts.

B. Technical Content

The 100-DR-2 OU is located in the northern portion of the Hanford Site. The OU contains approximately nine waste sites, which consists of cribs, trenches, french drains, solid waste burial grounds, and outfall structures. These waste sites received predominately liquid wastes from reactor operations. Contaminants of concern are primarily chromium, sodium dichromate, strontium-90, and tritium.

These sites will be characterized through the RI/FS process as defined per EPA guidance. Technical scope includes management, planning, field investigations, alternatives selection through focused feasibility studies, qualitative risk assessments, and preparation of data and evaluation reports. Assessment and characterization activities include efforts to describe the hydrologic and geologic settings, the characteristics, contents, and extent of contamination on and beneath the OU's. All actions lead to preparation of documentation that supports a ROD.

C. Work Statement

Complete 100-DR-2 work plan and issue to regulators to meet Tri-Party Agreement Milestone M-13-05. Revise work plan per DOE and regulator comments and gain regulator approval. Perform 100-DR-2 remedial investigations per approved work plan and DOWs. Remedial investigation activities will include surface geophysics. Submit samples and validate data to be included in qualitative risk assessment. Begin preparation of LFI. Complete focused feasibility study on characterized waste sites based on sample analysis and data evaluation from investigations. Begin preparation of focused feasibility study report and interim remedial measure/proposed plan for issuance to regulators.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11 (11-84)

FORM APPROVED OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.5 (PB)	100-BC Operable Units	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
379	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
100 B and C Reactor area past-practice sites--remedial actions	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

- Operable units included are as follows:
  - 100-BC-1
  - 100-BC-2
  - 100-BC-5
  - 100-IU-1.
- Total number of waste sites is 43.
- Total site example types are as follows:
  - Soil and groundwater
  - Trenches
  - Basins
  - Cribs
  - Burial grounds.

C. Work Statement

The following will be developed: a work plan, RI/FS, low-priority sites proposed plan, IRM, ROD, IROD, and remedial design. The following actions will be performed: project management, source investigations, focused feasibility studies, risk assessments, vadose zone investigations, limited field investigations, groundwater investigation and monitoring, treatability studies, expedited response actions, remedial actions, and site closure.

Note: Some work plans have been prepared and some source characterization work has started.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.5.1.10 (PB11)	100-BC-1 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
381	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 100-BC-1 OU is located in the northern portion of the Hanford Site. The OU contains approximately 32 waste sites, which consists of cribs, trenches, french drains, solid waste burial grounds, and outfall structures. These waste sites received predominately liquid wastes from reactor operations. Contaminants of concern are primarily chromium, sodium dichromate, strontium-90, and tritium.

These sites will be characterized through the RI/FS process as defined per EPA guidance. Technical scope includes management, planning, field investigations, alternatives selection through focused feasibility studies, qualitative risk assessments, and preparation of data and evaluation reports. Assessment and characterization activities include efforts to describe the hydrologic and geologic settings, and the characteristics, contents, and extent of contamination on and beneath the OU's. All actions lead to preparation of documentation that supports a ROD.

C. Work Statement

Continue 100-BC-1 remedial investigations per approved work plan and DOW's. Dig two confirmatory test pits and perform geophysics. Complete regulator review and comment incorporation into the LFI Report. Complete focused feasibility study on characterized waste sites based on sample analysis and data evaluation derived from investigations. Initiate preparation of focused feasibility study report and IRM/Proposed Plan and issue DOE-RL.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11 (11-84)

FORM APPROVED OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.5.2.10 (PB21)	100-BC-2 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
389	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 100-BC-2 OU is located in the northern portion of the Hanford Site. The OU contains approximately 11 waste sites, which consists of cribs, trenches, french drains, solid waste burial grounds, and outfall structures. These waste sites received predominately liquid wastes from reactor operations. Contaminants of concern are primarily chromium, sodium dichromate, strontium-90, and tritium.

These sites will be characterized through the RI/FS process as defined per EPA guidance. Technical scope includes management, planning, field investigations, alternatives selection through focused feasibility studies, qualitative risk assessments, and preparation of data and evaluation reports. Assessment and characterization activities include efforts to describe the hydrologic and geologic settings, and the characteristics, contents, and extent of contamination on and beneath the OU's. All actions lead to preparation of documentation that supports a record of decision.

C. Work Statement

Continue 100-BC-2 remedial investigations per approved work plan and DOWs. Complete sample analysis and sample validation. Initiate and complete preparation of LFI Report and QRA for issuance to DOE-RL. Initiate focused feasibility study on characterized waste sites based on sample analysis and data evaluation derived from investigations. Initiate focused feasibility study report and IRM/proposed plan for issuance to regulators.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.5.5.10 (PB51)	100-BC-5 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
394	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 100-BC-5 OU is located in the northern portion of the Hanford Site. This is a groundwater OU underlies the source OU's 100-BC-1, 100-BC-2, 100-BC-3, and 100-BC-4. The groundwater OU contaminants of concern are primarily chromium, sodium dichromate, strontium-90, and tritium. These waste sites received predominantly liquid wastes from reactor operations.

These sites will be characterized through the RI/FS process as defined per EPA guidance. Technical scope includes management, planning, field investigations, alternatives selection through focused feasibility studies, qualitive risk assessments, and preparation of data, and evaluation reports. Assessment and characterization activities include efforts to describe the hydrologic and geologic settings, the characteristics, contents, and extent of contamination on and beneath the OU's. All actions lead to preparation of documentation that supports a ROD.

C. Work Statement

Complete 100-BC-5 remedial investigations per approved work plan and DOW's. Collect biannual samples from 24 wells. Install two groundwater wells to fill data gaps and sample. Continue groundwater monitoring and perform required sample validation. Complete LFI Report and QRA regulator review and comment incorporation. Complete Focused Feasibility Study on characterized waste sites based on sample analysis and data evaluation derived from investigations. Initiate preparation of focused feasibility study report and IRM/proposed plan for DOE-RL review.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.5.6.20 (PB62)	100-IU-1 Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
402	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 100-IU-1 OU is located in the northern portion of the Hanford Site. This OU has two waste management sites, a burial ground and a pit. The burial ground is a former munitions cache; the pit might contain low-level contamination from a former equipment decontamination pit.

These sites will be remediated after sufficient information has been collected and analyzed to describe the extent and possible migration of the contaminates or when existing information is available, to recommend a remediation technique. After development of a proposed plan, the regulators will issue an action memorandum (for an ERA), an IROD (for an IRM), and/or a ROD (for final site cleanup). Technical scope includes management, planning, documentation, and implementation of remediation activities.

C. Work Statement

Complete remediation activities at the Riverland Rail Wash Pit. Complete documentation to close out site activities and remove waste from the NPL.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.6 (PC)	100-KR Operable Units	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
404	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
100 KE and KW Reactor area past-practice sites--remedial actions	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

- Operable units included are as follows:
  - 100-KR-1
  - 100-KR-2
  - 100-KR-3
  - 100-KR-4.
- Total number of waste sites is 37.
- Total site example types are as follows:
  - Soil and groundwater
  - Trenches
  - Basins
  - Cribs
  - Burial grounds.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.6 (Continued) (PC)	100-KR Operable Units	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
404	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
100 KE and KW Reactor area past-practice sites--remedial actions	EW201030	

12. ELEMENT TASK DESCRIPTION

C. Work Statement

The following will be developed: a work plan, remedial investigation report, feasibility study report, low-priority sites proposed plan, interim response measure plan, ROD, IROD, and remedial design. The following actions will be performed: project management, source investigations, focused feasibility studies, risk assessments, vadose zone investigations, limited field investigations, groundwater investigation and monitoring, treatability studies, expedited response actions, remedial actions, and site closure.

Note: Some work plans have been prepared and some source characterization work has started.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.6.1.10 (PC11)	100-KR-1 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
406	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 100-KR-1 OU is located in the northern portion of the Hanford Site. The OU contains approximately five waste sites, which consists of cribs, trenches, french drains, solid waste burial grounds, and outfall structures. These waste sites received predominately liquid wastes from reactor operations. Contaminants of concern are primarily chromium, sodium dichromate, strontium-90, and tritium.

These sites will be characterized through the RI/FS process as defined per EPA guidance. Technical scope includes management, planning, field investigations, alternatives selection through focused feasibility studies, qualitive risk assessments, and preparation of data and evaluation reports. Assessment and characterization activities include efforts to describe the hydrologic and geologic settings, and the characteristics, contents, and extent of contamination on and beneath the OU's. All actions lead to preparation of documentation that supports a ROD.

C. Work Statement

Complete 100-KR-1 intrusive field investigations to support the LFI report. FY 1994 field activities include surface GPR, install, and one test pit. Complete preparation of LFI report and issue to the regulators to meet Tri-Party Agreement Milestone M-15-10B. Complete preparation of the QRA. Conduct focused feasibility study on characterized waste sites based on sample analysis and data evaluation. Initiate preparation of focused feasibility study report and IRM/proposed plan.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.6.2.10 (PC21)	100-KR-2 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
412	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 100-KR-1 OU is located in the northern portion of the Hanford Site. The OU contains approximately five waste sites, which consists of cribs, trenches, french drains, solid waste burial grounds, and outfall structures. These waste sites received predominately liquid wastes from reactor operations. Contaminants of concern are primarily chromium, sodium dichromate, strontium-90, and tritium.

These sites will be characterized through the RI/FS process as defined per EPA guidance. Technical scope includes management, planning, field investigations, alternatives selection through focused feasibility studies, qualitive risk assessments, and preparation of data and evaluation reports. Assessment and characterization activities include efforts to describe the hydrologic and geologic settings, and the characteristics, contents, and extent of contamination on and beneath the OU. All actions lead to preparation of documentation that supports a record of decision.

C. Work Statement

Complete 100-KR-2 work plan and issue to the regulators. Revise work plan per DOE and regulator comments and gain regulator approval. Initiate 100-KR-2 remedial investigation per approved work plan and DOWs including intrusive and nonintrusive field investigations. Field activities include drilling one vadose, install three test pits, and perform surface GPR analysis.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.6.4.10 (PC41)	100-KR-4 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
423	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 100-KR-4 OU is located in the northern portion of the Hanford Site. This is a groundwater OU that underlies the source OU's 100-KR-1, 100-KR-2, and 100-KR-3. The groundwater OU contaminants of concern are primarily chromium, sodium dichromate, strontium-90, and tritium. These waste sites received predominantly liquid wastes from reactor operations.

These sites will be characterized through the RI/FS process as defined per EPA guidance. Technical scope includes management, planning, field investigations, alternatives selection through focused feasibility studies, qualitive risk assessments, and preparation of data and evaluation reports. Assessment and characterization activities include efforts to describe the hydrologic and geologic settings, and the characteristics, contents, and extent of contamination on and beneath the OUs. All actions lead to preparation of documentation that supports a ROD.

C. Work Statement

Complete 100-KR-4 remedial investigations per approved work plan and DOW's. Collect two rounds of groundwater samples (75 samples per round) and perform sample validation. Complete preparation of LFI report and issue to regulators to meet Tri-Party Agreement Milestone M-15-11B. Complete QRA. Conduct focused feasibility study on characterized waste sites based on sample analysis and data evaluation derived from investigations. Initiate preparation of focused feasibility study report and IRM/proposed plan and issue to DOE-RL.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.7 (PD)	100-FR Operable Units	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
428	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
100 F Reactor area past-practice sites--remedial actions	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

- Operable units included are as follows:
  - 100-FR-1
  - 100-FR-2
  - 100-FR-3
  - 100-IU-3.
- Total number of waste sites is 30.
- Total site example types are as follows:
  - Soil and groundwater
  - Trenches
  - Basins
  - Cribs
  - Burial grounds.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.7 (Continued) (PD)	100-FR Operable Units	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
428	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
100 F Reactor area past-practice sites--remedial actions	EW201030	

12. ELEMENT TASK DESCRIPTION

C. Work Statement

The following will be developed: a work plan, remedial investigation report, feasibility study report, low-priority sites proposed plan, interim response measure plan, ROD/IROD, and remedial design. The following actions will be performed: project management, source investigations, focused feasibility studies, risk assessments, vadose zone investigations, limited field investigations, groundwater investigation and monitoring, treatability studies, ERAs, remedial actions, and site closure.

Note: Some work plans have been prepared and some source characterization work has started.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.7.1.10 (PD11)	100-FR-1 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
430	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 100-FR-1 OU is located in the northern portion of the Hanford Site. The OU contains approximately 28 waste sites which consists of cribs, trenches, french drains, solid waste burial grounds, and outfall structures. These waste sites received predominately liquid wastes from reactor operations. Contaminants of concern are primarily chromium, sodium dichromate, strontium-90, and tritium.

These sites will be characterized through the RI/FS process as defined per EPA guidance. Technical scope includes management, planning, field investigations, alternatives selection through focused feasibility studies, qualitative risk assessments, and preparation of data and evaluation reports. Assessment and characterization activities include efforts to describe the hydrologic and geologic settings and the characteristics, contents, and extent of contamination on and beneath the OU. All actions lead to preparation of documentation that supports a ROD.

C. Work Statement

Complete 100-FR-1 remedial investigations per approved work plan and DOWs including surface sampling, soil gas surveys, and geophysics. Submit sample validation to Regulators to meet Tri-Party Agreement Milestone M-15-13A. Initiate and complete LFI report for issuance to regulators to meet Tri-Party Agreement Milestone M-15-13B.

Complete QRA. Continue Focused Feasibility Study on characterized waste sites based on sample analysis and data evaluation derived from investigations. Initiate preparation of focused feasibility study report and IRM/proposed plan.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11 (11-84)

FORM APPROVED OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.7.3.10 (PD31)	100-FR-3 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
439	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 100-FR-3 OU is located in the northern portion of the Hanford Site. This is a groundwater OU that underlies the source OUs 100-FR-1 and 100-FR-2. The groundwater OU contaminants of concern are primarily chromium, sodium dichromate, strontium-90, and tritium. These waste sites received predominantly liquid wastes from reactor operations.

These sites will be characterized through the RI/FS process as defined per EPA guidance. Technical scope includes management, planning, field investigations, alternatives selection through focused feasibility studies, qualitive risk assessments, and preparation of data, and evaluation reports. Assessment and characterization activities include efforts to describe the hydrologic and geologic settings, and the characteristics, contents, and extent of contamination on and beneath the OU. All actions lead to preparation of documentation that supports a record of decision.

C. Work Statement

Complete 100-FR-3 remedial investigations per approved work plan and DOW's. Drill three confirmatory wells; continue groundwater monitoring; and conduct two rounds of samples (21 wells) and sample validation. Complete preparation of LFI report and issue to regulators to meet Tri-Party Agreement Milestone M-15-13F. Complete QRA. Complete focused feasibility study on characterized waste sites based on sample analysis and data evaluation derived from investigations. Initiate preparation of focused feasibility study report and IRM/proposed plan.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-93RL12110
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.7.4.10 (PD41)	100-IU-3 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
445	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW201030	

12. ELEMENT TASK DESCRIPTION

Objective:

The objective of this task is to complete the ER RA program consistent with the Tri-Party Agreement and subsequent AIP for the assessment of 100-IU-3, located in the North Slope area of the Hanford Site.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform assessment of the 100-IU-3 (North Slope). Hazards to be assessed include environmental hazards, Nike missile sites, anti-aircraft sites, homestead sites, military landfills, acid disposal pits and trenches, 2,4-D Burial Site, UST's, and physical hazards such as open cisterns, surface debris, concrete footings, exposed rebar, subsurface shelters, artillery firing range, and ordnance contamination.

C. Work Statement

The following actions will be performed.

- Perform USACE project and technical management of assessment
- Perform assessment and characterization, including ordnance survey
- Determine physical hazards to be removed
- Determine environmental hazards to be remediated.

Note: An AIP targets remediation of the entire North Slope area by 4th quarter FY 1994.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-93RL12110
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.7.4.10.3 (PD413)	100-IU-3 North Slope Characterization	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
445a	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

Objective:

The objective of this task is to complete the ER RA work scope consistent with the Tri-Party Agreement and subsequent AIP for the characterization of 100-IU-3, located in the North Slope area of the Hanford Site.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform characterization of the 100-IU-3 (North Slope). Hazards to be characterized include environmental hazards, Nike missile sites, anti-aircraft sites, homestead sites, military landfills, acid disposal pits and trenches, 2,4-D Burial Site, UST's, and physical hazards such as open cisterns, surface debris, concrete footings, exposed rebar, subsurface shelters, artillery firing range, and ordnance contamination.

C. Work Statement

The following actions will be performed.

- Perform USACE project and technical management of characterization
- Perform characterization, including historical research, cultural resource review, flora and fauna survey, site inspections, and environmental sampling
- Perform ordnance and explosive waste survey, including archive and record search, aerial reconnaissance, site investigation, and environmental sampling
- Determine physical hazards to be removed
- Determine environmental hazards to be remediated.

Note: An AIP targets remediation of the entire North Slope area by 4th quarter FY 1994.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-93RL12110
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.7.4.20 (PD42)	100-IU-3 North Slope Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
446	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the Hanford Site ER RA program consistent with the Tri-Party Agreement and subsequent Agreements in Principle for the remediation of 100-IU-3, located in the North Slope area of the Hanford Site.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform remediation of the 100-IU-3 (North Slope). Remediation will be per approved assessment determinations of hazards. Possible hazards to be remediated include environmental hazards, Nike missile sites, anti-aircraft sites, homestead sites, military landfills, acid disposal pits and trenches, 2,4-D Burial Site, UST's, and physical hazards such as open cisterns, surface debris, concrete footings, exposed rebar, subsurface shelters, artillery firing range, and ordnance contamination.

C. Work Statement

The following actions will be performed.

- Perform USACE project and technical management of remediation
- Perform ordnance and explosive waste removal
- Perform remediation ERA design
- Perform remediation implementation and appropriate clean-up work.

Note: An Agreement in Principal targets remediation of the entire North Slope area by 4th quarter FY 1994.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT Hanford Environmental Restoration/ USACE	2. DATE December 22, 1993	3. IDENTIFICATION NUMBER DE-AI06-90RL12074 DE-AT06-93RL12110
4. WBS ELEMENT CODE 2.1.7.4.20.1 (PD421)	5. WBS ELEMENT TITLE 100-IU-3 North Slope Design	
6. INDEX LINE NO. 446a	7. REVISION NO. AND AUTHORIZATION Not Applicable	8. DATE Not Applicable
9. APPROVED CHANGES Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	11. BUDGET AND REPORTING NUMBER EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA program consistent with the Tri-Party Agreement and any subsequent Agreements in Principle for the ERA design of 100-IU-3, located in the North Slope Area.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform ERA design of the 100-IU-3 (North Slope). The ERA design will determine hazards. Possible hazards to be remediated include environmental hazards; Nike missile sites; anti-aircraft sites; homestead sites; military landfills; acid disposal pits and trenches; 2,4-D Burial Site; UST's; and physical hazards such as open cisterns, surface debris, concrete footings, exposed rebar, subsurface shelters, artillery firing range, and ordnance contamination.

C. Work Statement

The following actions will be performed:

- Perform USACE project and technical management of ERA design
- Perform remediation ERA design, including historical research, cultural resource review, flora and fauna survey, site inspections, and environmental sampling
- Perform ordnance and explosive waste survey, including archive and record search, aerial reconnaissance, site investigation, and environmental sampling
- Determine physical hazards to be removed
- Determine environmental hazards to be remediated.

Note: An Agreement in Principal targets remediation of the entire North Slope area by the fourth quarter FY 1994.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-93RL12110
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.7.4.20.2 (PD422)	100-IU-3 North Slope - ERA	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
447	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the Hanford Site ER RA program consistent with the Tri-Party Agreement and subsequent Agreements in Principle for the remediation implementation of 100-IU-3, located in the North Slope area of the Hanford Site.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform remediation implementation of the 100-IU-3 (North Slope). Remediation implementation will be per approved assessment determinations of hazards and ERA design. Possible hazards to be remediated include environmental hazards, Nike missile sites, anti-aircraft sites, homestead sites, military landfills, acid disposal pits and trenches, 2,4-D Burial Site, UST's, and physical hazards such as open cisterns, surface debris, concrete footings, exposed rebar, subsurface shelters, artillery firing range, and ordnance contamination.

C. Work Statement

The following actions will be performed.

- Perform USACE project and technical management of remediation implementation.
- Perform ordnance and explosive waste removal.
- Perform remediation implementation and appropriate clean-up work.

Note: An Agreement in Principal targets remediation of the entire North Slope area by 4th quarter FY 1994.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.8 (PE)	100-HR Operable Units	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
448	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
100 H Reactor area past-practice sites--remedial actions	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

- Operable units included are as follows:
  - 100-HR-1
  - 100-HR-2
  - 100-HR-3
  - 100-IU-2
  - 100-IU-4
  - 100-IU-5.
- Total number of waste sites is 28.
- Total site example types are as follows:
  - Soil and groundwater
  - Trenches
  - Basins
  - Cribs
  - Burial grounds.

C. Work Statement

The following will be developed: a work plan, remedial investigation report, feasibility study report, low-priority sites proposed plan, IRM plan, ROD, IROD, and remedial design. The following actions will be performed: project management, source investigations, focused feasibility studies, risk assessments, vadose zone investigations, limited field investigations, groundwater investigation and monitoring, treatability studies, expedited response actions, remedial actions, and site closure.

Note: Some work plans have been prepared and some source characterization work has started.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.8.1.10 (PE11)	100-HR-1 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
450	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 100-HR-1 OU is located in the northern portion of the Hanford Site. The OU contains approximately 13 waste sites, which consists of cribs, trenches, french drains, solid waste burial grounds, and outfall structures. These waste sites received predominately liquid wastes from reactor operations. Contaminants of concern are primarily chromium, sodium dichromate, strontium-90, and tritium.

These sites will be characterized through the RI/FS process as defined per EPA guidance. Technical scope includes management, planning, field investigations, alternatives selection through focused feasibility studies, qualitive risk assessments, and preparation of data and evaluation reports. Assessment and characterization activities include efforts to describe the hydrologic and geologic settings, and the characteristics, contents, and extent of contamination on and beneath the OU. All actions lead to preparation of documentation that supports a ROD.

C. Work Statement

Continue 100-HR-1 intrusive and nonintrusive confirmatory field investigations including soil gas surveys and geophysics. Complete LFI report and qualitative risk assessment regulatory review and comment incorporation. Conduct focused feasibility study on characterized waste sites based on sample analysis and data evaluation derived from investigations. Complete preparation of focused feasibility report and IRM/proposed plan and issue to regulators to meet Tri-Party Agreement Milestones M-15-C and M-05-D.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.8.2.10 (PE21)	100-HR-2 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
456	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 100-HR-2 OU is located in the northern portion of the Hanford Site. The OU contains approximately nine waste sites, which consists of cribs, trenches, french drain, solid waste burial grounds, and outfall structures. These waste sites received predominately liquid wastes from reactor operations. Contaminants of concern are primarily chromium, sodium dichromate, strontium-90, and tritium.

These sites will be characterized through the RI/FS process as defined per EPA guidance. Technical scope includes management, planning, field investigations, alternatives selection through focused feasibility studies, qualitive risk assessments, and preparation of data and evaluation reports. Assessment and characterization activities include efforts to describe the hydrologic and geologic settings and the characteristics, contents, and extent of contamination on and beneath the OU. All actions lead to preparation of documentation that supports a ROD.

C. Work Statement

Incorporate regulator comments for 100-HR-2 work plan final approval of scope of work and schedule. Continue 100-HR-2 remedial investigations per approved work plan and DOWs. Work will include intrusive and nonintrusive field investigations, geophysics, soil gas surveys, and surface radiation surveys. Complete preparation of LFI report and qualitative risk assessment and issue to regulators. Conduct focused feasibility study on characterized waste sites based on sample analysis and data evaluation derived from investigations. Initiate preparation on focused feasibility report and IRM/proposed plan.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.8.3.10 (PE31)	100-HR-3 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
463	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 100-HR-3 OU is located in the northern portion of the Hanford Site. This is a groundwater OU that underlies the source OU's 100-HR-1, 100-HR-2, 100-HR-3, and 100-HR-4. The groundwater OU contaminants of concern are primarily chromium, sodium dichromate, strontium-90, and tritium. These waste sites received predominantly liquid wastes from reactor operations.

These sites will be characterized through the RI/FS process as defined per EPA guidance. Technical scope includes management, planning, field investigations, alternatives selection through focused feasibility studies, qualitive risk assessments, and preparation of data and evaluation reports. Assessment and characterization activities include efforts to describe the hydrologic and geologic settings, and the characteristics, contents, and extent of contamination on and beneath the OU. All actions lead to preparation of documentation that supports a ROD.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.8.3.10 (Continued) (PE31)	100-HR-3 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
463	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

C. Work Statement

Complete 100-HR-3 remedial investigations per approved work plan and DOW's. Continue groundwater monitoring, drill four additional monitor wells, and perform aquifer tests. Complete preparation of LFI report and issue to regulators to meet Tri-Party Agreement Milestone M-15-06A. Complete qualitative risk assessment. Conduct focused feasibility study on characterized waste sites based on sample analysis and data evaluation derived from investigations. Complete preparation of focused feasibility study report and IRM/proposed plan and issue to regulators to meet Tri-Party Agreement Milestones M-15-06C and M-15-06D. Complete bench scale treatability tests on biodenitrification and chemical reduction precipitation to support Milestone M-15-06B. Initiate procurement of pilot-scale pump and treat system, mobilize system, and conduct pilot-scale field activities. Prepare documentation of field results.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.8.6.20 (PE62)	100-IU-5 Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
477	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 100-IU-5 OU is located in the northern portion of the Hanford Site. This OU has one waste site, a crib. The crib potentially contains nitric and hydrofluoric acids.

This site will be remediated after sufficient information has been collected and analyzed to describe the extent and possible migration of the contaminates or when existing information is available to recommend a remediation technique. After development of a proposed plan, the regulators will issue an action memorandum (for an ERA), an IROD (for an IRM), and/or a ROD (for final site cleanup). Technical scope includes management, planning, documentation, and implementation of remediation activities.

C. Work Statement

Prepare and issue an EE/CA to the regulators based on the results of preliminary characterization activities. Initiate field cleanup activities in accordance with the resulting memorandum.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.8.7.10 (PE71)	100 Area Common Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
481	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The technical content includes management, planning, investigations, alternatives, selection, and documentation to support those activities common to the 100 Areas. Additionally, feasibility studies, treatability tests, and risk assessment activities are included.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.8.7.10 (Continued) (PE71)	100 Area Common Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
481	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

C. Work Statement

Provide project management, quality assurance, safety and environmental protection support to the 100 Areas OU activities. Project management includes remedial investigation coordinators, management support, training, travel, relocation expenses, and items such as review boards and evaluation teams that relate to the 100 Areas specific remediation activities. Complete 100 Areas history reports, provide for general safety, environmental handling of IDW, lab assessments for contract review, sample disposal case. Conduct risk assessment activities to support ongoing RI/FS risk assessment work, groundwater modeling, and vadose zone modeling. In addition, efforts will be required to maintain and respond to lessons learned for the baseline risk assessment methodology. A methodology for risk evaluation of remedial alternatives for cleanup will be completed for DOE-RL review the end of FY 1993. Revisions of the alternatives in response to DOE-RL and regulatory comments will be done during FY 1994.

Conduct intrusive and nonintrusive characterization activities of the 100 Areas. These activities will include (if deemed necessary by the DOE and regulators) ecological sampling activities for ecological risk assessment and NRDA. Complete sediment sampling documents, and incorporate public comments on the Columbia River impact evaluation plan. Perform cultural resources review for field investigation and determination of site stability. Complete flux monitoring studies of the Columbia River. Complete chromium speciation studies. Review non-Hanford Site contamination sources and characterize if necessary. Conduct Columbia River surface water monitoring (as part of PNL's Sitewide monitoring program). Model surface water dispersion. Drill four additional groundwater wells to fill data gaps and install groundwater monitoring equipment. Revise 100 Areas feasibility studies 1 and 2 reports per DOE and regulator comments. Update 100 Areas interim remedial measure plans in accordance with most recent evaluation of waste site selection for remediation.

Complete excavation treatability test activities initiated in FY 1993 per 100 Areas Excavation Treatability Test Plan (DOE/RL-93-04). This treatability test is being conducted to support the 100-HR-1 Tri-Party Agreement Milestone M-15-05B. Complete laboratory soil washing tests and issue test reports to support the 100-BC-1 Tri-Party Agreement Milestone M-15-08C. Prepare procedures and other supporting documentation and conduct a pilot-scale treatability test to support Tri-Party Agreement Milestone M-15-07B for the 100-DR-1 OU. Prepare test plan, procedures, SOW, and other supporting documentation, and conduct treatability tests for soil and buried waste. Activities will be negotiated with regulators and DOE and be accomplished per schedules that will be developed for new OU work plans (e.g., 100-HR-2, 100-DR-2, and 100-BC-2 OUs). Activities will include collecting field samples and conducting a combination of laboratory and pilot-scale treatability test.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.3 (PF)	SST Closures	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
320	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The object of this effort is to issue the final report on findings of the T-106 Borehole in response to GAO Audit GAO/RCED-89-157.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The drilling of Borehole 299-W10-196 was completed in FY 1993. This borehole was drilled in response to GAO Audit RAO/RCED-89-157 at SST T-106. A report, initiated in FY 1993 documenting the findings, will be completed in FY 1994 to closeout the audit finding. The scope and cost to remediate the borehole is not included.

C. Work Statement

- Issue final report of findings of the T-106 Borehole in response to GAO audit GAO/RCED-89-157.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.3.7.10 (PFT1)	200-TP-5 and 200-TP-6 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
347	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The object of this effort is to issue the final report on findings of the T-106 Borehole in response to GAO Audit GAO/RCED-89-157.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The drilling of Borehole 299-W10-196 was completed in FY 1993. This borehole was drilled in response to GAO Audit RAO/RCED-89-157 at SST T-106. A report, initiated in FY 1993 documenting the findings, will be completed in FY 1994 to closeout the audit finding. The scope and cost to remediate the borehole is not included.

C. Work Statement

- Issue final report of findings of the T-106 Borehole in response to GAO audit GAO/RCED-89-157.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11 (11-84)

FORM APPROVED OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT Hanford Environmental Restoration	2. DATE December 22, 1993	3. IDENTIFICATION NUMBER DE-AC06-87RL10930
4. WBS ELEMENT CODE 2.1.9 (PG)	5. WBS ELEMENT TITLE 100-NR Oprable Units	
6. INDEX LINE NO. 488	7. REVISION NO. AND AUTHORIZATION Not applicable	8. DATE Not applicable
9. APPROVED CHANGES Not applicable		
10. SYSTEM DESIGN DESCRIPTION 100 N Reactor area past-practice sites--remedial actions	11. BUDGET AND REPORTING NUMBER EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU Work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

- Operable units included are as follows:
  - 100-NR-1
  - 100-NR-2.
- Total number of waste sites is 57.
- Total site example types are as follows:
  - Soil and groundwater
  - Trenches
  - Basins
  - Cribs
  - Burial grounds.

C. Work Statement

The following will be developed: a work plan, remedial investigation report, feasibility study report, low-priority sites proposed plan, IRM plan, ROD, interim rod, and remedial design. The following actions will be performed: project management, source investigations, focused feasibility studies, risk assessments, vadose zone investigations, LFI, groundwater investigation and monitoring, treatability studies, expedited response actions, remedial actions, and site closure.

Note: Some work plans have been prepared and some source characterization work has started.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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DOE F1332.11 (11-84)

FORM APPROVED OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.9.1.10 (PG11)	100-NR-1 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
490	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU Work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 100-NR-1 OU is located in the northern portion of the Hanford Site. This OU contains approximately 57 waste sites, which consists of cribs, trenches, french drains, solid waste burial grounds, and outfall structures. These waste sites received predominately liquid wastes from reactor operations. Contaminants of concern are primarily chromium, sodium dichromate, strontium-90, and tritium.

These sites will be characterized through the RI/FS process as defined per EPA guidance. Technical scope includes management, planning, field investigations, alternatives selection through focused feasibility studies, qualitive risk assessments, and preparation of dates and evaluation reports. Assessment and characterization activities include efforts to describe the hydrologic and geologic settings, and the characteristics, contents, and extent of contamination on and beneath the OU. All actions lead to preparation of documentation that supports a ROD.

C. Work Statement

Finalize and issue 100-NR-1 work plan ensuring program integration with D&D activities and ERA or IRM at N-Springs. Continue 100-NR-1 remedial investigations per approved work plan and DOWs. Prepare a LFI report and QRA and issue to regulators. Initiate focused feasibility study on characterized waste sites based on sample analysis and data evaluation derived from investigations. Initiate preparation of focused feasibility study report and IRM/proposed plan.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.9.2.10 (PG21)	100-NR-2 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
498	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 100-NR-2 OU is located in the northern portion of the Hanford Site. This is a groundwater OU that underlies the source OU 100-NR-1. These waste sites received predominantly liquid wastes from reactor operations. The groundwater OU contaminants of concern are primarily chromium, sodium dichromate, strontium-90, and tritium.

These sites will be characterized through the RI/FS process as defined per EPA guidance. Technical scope includes management, planning, field investigations, alternatives selection through focused feasibility studies, qualitive risk assessments, and preparation of data and evaluation reports. Assessment and characterization activities include efforts to describe the hydrologic and geologic settings and the characteristics, contents, and extent of contamination on and beneath the OU. All actions lead to preparation of documentation that supports a ROD.

C. Work Statement

Finalize 100-NR-2 work plan ensuring program integration with D&D activities and ERA or IRM at N-Springs. Continue 100-NR-2 remedial actions per approved work plan and DOWs. Conduct groundwater monitoring, two rounds of sampling (20 wells), and sample validation. Prepare LFI report and QRA and issue to regulators. Conduct a focused feasibility study on characterized waste sites based on sample analysis and data evaluation derived from investigation. Initiate preparation of focused feasibility study report and IRM/proposed plan.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.9.2.20 (PG22)	100-NR-2 Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
504	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

Technical scope includes the ERA at 100-NR-2 OU. This action is to mitigate offsite contamination (primarily strontium-90 and tritium) from the 1301-N and 1325-N Cribs. These cribs predominately received approximately 1.4 million gallons of liquid waste. This waste site commonly is known as N-Springs.

C. Work Statement

Revise ERA proposal for N-Springs. Prepare an RFP and award contract. Scope of work will be based on the final preferred alternative as outlined in the ERA proposal. Prepare safety documentation to assess potential hazards to the public, site workers, and environment during the process of remediation.

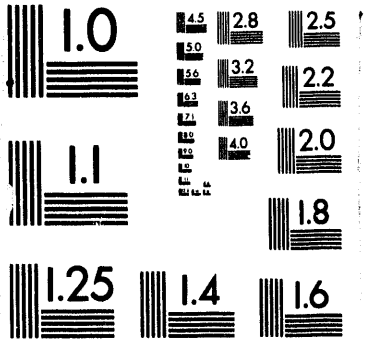
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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11 (11-84)

FORM APPROVED OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	5. WBS ELEMENT TITLE	
2.1.10 (PL)	200-BP Operable Units	
6. INDEX LINE NO.	7. REVISION NO. AND AUTHORIZATION	8. DATE
506	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	11. BUDGET AND REPORTING NUMBER	
200 B Plant processing area past-practice sites--remedial actions	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

- Operable units included are as follows:

  - 200-BP-1 - 200-BP-6
  - 200-BP-2 - 200-BP-8
  - 200-BP-3 - 200-BP-9
  - 200-BP-4 - 200-BP-10
  - 200-BP-5 - 200-BP-11.

- Total number of waste sites is 128.

- Total site example types are as follows:

  - Soil and groundwater
  - Trenches
  - Basins
  - Cribs
  - Burial grounds.

C. Work Statement

The following will be developed: a work plan, remedial investigation report, feasibility study report, low-priority sites proposed plan, IRM plan, ROD, IROD, and remedial design. The following actions will be performed: project management, source investigations, focused feasibility studies, risk assessments, vadose zone investigations, limited field investigations, groundwater investigation and monitoring, treatability studies, ERAs, remedial actions, and site closure.

Note: Some work plans have been prepared and some source characterization work has started.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.10.1.10 (PL11)	200-BP-1 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
508	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

The cost content includes the following types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 200-BP-1 OU is located in the central area of the Hanford Site (200 East). This OU received predominately liquid waste from B-Plant. This OU contains no containment structures (i.e., tanks) and predominately cribs, ditches, trenches, ponds, and spills. The 14 waste sites within this OU contain contaminates consisting predominately of strontium, cobalt, technetium, uranium, nitrate, and cyanide.

These sites will be characterized through the RI/FS studies process as defined per EPA guidance. Contaminates of concern are considered to be mixed wastes. Technical scope includes management, planning, field investigations, alternatives selection through focused feasibility studies, qualitative risk assessments, and preparation of reports to support a ROD.

C. Work Statement

Complete construction of the Hanford Prototype Barrier over the B-57 Crib and prepare a constructability report. Complete the feasibility study 1, 2, and 3 report incorporating regulator comments. Prepare a proposed plan for remediation using the selected remedial action.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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DOE F1332.11
(11-84)

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OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.10.1.20 (PL12)	200-BP-1 Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
512	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 200-BP-1 OU is located in the central area of the Hanford Site (200 East). This OU received predominately liquid waste from B-Plant. This OU contains no containment structures (i.e., tanks) and predominately cribs, ditches, trenches, ponds, and spills. The 14 waste sites within this OU contain contaminates consisting predominately of strontium, cobalt, technetium, uranium, nitrate, and cyanide.

These sites will be remediated after sufficient information has been collected and analyzed to describe the extent and possible migration of the contaminates or when existing information is available to recommend a remediation technique. After development of a proposed plan, the regulators will issue an action memorandum (for an ERA), an IROD (for an IRM), and/or a ROD (for final site cleanup). Technical scope includes management, planning, documentation, and implementation of remediation activities.

C. Work Statement

Award a contract for construction of the final remedy in accordance with the ROD expected from the regulators in December 1993.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.10.5.10 (PL51)	200-BP-5 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
524	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 200-BP-5 OU is located in the northern portion of the Hanford Site (200 East) and recently has been designated as a groundwater OU containing contaminants consisting predominantly of strontium, cobalt, technetium, uranium, nitrate, and cyanide.

This OU will be evaluated through the past practice strategy process. Contaminates of concern are considered to be mixed wastes. Technical scope includes management, planning, field investigations, alternatives selection through focused feasibility studies, qualitative risk assessments, and preparation of reports to support a ROD.

C. Work Statement

Prepare and issue a treatability test plan for the 200-BP-5 OU using the 200 East groundwater AAMS report recommendations as a base. The treatability test will be issued to the regulators in January 1994. A pilot-scale treatability test will commence in August 1994 and continue through the remainder of the fiscal year. Conduct semiannual monitoring of groundwater from the wells originally co-structured during the 200-BP-1 RI. These data will be used to monitor cesium and cyanide in the groundwater.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.10.10.10 (PLA1)	200-BP-11 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
542	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 200-BP-1 OU is located in the central area of the Hanford Site (200 East). This OU received predominately liquid wastes from B-Plant. This OU contains no containment structures (i.e., tanks) and predominately cribs, ditches, trenches, ponds, and spills. The 14 waste sites within this OU contain contaminates consisting predominately of strontium, cobalt, technetium, uranium, nitrate, and cyanide.

These sites will be characterized through the past practice strategy process as defined per EPA guidance. Contaminates of concern are considered to be mixed wastes. Technical scope includes management, planning, field investigations, alternatives selection through focused feasibility studies, qualitative risk assessments, and preparation of reports to support a ROD.

C. Work Statement

Finalize preparation of a LFI work plan (actually a work/closure plan) using the B Plant AAMS report recommendations as a base. This includes integrating the closure plan for the main B-Pond and accompanying ditch into the 200-BP-11 OU. Preparation will support issuance of a work plan to the regulators in April 30, 1994 per TPA Milestone M-13-07. Initiate characterization at the 200-BP-11 OU per the work plan.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.10.11.10 (PLB1)	200 Area Common Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
548	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The technical scope includes management, planning investigation alternatives, selection, and documentation to support those activities common to the 200 Areas. Also within the scope is conducting and implementing those investigations/programs common to the 200 Areas.

C. Work Statement

Conduct required inspections and maintenance of storage facilities and drums containing investigation derived waste (IDW) generated in support of the ER characterization program in the 200 Areas. The inspections, records, and facilities are to be conducted/maintained in accordance with procedures agreed to in the Tri-Party Agreement and implemented via EII 4.3. Complete the 200 Areas Ecological study started in FY 1993 and issue a summary report. Complete the pipeline to the 200 Area Effluent Treatment Facility started in FY 1993.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.10.11.20 (PLB2)	200 Area General Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
551	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010302	

12. ELEMENT TASK DESCRIPTION

Objective:

The objective of this task is to complete the ER RA program consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials equipment, utilities, engineering services, and subcontracts. Note: The construction portion of this scope will be funded with FY 1993 CENRTC carryover funding.

B. Technical Content

The technical scope includes management and construction of a six-inch pipeline trench as part of Project W-094H.

C. Work Statement

Provide WHC Project Management support to the project to install a six-inch pipeline trench to be excavated as part of Project W-049H. Complete installation of a six-inch pipeline in pipeline trenches to be excavated as part of Project W-049H, "200 Area Treated Effluent Disposal Facility." This pipeline will be available to convey groundwater from the vicinity of W-049H pump station to 200 West to the vicinity of the C-018H Effluent Treatment Facility in 200 East.

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U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.12 (PN)	200-PO Operable Units	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
558	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

- Operable units included are as follows:
  - 200-PO-1
  - 200-PO-2
  - 200-PO-4
  - 200-PO-5
  - 200-PO-6.
- Total number of waste sites identified is 161.
- Total site example types are as follows:
  - Soil and groundwater
  - Septic tanks
  - Ash pits
  - Cribs.

C. Work Statement

The following will be developed: a work plan LFI report, focused feasibility study report, IRM plan, ROD, IROD, and remedial design. The following actions will be performed: project management, source investigations, focused feasibility studies, risk assessments, vadose zone investigations, LFI, groundwater investigation and monitoring, treatability studies, ERAs, remedial actions, and site closure.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.12.1.10 (PN11)	200-PO-1 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
560	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 200-PO-1 OU located in the 200 East Area received predominately liquid waste from the PUREX plant and is designated as a groundwater OU. The contaminates are predominantly tritium and nitrate.

These sites will be characterized through the RI/FS process as defined per EPA guidance. Contaminates of concern are considered to be mixed w ste. Technical scope includes management planning, field investigations, remedial alternative selection through focused feasibility studies, qualitative risk assessment, and preparation of reports to support ROD.

C. Work Statement

Initiate preparation of a LFI work plan using the PUREX AAMS report recommendations as a base. Preparation activities will support issuance of a draft work plan to the regulators in August 1994.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.16 (PT)	200-UP Operable Units	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
603	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
200 processing area U Plant's past-practice sites--remedial actions	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

- Operable units included are as follows:
  - 200-UP-1
  - 200-UP-2.
- Total number of waste sites is 51
- Total site example types are as follows:
  - Soil and groundwater
  - Ponds
  - Trenches
  - Cribs
  - Ditches.

C. Work Statement

The following will be developed: a work plan, LFI report, feasibility study report, proposed plan, ROD, IROD, and remedial design. The following actions will be performed: project management, source investigations, focused feasibility studies, risk assessments, vadose zone investigations, LFI, groundwater investigation and monitoring, treatability studies, remedial actions, and site closure.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.16.1.10 (PT11)	200-UP-1 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
605	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 200-UP-1 OU is located in the 200 West Area and recently has been designated as a groundwater OU containing contaminants consisting of uranium and technetium.

This OU will be evaluated through the past-practice strategy process. Contaminates of concern are considered to be mixed waste. Technical scope includes management, planning, field investigations, remediel alternatives selection through focused feasibility studies, qualitative risk assessments, and preparation of reports to support a ROD.

C. Work Statement

Revise the 200-UP-1 groundwater LFI work plan (or equivalent) using the U Plant and 200 West Area groundwater AAMS report recommendations and regulator and public comments as a base. Complete incorporation of comments and issue final work plan containing negotiated scope and schedule. Additionally, initiate a pilot-scale treatability test of the uranium and technetium (primary contaminants) found in the groundwater. The test will commence in March 1994 and will continue for the remainder of the FY.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.16.2.10 (PT21)	200-UP-2 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
613	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 200-UP-2 OU is located in the 200 West Area and has received predominately liquid waste from U Plant. This OU contains no contaminated structures (i.e., tanks) and is predominately cribs, ditches, trenches, ponds, and spills. The 38 waste sites within this OU contain contaminates consisting predominately of strontium, technetium, carbon tetrachloride, and tritium.

These sites will be characterized through the past-practice strategy process as defined per EPA guidance. Contaminates of concern are considered to be mixed waste. Technical scope includes management, planning, field investigations, alternatives selection through focused feasibility studies, qualitative risk assessments, and preparation of reports to support a ROD.

C. Work Statement

Conduct characterization activities at the 200-UP-2 OU in accordance with the approved work plan and schedule. The work will be at the high priority LFI sites (U-1, U-4, U-8, and U-12 cribs and U-Pond System). The work will consist of surface radiation surveys and potential associated surface sampling, borehole drilling and sampling activities, test pit sampling activities, and spectral logging activities adjacent to the sites. Preparation of a LFI report will begin based on data gathered during characterization efforts.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.17 (PU)	200-_P Operable Units	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
618	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
200 processing area Z Plant's past-practice sites--remedial actions	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

- Operable units included are as follows:
  - 200-ZP-1
  - 200-ZP-2
  - 200-ZP-3.
- Total number of waste sites is 46
- Total site example types are as follows:
  - Soil and groundwater
  - Trenches
  - Cribs
  - Burial grounds.

C. Work Statement

The following will be developed: a work plan, LFI report, feasibility study report, proposed plan, ROD, ROD, and remedial design. The following actions will be performed: project management, source investigations, focused feasibility studies, risk assessments, vadose zone investigations, LFI, groundwater investigation and monitoring, treatability studies, ERAs, remedial actions, and site closure.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.17.1.10 (PU11)	200-ZP-1 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
620	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 200-ZP-1 OU is located in the 200 West Area and recently has been designated as a groundwater OU containing contaminants consisting of carbon tetrachloride, trichloroethylene, and chloroform.

This OU will be evaluated through the past-practice strategy process. Contaminates of concern are considered to be mixed waste. Technical scope includes management, planning, field investigations, remedial alternatives selection through focused feasibility studies, qualitative risk assessments, and preparation of reports to support a ROD.

C. Work Statement

Revise and issue the 200-ZP-1 IRM proposed plan using the Z Plant and 200 West Area groundwater AAMS report recommendations as a base.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.17.1.20 (PU12)	200-ZP-1 Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
622	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 200-ZP-1 OU is located in the 200 West Area and recently has been designated as a groundwater OU containing contaminants consisting of carbon tetrachloride, trichlorethylene, and chloroform.

This OU will be remediated on receipt of a ROD based on the 200 West Area groundwater AAMS. After development of a proposed plan, the regulators will issue an IROD (for an IRM). Technical scope includes management, planning, documentation, and implementation of remediation activities.

C. Work Statement

Initiate groundwater remediation using pump and treat techniques on February 28, 1994. Continue operation of the system throughout the remaining of the FY.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.17.2.20 (PU22)	200-ZP-2 Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
627	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 200-ZP-2 OU is located in the 200 West Area and has received predominately liquid waste from Z Plant. This OU contains no contaminated structures (i.e., tanks) and is predominately cribs, ditches, trenches, ponds, and spills. The 19 waste management sites within this OU contain contaminates consisting predominately of nitrate, plutonium, and carbon tetrachloride.

These sites will be remediated after sufficient information has been collected and analyzed to describe the extent and possible migration of the contaminates or when existing information is available to recommend a remediation technique. After development of a proposed plan, the regulators will issue an action memorandum (for an ERA), an IROD (for an IRM), and/or a ROD (for final site cleanup). Technical scope includes management, planning, documentation, and implementation of remediation activities.

C. Work Statement

Continue carbon tetrachloride extraction activities in the 200-ZP-2 OU, using existing system. Complete site characterization activities defining plume boundaries and expand the well field via drilling additional boreholes. Prepare and issue a report at the end of the FY summarizing operations (including carbon tetrachloride extraction data) and site characterization activities.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11 (11-84)

FORM APPROVED OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.22 (P2)	300 Area Operable Units	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
666	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
300 Fuel Fabrication and adjacent area's past-practice sites--remedial actions	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

- Operable units included are as follows:
  - 300-FF-1*
  - 300-FF-2*
  - 300-FF-3*
  - 300-FF-4*
  - 300-FF-5
  - 300-IU-1*.
- Total number of waste sites is 91.
- Total site example types are as follows:
  - Soil and groundwater
  - Trenches
  - Ponds
  - French drains
  - Burial grounds.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.22 (Continued) (P2)	300 Area Operable Units	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
666	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
300 Fuel Fabrication and adjacent area's past-practice sites--remedial actions	EW201030	

12. ELEMENT TASK DESCRIPTION

C. Work Statement

The following will be developed: a LFI, work plan, remedial investigation report, feasibility study report, proposed plan, IRM plan, ROD, IROD, and remedial design. The following actions will be performed: project management, source investigations, focused feasibility studies, risk assessments, vadose zone investigations, LFI, groundwater investigation and monitoring, treatability studies, ERAs, remedial actions, and site closure.

Note: Two work plans have been prepared and approved (300-FF-1 and 300-FF-5). Characterization work (e.g., source characterization and vadose zone and groundwater monitoring well drilling) has started. Remedial investigations Phase I and feasability study Phase 1 and 2 reports have been prepared for both operable units.

*Current Tri-Party Agreement negotiations call for combining the 300-FF-2, FF-3, FF-4, and IU-1 OUs into one OU (300-FF-2). Although the change request that documents this strategy is still in preparation FY 1994 planning is based on change request approval.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.22.1.10 (P211)	300-FF-1 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
668	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 300-FF-1 OU is located in the southwestern portion of the Hanford Site and contains soil contaminations resulting primarily from fuel fabrication operations. This OU has no containment structures (i.e., tanks) and is predominately cribs, ditches, trenches, ponds, and spills. The 22 waste management sites within this OU contain contaminates consisting predominately of uranium, heavy metals, trichloroethylene, fluoride, and dichloroethylene.

These sites will be characterized through the RI/FS process as defined per EPA guidance. Contaminates of concern are considered to be mixed waste. Technical scope includes management, planning, field investigations, alternatives selection through feasibility studies, risk assessments, and preparation of reports to support a ROD.

C. Work Statement

Issue FS Phase III report August 15, 1994. Issue RI Phase II (Summarizing the soil washing treatability tests) December 15, 1993. Continue periodic radiation surveys of the waste sites in the OU. Conduct discussions/negotiations with the regulators to transition to remediation activities. Complete field treatability test on 300-FF-1 soils that was contracted in FY 1993. Perform a test with a contractor using physical separation techniques and chemical extraction methods. Evaluate/analyze the performance of the systems, prepare a report summarizing the results, and provide recommendations for future use of the technique(s) on the Hanford Site. Work in conjunction with the RI coordinator and remediation coordinator for the 300-FF-1 OU to ensure accelerated implementation of the soil remediation technology (if successful) at the 300-FF-1 OU.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.22.2.10 (P221)	300-FF-2 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
675	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 300-FF-2 OU encompasses all the geographic area in the 300 and 400 Areas exclusive of the 300-FF-1 OU. The 78 waste management sites with this OU consists of burial grounds, dumping areas, sewers, drain fields, storage tanks, cribs, pits, retention basins, trenches, storage areas, equipment, french drains, and unplanned releases. The wastes typically are heavy metals associated with field fabrication activities.

These sites will be characterized through the past-practice strategy process as defined per EPA guidance. Contaminates of concern are considered to be mixed wastes. Technical scope includes management, planning, field investigations, remedial alternatives selection through focused feasibility studies, qualitative risk assessments, and preparation of reports to support a ROD.

C. Work Statement

Initiate preparation of a LFI work plan. Work will support issuance of the work plan to the regulators in December 1994. Additionally characterization activities will be initiated at the 300-FF-2 OU in the vicinity of the 618-11 burial grounds. This will support the EE/CA recommendations from the 618-11 burial ground ERA that is being carried into FY 1994 as 300-FF-2 OU activity.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
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FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.22.5.10 (P251)	300-FF-5 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
686	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 300-FF-5 Operable Unit (OU) is located in the southwestern portion of the Hanford Site and contains groundwater contamination resulting primarily from fuel fabrication operations. The primary contaminate in the groundwater is uranium.

These sites will be characterized through the RI/FS process as defined per EPA guidance. Contaminates of concern are considered to be mixed wastes. Technical scope includes management, planning, field investigations, remedial alternatives selection through feasibility studies, risk assessments, and preparation of reports to support a ROD.

C. Work Statement

Continue the remedial investigation at the 300-FF-5 OU in accordance with the approved work plan and schedule. Complete the Phase 1 RI report incorporating regulator comments. Conduct discussions/negotiations with the regulators to determine Phase 2 RI scope. Issue the Phase 2 work plan to the regulators describing the negotiated scope. Continue the feasibility study at the 300-FF-5 OU in accordance with the approved work plan and schedule. Complete the Phase 1 and 2 feasibility study report incorporating regulator comments. Issue the Phase 2 remedial investigation report on August 15, 1994 to the regulatory agencies.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

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FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.22.6.20 (P262)	300-IU-1 Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
693	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope consistent with the OU work plans and the Tri-Party Agreement.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The 300-IU-1 OU is located in the southwestern portion of the Hanford Site. The four waste management sites within this OU are a crib, two burial grounds, and a landfill. The crib potentially contains uranium wastes and contaminated tanks; the burial grounds (consisting of trenches, pipe, facilities, and caissons) possibly contain low- to high-level fission products and plutonium. The landfill potentially contains nonradioactive dangerous wastes from various construction areas.

These sites will be remediated after sufficient information has been collected and analyzed to describe the extent and possible migration of the contaminates or when existing information is available to recommend a remediation technique. After development of a proposed plan, the regulators will issue an action memorandum (for an ERA), an IRD (for an IRM), and/or a ROD (for the final site cleanup). Technical scope includes management, planning, documentation, and implementation of remedial activities.

C. Work Statement

Finalize the EE/CA for the 618-11 Burial Ground incorporating regulator comments. Transition the burial ground into the new 300-FF-2 OU.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12103
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.23 (P3)	1100-EM Operable Unit	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
698	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to complete the ER RA work scope, consistent with the TPA and subsequent AIP for the 1100-EM.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

- Operable units include 1100-EM-1, 1100-EM-2, 1100-EM-3, and 1100-IU-1
- Total number of waste sites is 27.
- Total site example type areas include soil and groundwater, landfill, staging areas, storage tanks, missile base, and Arid Lands Ecology Reserve.
- The cleanup of the Arid Lands Ecology Reserve is also included in this subproject.

C. Work Statement

The following will be developed: a work plan, LFI report, focused feasibility study, proposed plans, IRM plan, ROD, IROD, and remedial design. The following action will be performed: project management, source investigations, focused feasibility studies, risk assessments, vadose zone investigations, LFIs, groundwater investigation and monitoring, treatability studies, ERAs, remedial actions, and site closure. In addition, the Arid Lands Ecology Reserve will be cleaned up in compliance with Federal real estate excessing procedures.

Note: The ROD for the remediation of the four OUs is targeted for 4th quarter FY 1994. An AIP targets remediation of the entire ALE area by 4th Qtr FY 1994.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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DOE F1332.11 (11-84)

FORM APPROVED OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12103
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.23.1 (P31)	1100-EM-1 Operable Unit	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
699	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the Hanford Site ER RA program consistent with the Tri-Party Agreement and subsequent AIP for the 1100-EM-1.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform assessment and remediation activities of the 1100-EM-1. Hazards to be assessed and/or remediated include environmental hazards at discolored soil sites (BEPH contamination), ephemeral pool (PCB contamination), and the Horn Rapids landfill.

C. Work Statement

The following actions will be performed.

- Perform USACE project and technical management of assessment and remediation
- Perform assessment
- Perform remediation
- Perform monitoring.

Note: ROD for the 1100-EM-1 OU targeted for 4th quarter FY 1993.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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DOE F1332.11
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FORM APPROVED
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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12103
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.23.1.10 (P311)	1100-EM-1 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
700	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the Hanford Site ER RA program consistent with the Tri-Party Agreement and subsequent AIP for the assessment of 1100-EM-1.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform assessment of the 1100-EM-1. Hazards to be assessed include environmental hazards at discolored soil sites (BEPH contamination), ephemeral pool (PCB contamination), and the Horn Rapids landfill.

C. Work Statement

The following actions will be performed.

- Perform USACE project and technical management of assessment
- Perform assessment by RI/FS
- Perform monitoring
- Develop proposed plan for ROD.

Note: ROD for the 1100-EM-1 OU targeted for 4th quarter FY 1993.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11 (11-84)

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12103
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.23.1.20 (P312)	1100-EM 1 Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
701	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the Hanford Site ER RA program consistent with the Tri-Party Agreement and subsequent AIP for the remediation of 1100-EM-1.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform remediation of the 1100-EM-1. Remediation will be per ROD. Possible hazards to be remediated include environmental hazards at discolored soil sites (BEPH contamination), ephemeral pool (PCB contamination), and the Horn Rapids landfill.

C. Work Statement

The following actions will be performed.

- Perform USACE project and technical management of remediation
- Perform remedial action design
- Perform remedial action implementation.

Note: ROD for the 1100-EM-1 OU targeted for 4th quarter FY 1993.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12103
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.23.2 (P32)	1100-EM-2 Operable Unit	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
702	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the Hanford Site ER RA program consistent with the Tri-Party Agreement and subsequent AIP for the 1100-EM-2.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform assessment and remediation activities of the 1100-EM-2. Hazards to be assessed and/or remediated include environmental hazards at several used oil tanks, steam pad and hoist ram storage tanks, and a hazardous waste storage area.

C. Work Statement

The following actions will be performed.

- Perform USACE project and technical management of assessment and remediation
- Perform assessment
- Perform remediation
- Perform monitoring.

Note: ROD for the 1100-EM-2 OU targeted for 4th quarter FY 1993.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
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FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12103
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.23.2.10 (P321)	1100-EM-2 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
703	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the Hanford Site ER RA program consistent with the Tri-Party Agreement and subsequent AIP for the assessment of 1100-EM-2.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform assessment of the 1100-EM-2. Hazards to be assessed include environmental hazards at several used oil tanks, steam pad and hoist ram storage tanks, and a hazardous waste storage area.

C. Work Statement

The following actions will be performed.

- Perform USACE project and technical management of assessment
- Perform assessment by LFI
- Perform monitoring
- Develop IRM proposed plan for inclusion in 1100-EM-1 ROD.

Note: ROD for the 1100-EM-2 OU targeted for 4th quarter FY 1993.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

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FORM APPROVED
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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12103
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.23.2.20 (P322)	1100-EM-2 Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
704	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the Hanford Site ER RA program consistent with the Tri-Party Agreement and subsequent AIP for the remediation of 1100-EM-2.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform remediation of the 1100-EM-2. Remediation will be per ROD. Possible hazards to be remediated include environmental hazards at several used oil tanks, steam pad and hoist ram storage tanks, and a hazardous waste storage area.

C. Work Statement

The following actions will be performed.

- Perform USACE project and technical management of remediation
- Perform interim remedial action design
- Perform interim remedial action implementation.

Note: ROD for the 1100-EM-2 OU targeted for 4th quarter FY 1993.

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12103
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.23.3 (P33)	1100-EM-3	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
705	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the Hanford Site ER RA program consistent with the Tri-Party Agreeement and subsequent AIP for the 1100-EM-3.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform assessment and remediation activities of the 1100-EM-3. Hazards to be assessed and/or remediated include environmental hazards at several used oil tanks, contaminated soil from previously removed UST, and several hazardous waste storage and staging areas.

C. Work Statement

The following actions will be performed.

- Perform USACE project and technical management of assessment and remediation
- Perform assessment
- Perform remediation
- Perform monitoring.

Note: ROD for the 1100-EM-3 OU targeted for 4th quarter FY 1993.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12103
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.23.3.10 (P331)	1100-EM-3 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
706	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the Hanford Site ER RA program consistent with the Tri-Party Agreement and subsequent AIP for the assessment of 1100-EM-3.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform assessment of the 1100-EM-3. Hazards to be assessed include environmental hazards at several used oil tanks, contaminated soil from previously removed UST, and several hazardous waste storage and staging areas.

C. Work Statement

The following actions will be performed.

- Perform USACE project and technical management of assessment
- Perform assessment by LFI
- Perform monitoring
- Develop IRM proposed plan for inclusion in 1100-EM-1 ROD.

Note: ROD for the 1100-EM-3 OU targeted for 4th quarter FY 1993.

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12103
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.23.3.20 (P332)	1100-EM-3 Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
707	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the Hanford Site ER RA program consistent with the Tri-Party Agreement and subsequent AIP for the remediation of 1100-EM-3.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform remediation of the 1100-EM-3. Remediation will be per ROD. Possible hazards to be remediated include environmental hazards at several used oil tanks, contaminated soil from previously removed UST, and several hazardous waste storage and staging areas.

C. Work Statement

The following actions will be performed.

- Perform USACE project and technical management of remediation
- Perform interim remedial action design
- Perform interim remedial action implementation.

Note: ROD for the 1100-EM-3 OU targeted for 4th quarter FY 1993.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12103
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.23.4 (P34)	1100-IU-1 Operable Unit	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
708	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the Hanford Site ER RA program consistent with the Tri-Party Agreement and subsequent AIP for the 1100-IU-1, located in the ALE area of the Hanford Site.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform assessment and remediation activities of the 1100-IU-1. Hazards to be assessed and/or remediated include environmental hazards, Nike missile site, septic tanks and drain fields, electrical transformers, UST's, and waste disposal areas.

C. Work Statement

The following actions will be performed.

- Perform USACE project and technical management of assessment and remediation
- Perform assessment
- Perform remediation
- Perform monitoring.

Note: ROD for the 1100-IU-1 OU targeted for 4th quarter FY 1993.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12103
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.23.4.10 (P341)	100-IU-1 Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
709	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the Hanford Site ER RA program consistent with the Tri-Party Agreement and subsequent AIP for the assessment of 1100-IU-1, located in the ALE area of the Hanford Site.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform assessment of the 1100-IU-1. Hazards to be assessed include environmental hazards, Nike missile site, septic tanks and drain fields, electrical transformers, UST's, and waste disposal areas.

C. Work Statement

The following actions will be performed.

- Perform USACE project and technical management of assessment
- Perform assessment by LFI
- Perform monitoring
- Develop IRM proposed plan for inclusion in 1100-EM-1 ROD.

Note: ROD for the 1100-IU-1 OU targeted for 4th quarter FY 1993.

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Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
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FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12103
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.23.4.20 (P342)	100-IU-3 Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
710	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the Hanford Site ER RA program consistent with the Tri-Party Agreement and subsequent AIP for the remediation of 1100-IU-1, located in the ALE area of the Hanford Site.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform remediation of the 1100-IU-1. Remediation will be per ROD. Possible hazards to be remediated include environmental hazards, Nike missile site, septic tanks and drain fields, electrical transformers, UST's, and waste disposal areas.

C. Work Statement

The following actions will be performed.

- Perform USACE project and technical management of remediation
- Perform interim remedial action desig
- Perform interim remedial action implementation.

Note: ROD for the 1100-IU-1 OU targeted for 4th quarter FY 1993.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12103
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.23.6 (P36)	Arid Land Ecology (ALE) Reserve	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
714	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the Hanford Site ER RA program consistent with the Tri-Party Agreement and subsequent AIP for the Arid Land Ecology Reserve (ALE).

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform assessment and remediation activities of the ALE. Hazards to be assessed and/or remediated include environmental hazards, Nike missile site, anti-aircraft sites, homestead sites, military landfills, UST's, and physical hazards such as open cisterns, surface debris, concrete footings, exposed rebar, and subsurface shelters. The ALE will be cleaned up in compliance with federal real estate excessing procedures.

C. Work Statement

The following actions will be performed.

- Perform USACE project and technical management of assessment and remediation
- Perform assessment
- Perform remediation
- Perform monitoring.

Note: ROD for the 1100-IU-1 OU targeted for 4th quarter FY 1993. An AIP targets remediation of the entire ALE area by 4th quarter FY 1994.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12103
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.23.6.10 (P361)	Arid Land Ecology (ALE) - Assessment	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
715	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the ER RA work scope consistent with the Tri-Party Agreement and subsequent AIP for the assessment of Arid Land Ecology Reserve (ALE).

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform assessment of the ALE. Hazards to be assessed include environmental hazards, Nike missile site, anti-aircraft sites, homestead sites, military landfills, UST's, and physical hazards such as open cisterns, surface debris, concrete footings, exposed rebar, and subsurface shelters. The ALE will be cleaned up in compliance with federal real estate excessing procedures.

C. Work Statement

The following actions will be performed:

- Perform USACE project and technical management of assessment
- Perform preliminary assessment screening (PAS)
- Determine physical hazards to be removed
- Determine environmental hazards to be remediated.

Note: The ROD for the 1100-IU-1 OU is targeted for 4th Qtr FY 1993. An AIP targets remediation of the entire ALE area by 4th Qtr FY 1994.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12103
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.23.6.10.6 (P3616)	ALE-Preliminary Assessmetn (PAS)	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
716	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the ER RA work scope consistent with the Tri-Party Agreement and subsequent AIP for the PAS of the ALE.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform preliminary assessment screening of the ALE. Hazards to be assessed include environmental hazards; Nike missile site; anti-aircraft sites; homestead sites; military landfills; UST's; and physical hazards such as open cisterns, surface debris, concrete footings, exposed rebar, and subsurface shelters. The ALE will be cleaned up in compliance with federal real estate excessing procedures.

C. Work Statement

The following actions will be performed:

- Perform USACE project and technical management of assessment
- Perform PAS, including historical research, cultural resource review, flora and fauna survey, site inspections, and environmental sampling
- Determine physical hazards to be removed
- Determine environmental hazards to be remediated.

Note: The ROD for the 1100-IU-1 OU targeted for 4th Qtr FY 1993. An AIP targets remediation of the entire ALE area by 4th Qtr FY 1994.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12103
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.23.6.20 (P362)	ALE - Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
717	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the ER RA work scope consistent with the Tri-Party Agreement and subsequent AIP for the remediation of the ALE.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform remediation of the ALE. Remediation will be per approved assessment of hazards. Possible hazards to be remediated include environmental hazards; Nike missile site; anti-aircraft sites; homestead sites; military landfills; UST's; and physical hazards such as open cisterns, surface debris, concrete footings, exposed rebar, and subsurface shelters. The ALE will be cleaned up in compliance with federal real estate excessing procedures.

C. Work Statement

The following actions will be performed:

- Perform USACE project and technical management of remediation
- Perform design
- Perform field remediation and appropriate clean-up work.

Note: The ROD for the 1100-IU-1 OU targeted for 4th Qtr FY 1993. An AIP targets remediation of the entire ALE area by 4th Qtr FY 1994.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12103
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.23.6.20.5 (P3625)	ALE - RA Design	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
718	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the ER RA work scope consistent with the Tri-Party Agreement and subsequent AIP for the remediation design of ALE.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform remediation design of the ALE. Remediation will be per approved assessment of hazards. Possible hazards to be remediated include environmental hazards; Nike missile site; anti-aircraft sites; homestead sites; military landfills; UST's; and physical hazards such as open cisterns, surface debris, concrete footings, exposed rebar, and subsurface shelters. The ALE will be cleaned up in compliance with federal real estate excessing procedures.

C. Work Statement

The following actions will be performed:

- Perform USACE project and technical management of remediation
- Perform remediation design.

Note: The ROD for the 1100-IU-1 OU targeted for 4th Qtr FY 1993. An AIP targets remediation of the entire ALE area by 4th Qtr FY 1994.

U.S. DEPARTMENT OF ENERGY

Table A2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12103
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.1.23.6.20.6 (P3626)	ALE - RA Implementation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
719	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the ER RA work order consistent with the Tri-Party Agreement and subsequent AIP for the field remediation of ALE.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Perform field remediation of the ALE. Remediation will be per approved assessment of hazards and remedial design. Possible hazards to be remediated include environmental hazards; Nike missile site; anti-aircraft sites; homestead sites; military landfills; UST's; and physical hazards such as open cisterns, surface debris, concrete footings, exposed rebar, and subsurface shelters. The ALE will be cleaned up in compliance with federal real estate excessing procedures.

C. Work Statement

The following actions will be performed:

- Perform USACE project and technical management of remediation
- Perform field remediation and appropriate clean-up work.

Note: The ROD for the 1100-IU-1 OU targeted for 4th Qtr FY 1993. An AIP targets remediation of the entire ALE area by 4th Qtr FY 1994.

Table A2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 FISCAL YEAR WORK PLAN RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE							
PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
REMEDIAL ACTIONS 2.1 [1P]							
2.1.1 PJ				RARA/UNDERGROUND STORAGE TANKS	MIX, PD	DRCP	HARRIS, AC
	2.1.1.1 PJ1			RARA COMMON ACTIVITIES	MIX, PD	DRCP	HARRIS, AC
		2.1.1.1.20 PJ12		RARA COMMON ACTIVITIES REMEDIATION	MIX, PD	DRCP	HARRIS, AC
			2.1.1.1.20.1 PJ121	ACREAGE DECONTAMINATION AND STABILIZATION	HUGHES, MC	IFS&M	HARRIS, AC
			2.1.1.1.20.2 PJ122	RARA SURVEILLANCE	HUGHES, MC	IFS&M	HARRIS, AC
			2.1.1.1.20.3 PJ123	VEGETATION MANAGEMENT	HOBBS, BJ	EH&P	HARRIS, AC
	2.1.1.2 PJ2			UST COMMON ACTIVITIES	MIX, PD	DRCP	HARRIS, AC
		2.1.1.2.20 PJ22		UST COMMON ACTIVITIES REMEDIATION	MIX, PD	DRCP	HARRIS, AC
			2.1.1.2.20.1 PJ221	UST REMOVAL/ REGULATORY COMPLIANCE	MIHALIC, MA	DE	HARRIS, AC
2.1.2 PV				RCRA CLOSURES	MIX, PD	DRCP	MCLEOD, RG
	2.1.2.1 PV1			RCRA COMMON ACTIVITIES	MIX, PD	DRCP	HARRIS, AC
		2.1.2.1.10 PV11		RCRA COMMON ACTIVITES - ASSESSMENT	MIX,PD	DRCP	MCLEOD, RG
			2.1.2.1.10.1 PV111	VEGETATION STUDIES	KEMP, CJ	EA/TD	MCLEOD, RG
			2.1.2.1.10.2 PV112	INACTIVE UNDERGROUND TANKS	CARLSON, RA	RR	MCLEOD, RG
	2.1.2.3 PV3			RCRA 100-DR	MIX, PD	DRCP	MCLEOD, RG
		2.1.2.3.10 PV31		100-DR ASSESSMENT	MIX, PD	DRCP	MCLEOD, RG
			2.1.2.3.10.1 PV311	100-D POND PLANNING DOCUMENTS	RUCK, FA	RCA	MCLEOD, RG

Table A2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 FISCAL YEAR WORK PLAN RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE							
PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
	2.1.2.5 PV5			RCRA 100-HR	MIX, PD	DRCP	MCLEOD, RG
		2.1.2.5.20 PV52		REMEDIATION	MIX, PD	DRCP	MCLEOD, RG
			2.1.2.5.20.1 PV521	183-H SOLAR EVAPORATION BASINS	KACCHELE, DG	DDP	MCLEOD, RG
	2.1.2.7 PV7			RCRA 100-NR	MIX, PD	DRCP	MCLEOD, RG
		2.1.2.7.10 PV71		ASSESSMENT	MIX, PD	DRCP	MCLEOD, RG
			2.1.2.7.10.1 PV711	1301-N/1325-M CLOSURE PLAN	RUCK, FA	RCA	MCLEOD, RG
			2.1.2.7.10.2 PV712	1324-N/1324-NA CLOSURE PLAN	RUCK, FA	RCA	TRUMBLE, HC
	2.1.2.9 PVB			RCRA 200 AREA B (BP)	MIX, PD	DRCP	MCLEOD, RG
		2.1.2.9.10 PVB1		200-BP ASSESSMENT	MIX, PD	DRCP	MCLEOD, RG
			2.1.2.9.10.1 PVB11	B POND CLOSURE	RUCK, FA	RCA	MCLEOD, RG
		2.1.2.9.20 PVB2		REMEDIATION	MIX, PD	DRCP	MCLEOD, RG
		2.1.2.9.20 7PVB2		200-BP REMEDIATION	MIX, PD	DRCP	MCLEOD, RG
			2.1.2.9.20.3 7PVB23	X-009 BYPASS LOBE - CONSTRUCTION	FREDERICK, DO	EP	MCLEOD, RG
	2.1.2.11 PVS			RCRA 200 AREA S (RO)	MIX, PD	DRCP	MCLEOD, RG
		2.1.2.11.10 PVS1		200-RO ASSESSMENT	MIX, PD	DRCP	MCLEOD, RG
			2.1.2.11.10.2 PVS12	HEXONE	RUCK, FA	RCA	MCLEOD, RG
	2.1.2.13 PVU			RCRA 200 AREA UP	MIX, PD	DRCP	MCLEOD, RG
		2.1.2.13.10 PVU1		ASSESSMENT	MIX, PD	DRCP	MCLEOD, RG

Table A2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 FISCAL YEAR WORK PLAN
RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE

PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
			2.1.2.13.10.1 PVU11	216-U-12 CRIB	RUCK, FA	RCA	MCLEOD, RG
	2.1.2.15 PVI			RCRA 200 AREA IU	MIX, PD	DRCP	MCLEOD, RG
		2.1.2.15.10 PVI1		ASSESSMENT	MIX, PD	DRCP	MCLEOD, RG
			2.1.2.15.10.1 PVI11	NRDWL	RUCK, FA	RCA	MCLEOD, RG
	2.1.2.16 PVF			RCRA 300 AREA FF	MIX, PD	DRCP	MCLEOD, RG
		2.1.2.16.10 PVF1		300-FF-3 ASSESSMENT	MIX, PD	DRCP	MCLEOD, RG
			2.1.2.16.10.1 PVF11	300 AREA PROCESS TRENCHES	RUCK, FA	RCA	MCLEOD, RG
2.1.3 PF				SST CLOSURES	MIX, PD	DRCP	FOLEY, BL
	2.1.3.7 PFT			SST 200 AREA T (TP)	MIX, PD	DRCP	FOLEY, BL
		2.1.3.7.10 PFT1		ASSESSMENT	MIX, PD	DRCP	FOLEY, BL
			2.1.3.7.10.1 PFT11	SST (T-200-TP-6) (T106)	CARLSON, RA	RR	FOLEY, BL
2.1.4 PA				100-DR	WINTCZAK, TM	RP	GOLLER, ED
	2.1.4.1 PA1			100-DR-1	PATTERSON, JK	RP	GOLLER, ED
		2.1.4.1.10 PA11		ASSESSMENT	PATTERSON, JK	RP	GOLLER, ED
			2.1.4.1.10.1 PA111	100-DR-1 GENERAL	PATTERSON, JK	RP	GOLLER, ED
			2.1.4.1.10.3 PA113	100-DR-1 CHARACTERIZATION	HENKEL, RP	ARI	GOLLER, ED
			2.1.4.1.10.4 PA114	100-DR-1 FEASIBILITY STUDIES	HENKEL, RP	ARI	GOLLER, ED
	2.1.4.2 PA2			100-DR-2	PATTERSON, JK	RP	GOLLER, ED

Table A2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 FISCAL YEAR WORK PLAN
RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE

PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
		2.1.4.2.10 PA21		ASSESSMENT	PATTERSON, JK	RP	GOLLER, ED
			2.1.4.2.10.2 PA212	100-DR-2 PLANNING DOCUMENTS	HENKEL, RP	ARI	GOLLER, ED
			2.1.4.2.10.3 PA213	100-DR-2 CHARACTERIZATION	HENKEL, RP	RP	GOLLER, ED
			2.1.4.2.10.4 PA214	100-DR-2 FEASIBILITY STUDIES	HENKEL, RP	ARI	GOLLER, ED
2.1.5 PB				100-BC	WINTCZAK, TM	RP	GOLLER, ED
	2.1.5.1 PB1			100-BC-1	PATTERSON, JK	RP	GOLLER, ED
		2.1.5.1.10 PB11		ASSESSMENT	PATTERSON, JK	RP	GOLLER, ED
			2.1.5.1.10.1 PB111	100-BC-1 GENERAL	PATTERSON, JK	RP	GOLLER, ED
			2.1.5.1.10.3 PB113	100-BC-1 CHARACTERIZATION	HENKEL, RP	RP	GOLLER, ED
			2.1.5.1.10.4 PB114	100-BC-1 FEASIBILITY STUDIES	HENCKEL, RP	RP	GOLLER, ED
			2.1.5.1.10.6 PB116	100-BC-1 TREATABILITY ENGINEERING	LAUTERBACK, MJ	RP	GOLLER, ED
	2.1.5.2 PB2			100-BC-2	PATTERSON, JK	RP	GOLLER, ED
		2.1.5.2.10 PB21		ASSESSMENT	PATTERSON, JK	RP	GOLLER, ED
			2.1.5.2.10.3 PB213	100-BC-2 CHARACTERIZATION	HENKEL, RP	ARI	GOLLER, ED
			2.1.5.2.10.4 PB214	100-BC-2 FEASIBILITY STUDIES	HENKEL, RP	ARI	GOLLER, ED
	2.1.5.5 PB5			100-BC-5	PATTERSON, JK	RP	GOLLER, ED
		2.1.5.5.10 PB51		ASSESSMENT	PATTERSON, JK	RP	GOLLER, ED
			2.1.5.5.10.3 PB513	100-BC-5 CHARACTERIZATION	HENKEL, RP	ARI	GOLLER, ED

Table A2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 FISCAL YEAR WORK PLAN
RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE

PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
			2.1.5.5.10.4 PB514	100-BC-5 FEASIBILITY STUDIES	HENKEL, RP	ARI	GOLLER, ED
	2.1.5.6 PB6			100-IU-1	PATTERSON, JK	RP	GOLLER, ED
		2.1.5.6.20 PB62		100-IU-1 REMEDIATION	PATTERSON, JK	RP	GOLLER, ED
			2.1.5.6.20.2 PB622	RIVERLAND WASH PIT - ERA	HENCKEL, GC	EERA	PAK, PM
2.1.6 PC				100-KR	PATTERSON, JK	RP	GOLLER, ED
	2.1.6.1 PC1			100-KR-1	PATTERSON, JK	RP	GOLLER, ED
		2.1.6.1.10 PC11		ASSESSMENT	PATTERSON, JK	RP	GOLLER, ED
			2.1.6.1.10.1 PC111	100-KR-1 GENERAL	PATTERSON, JK	RP	GOLLER, ED
			2.1.6.1.10.3 PC113	100-KR-1 CHARACTERIZATION	HENKEL, RP	ARI	GOLLER, ED
			2.1.6.1.10.4 PC114	100-KR-1 FEASIBILITY STUDIES	HENKEL, RP	ARI	GOLLER, ED
	2.1.6.2 PC2			100-KR-2	PATTERSON, JK	RP	GOLLER, ED
		2.1.6.2.10 PC21		ASSESSMENT	PATTERSON, JK	RP	GOLLER, ED
			2.1.6.2.10.2 PC212	100-KR-2 PLANNING DOCUMENTS	HENKEL, RP	ARI	GOLLER, ED
			2.1.6.2.10.3 PC213	100-KR-2 CHARACTERIZATION	HENKEL, RP	ARI	GOLLER, ED
	2.1.6.4 PC4			100-KR-4	PATTERSON, JK	RP	GOLLER, ED
		2.1.6.4.10 PC41		ASSESSMENT	PATTERSON, JK	RP	GOLLER, ED
			2.1.6.4.10.3 PC413	100-KR-4 CHARACTERIZATION	HENKEL, RP	RP	GOLLER, ED
			2.1.6.4.10.4 PC414	100-KR-4 FEASIBILITY STUDIES	HENKEL, RP	RP	GOLLER, ED

Table A2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 FISCAL YEAR WORK PLAN
RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE

PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
2.1.7 PD				100-FR	PATTERSON, JK	RP	GOLLER, ED
	2.1.7.1 PD1			100-FR-1	PATTERSON, JK	RP	GOLLER, ED
		2.1.7.1.10 PD11		ASSESSMENT	PATTERSON, JK	RP	GOLLER, ED
			2.1.7.1.10.1 PD111	100-FR-1 GENERAL	PATTERSON, JK	RP	GOLLER, ED
			2.1.7.1.10.3 PD113	100-FR-1 CHARACTERIZATION	PATTERSON, JK	RP	GOLLER, ED
			2.1.7.1.10.4 PD114	100-FR-1 FEASIBILITY STUDIES	PATTERSON, JK	RP	GOLLER, ED
	2.1.7.3 PD3			100-FR-3	PATTERSON, JK	RP	GOLLER, ED
		2.1.7.3.10 PD31		ASSESSMENT	PATTERSON, JK	RP	GOLLER, ED
			2.1.7.3.10.3 PD313	100-FR-3 CHARACTERIZATION	PATTERSON, JK	RP	GOLLER, ED
			2.1.7.3.10.4 PD314	100-FR-3 FEASIBILITY STUDIES	PATTERSON, JK	RP	GOLLER, ED
	2.1.7.4 PD4			100-IU-3	GARDNER-CLAYON, JA	USACE	GOLLER, ED
		2.1.7.4.10 PD41		ASSESSMENT	GARDNER-CLAYON, JA	USACE	PERRO, WD
			2.1.7.4.10.3 PD413	100-IU-3 NORTH SLOPE CHARACTERIZATION	GARDNER-CLAYON, JA	USACE	PERRO, WD
		2.1.7.4.20 PD42		REMEDIATION	GERDNER-CLAYON, JA	USACE	PERRO, WD
			2.1.7.4.20.1 PD421	100-IU-3 NORTH SLOPE DESIGN	GARDNER-CLAYON, JA	USACE	PERRO, WD
			2.1.7.4.20.1 PD422	100-IU-3 NORTH SLOPE ERA	GARDNER-CLAYON, JA	USACE	PERRO, WD
2.1.8 PE				100-HR	PATTERSON, JK	RP	GOLLER, ED
	2.1.8.1 PE1			100-HR-1	PATTERSON, JK	RP	GOLLER, ED

Table A2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 FISCAL YEAR WORK PLAN
RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE

PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
		2.1.8.1.10 PE11		ASSESSMENT	PATTERSON, JK	RP	GOLLER, ED
			2.1.8.1.10.1 PE111	100-HR-1 GENERAL	PATTERSON, JK	RP	GOLLER, ED
			2.1.8.1.10.3 PE113	100-HR-1 CHARACTERIZATION	HENKEL, RP	ARI	GOLLER, ED
			2.1.8.1.10.4 PE114	100-HR-1 FEASIBILITY STUDIES	HENKEL, RP	ARI	GOLLER
	2.1.8.2 PE2			100-HR-2	PATTERSON, JK	RP	GOLLER, ED
		2.1.8.2.10 PE21		ASSESSMENT	PATTERSON, JK	RP	GOLLER, ED
			2.1.8.2.10.2 PE212	100-HR-2 PLANNING DOCUMENTS	PATTERSON, JK	RP	GOLLER, ED
			2.1.8.2.10.3 PE213	100-HR-2 CHARACTERIZATION	PATTERSON, JK	RP	GOLLER, ED
			2.1.8.2.10.4 PE214	100-HR-2 FEASIBILITY STUDIES	PATTERSON, JK	RP	GOLLER, ED
	2.1.8.3 PE3			100-HR-3	PATTERSON, JK	RP	GOLLER, ED
		2.1.8.3.10 PE31		ASSESSMENT	PATTERSON, JK	RP	GOLLER, ED
			2.1.8.3.10.3 PE313	100-HR-3 CHARACTERIZATION	PATTERSON, JK	ARI	GOLLER, ED
			2.1.8.3.10.4 PE314	100-HR-3 FEASIBILITY STUDIES	PATTERSON, JK	ARI	GOLER, ED
			2.1.8.3.10.5 PE315	100-HR-3 TREATABILITY	PATTERSON, JK	RP	GOLLER, ED
	2.1.8.6 PE6			100-IU-5	PATTERSON, JK	RP	GOLLER, ED
		2.1.8.6.20 PE62		REMEDIATION	PATTERSON, JK	RP	GOLLER, ED
			2.1.8.6.20.1 PE621	ERA - DESIGN	HENCKEL, RP	EERA	PAK, PM
	2.1.8.7 PE7			100 NPL COMMON ACTIVITIES	PATTERSON, JK	RP	GOLLER, ED

Table A2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 FISCAL YEAR WORK PLAN
RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE

PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
		2.1.8.7.10 PE71		ASSESSMENT	PATTERSON, JK	RP	GOLLER, ED
			2.1.8.7.10.1 PE711	GENERAL	HENCKEL, RP	EERA	GOLLER, ED
			2.1.8.7.10.2 PE712	PLANNING DOCUMENT	LAUTERBACH, MJ	EERA	GOLLER, ED
			2.1.8.7.10.3 PE713	CHARACTERIZATION	BIGGERSTAFF, RL	EERA	GOLLER, ED
			2.1.8.7.10.4 PE714	FEASIBILITY STUDIES	HENCKEL, RP	EERA	GOLLER, ED
			2.1.8.7.10.5 PE715	TREATABILITY	HENCKEL, RP	EERA	GOLLER, ED
2.1.9 PG				100-NR	PATTERSON, JK	RP	GOLLER, ED
	2.1.9.1 PG1			100-NR-1	PATTERSON, JK	RP	FOLEY, BL
		2.1.9.1.10 PG11		ASSESSMENT	PATTERSON, JK	RP	FOLEY, BL
			2.1.9.1.10.1 PG111	100-NR-1 GENERAL	PATTERSON, JK	RP	FOLEY,BL
			2.1.9.1.10.2 PG112	100-NR-1 PLANNING DOCUMENT	HENCKEL, RP	EERA	FOLEY, BL
			2.1.9.1.10.3 PG113	100-NR-1 CHARACTERIZATION	HENCKEL, RP	EERA	FOLEY, BL
			2.1.9.1.10.4 PG114	100-NR-1 FEASIBILITY STUDIES	HENCKEL, RP	EERA	FOLEY, BL
	2.1.9.2 PG2			100-NR-2	PATTERSON, JK	RP	FOLEY, BL
		2.1.9.2.10 PG21		ASSESSMENT	PATTERSON, JK	RP	FOLEY,BL
			2.1.9.2.10.2 PG212	100-NR-2 PLANNING DOCUMENTS	HENCKEL, RP	EERA	FOLEY, BL
			2.1.9.2.10.3 PG213	100-NR-2 CHARACTERIZATION	HENCKEL, RP	EERA	FOLEY, BL
			2.1.9.2.10.4 PG214	100-NR-2 FEASIBILITY STUDIES	HENCKEL, RP	EERA	FOLEY, BL

Table A2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 FISCAL YEAR WORK PLAN
RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE

PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
		2.1.9.2.20 PG22		REMEDIATION	PATTERSON, JK	RP	FOLEY, BL
			2.1.9.2.20.1 PG221	100-NR-2 N-SPRINGS ERA	HENCKEL, RP	EERA	FOLEY, BL
2.1.10 PL				200-BP	DOWNEY, HD	RP	PAK, PM
	2.1.10.1 PL1			200-BP-1	DOWNEY, HD	RP	PAK, PM
		2.1.10.1.10 PL11		ASSESSMENT	DOWNEY, HD	RP	PAK, PM
			2.1.10.1.10.1 PL111	200-BP-1 GENERAL	DOWNEY, HD	RP	PAK, PM
			2.1.10.1.10.4 PL114	200-BP-1 FEASIBILITY STUDY	CARLSON, RA	23RI	PAK, PM
			2.1.10.1.10.5 PL115	200-BP-1 TREATABILITY	CARLSON, RA	23RI	PAK, PM
		2.1.10.1.20 PL12		REMEDIATION	DOWNEY, HD	RP	PAK, PM
			2.1.10.1.20.5 PL125	200-BP-1 REMEDIAL ACTIONS DESIGN	CARLSON, RA	23RI	PAK, PM
	2.1.10.5 PL5			200-BP-5	DOWNEY, HD	PR	PAK, PM
		2.1.10.5.10 PL51		ASSESSMENT	DOWNEY, HD	RP	PAK, PM
			2.1.10.5.10.3 PL513	200-BP-5 CHARACTERIZATION	CARLSON, RA	23RI	PAK, PM
			2.1.10.5.10.5 PL515	200-BP-5 TREATABILITY	CARLSON, RA	23RI	PAK, PM
	2.1.10.10 PLA			200-BP-11	DOWNEY, HD	RP	MCLEOD, RG
		2.1.10.10.10 PLA1		ASSESSMENT	DOWNEY, HD	RP	MCLEOD, RG
			2.1.10.10.10.2 PLA12	200-BP-11 PLANNING DOCUMENTS	CARLSON, RA	23RI	MCLEOD, RG
			2.1.10.10.10.3 PLA13	200-BP-11 CHARACTERIZATION	CARLSON, RA	23RI	MCLEOD, RG

Table A2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 FISCAL YEAR WORK PLAN
RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE

PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
	2.1.10.11 PLB			200 NPL COMMON ACTIVITIES	DOWNEY, HD	RP	PAK, PM
		2.1.10.11.10 PLB1		ASSESSMENT	DOWNEY, HD	RP	PAK, PM
			2.1.10.11.10.1 PLB11	200 AREAS GENERAL	HOBBS, BJ	23RI	PAK, PM
			2.1.10.11.10.2 PLB12	GROUNDWATER REMEDIATION STRATEGY	KNEPP, AJ	CG	PAK, PM
			2.1.10.11.10.3 PLB13	COMMON CHARACTERIZATION	CARLSON, RA	23RI	PAK, PM
		2.1.10.11.20 PLB2		REMEDIATION	DOWNEY, HD	RP	PAK, PM
			2.1.10.11.20.10 PLB2A	WHC SUPPORT TO ER PIPELINE	HUGHES, DP	EA/PRJ	PAK, PM
			2.1.10.11.10.10 7PLB2B	ER PIPELINE IN W-094-H TRENCH	HUGHES, DP	EA/PRJ	PAK,PM
2.1.12 PN				200-PO	DOWNEY, HD	RP	PAK. PM
	2.1.12.1 PN1			200-PO-1	DOWNEY, HD	RP	PAK. PM
		2.1.12.1.10 PN11		ASSESSMENT	DOWNEY, HD	RP	PAK. PM
			2.1.12.1.10.1 PN111	200-PO-1 GENERAL	DOWNEY, HD	RP	PAK. PM
			2.1.12.1.10.2 PN112	200-PO-1 PLANNING DOCUMENTS	CARLSON, RA	23RI	PAK, PM
2.1.16 PT				200-UP	DOWNEY, HD	RP	PAK, PM
	2.1.16.1 PT1			200-UP-1	DOWNEY, HD	RP	PAK, PM
		2.1.16.1.10 PT11		200-UP-1 ASSESSMENT	DOWNEY, HD	RP	PAK, PM
			2.1.16.1.10.1 PT111	200-UP-1 GENERAL	DOWNEY, HD	RP	PAK, PM
			2.1.16.1.10.2 PT112	200-UP-1 PLANNING DOCUMENT	CARLSON, RA	23RI	PAK, PM

Table A2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 FISCAL YEAR WORK PLAN
RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE

PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
			2.1.16.1.10.3 PT113	200-UP-1 CHARACTERIZATION	CARLSON, RA	23RI	PAK, PM
			2.1.16.1.10.5 PT115	200-UP-1 TREATABILITY	CARLSON, RA	23RI	PAK, PM
	2.1.16.2 PT2			200-UP-2	DOWNEY, HD	RP	PAK, PM
		2.1.16.2.10 PT21		ASSESSMENT	DOWNEY, HD	RP	PAK, PM
			2.1.16.2.10.3 PT213	200-UP-2 CHARACTERIZATION	CARLSON, RA	23RI	PAK, PM
2.1.17 PU				200-ZP	DOWNEY, HD	RP	PAK, PM
	2.1.17.1 PU1			200-ZP-1	DOWNEY, HD	RP	PAK, PM
		2.1.17.1.10 PU11		ASSESSMENT	DOWNEY, HD	RP	PAK, PM
			2.1.17.1.10.1 PU111	200-ZP-1 GENERAL	DOWNEY, HD	PR	PAK, PM
		2.1.17.1.20 PU12		REMEDIATION	DOWNEY, HD	RP	PAK, PM
			2.1.17.1.20.3 PU123	200-ZP-1 IRM DESIGN	CARLSON, RA	23RI	PAK, PM
			2.1.17.1.20.4 PU124	200-ZP-1 IRM IMPLEMENTATION	CARLSON, RA	23RI	PAK, PM
	2.1.17.2 PU2			200-ZP-2	DOWNEY, HD	RP	PAK, PM
		2.1.17.2.20 PU22		REMEDIATION	DOWNEY, HD	RP	PAK, PM
			2.1.17.2.20.2 PU222	200-ZP-2 ERA IMPLEMENTATION	HAGOOD, MC	23RI	PAK, PM
2.1.22 P2				300 -FF-1	DOWNEY, HD	RP	MCLEOD, RG
	2.1.22.1 P21			300-FF-1	DOWNEY, HD	RP	MCLEOD, RG
		2.1.22.1.10 P211		ASSESSMENT	DOWNEY, HD	RP	MCLEOD, RG

Table A2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 FISCAL YEAR WORK PLAN
RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE

PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
			2.1.22.1.10.1 P2111	300-FF-1 GENERAL	DOWNEY, HD	RP	MCLEOD. RG
			2.1.22.1.10.3 P2113	300-FF-1 CHARACTERIZATION	CARLSON, RA	23RI	MCLEOD, RG
			2.1.22.1.10.4 P2114	300-FF-1 FEASIBILITY STUDY	CARLSON, RA	23RI	MCLEOD. RG
			2.1.22.1.10.5 P2115	300-FF-1 TREATABILITY	CARLSON, RA	23RI	MCLEOD, RG
	2.1.22.2 P22			300-FF-2	DOWNEY, HD	RP	MCLEOD, PG
		2.1.22.2.10 P221		ASSESSMENT	DOWNEY, HD	RP	MCLEOD, RG
			2.1.22.2.10.2 P2212	300-FF-2 PLANNING DOCUMENTS	CARLSON, RA	23RI	MCLEOD, RG
			2.1.22.2.10.3 P2213	300-FF-2 CHARACTERIZATION	CARLSON, RA	23RI	MCLEOD, RG
	2.1.22.5 P25			300-FF-5	DOWNEY, HD	RP	MCLEOD, RG
		2.1.22.5.10 P251		ASSESSMENT	DOWNEY, HD	RP	MCLEOD, RG
			2.1.22.5.10.3 P2513	300-FF-5 CHARACTERIZATION	CARLSON, RA	23RI	MCLEOD, RG
			2.1.22.5.10.4 P2514	300-FF-5 FEASIBILITY STUDIES	CARLSON, RA	23RI	MCLEOD, RG
	2.1.22.6 P26			300-IU-1	DOWNEY, HD	RP	MCLEOD, RG
		2.1.22.6.20 P262		REMEDIATION	DOWNEY, HD	RP	MCLEOD, RG
			2.1.22.6.20.1 P2621	300-IU-1 ERA IMPLEMENTATION	HENCKEL, GC	EERA	MCLEOD, RG
2.1.23 P3				1100-EM	GARDNER-CLAYSON, JA	USACE	PERRO, WD
	2.1.23.1 P31			1100-EM-1	GARDNER-CLAYSON, JA	USACE	PERRO, WD
		2.1.23.1.10 P311		ASSESSMENT	GARDNER-CLAYSON, JA	USACE	PERRO, WD

Table A2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 FISCAL YEAR WORK PLAN
RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE

PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
		2.1.23.1.20 P312		REMEDIATION	GARDNER-CLAYSON, JA	USACE	PERRO, WD
	2.1.23.2 P32			1100-EM-2	GARDNER-CLAYSON, JA	USACE	PERRO, WD
		2.1.23.2.10 P321		ASSESSMENT	GARDNER-CLAYSON, JA	USACE	PERRO, WD
	2.1.23.3 P33			1100-EM-3	GARDNER-CLAYSON, JA	USACE	PERRO, WD
		2.1.23.3.10 P331		ASSESSMENT	GARDNER-CLAYSON, JA	USACE	PERRO, WD
		2.1.23.3.20 P332		REMEDIATION	GARDNER-CLAYSON, JA	USACE	PERRO, WD
	2.1.23.4 P34			1100-IU-1	GARDNER-CLAYSON, JA	USACE	PERRO, WD
		2.1.23.4.10 P341		ASSESSMENT	GARDNER-CLAYSON, JA	USACE	PERRO, WD
		2.1.23.4.20 P342		REMEDIATION	GARDNER-CLAYSON, JA	USACE	PERRO, WD
	2.1.23.6 P36			ARID LAND ECOLOGICAL (ALE) RESERVE	GARDNER-CLAYSON, JA	USACE	PERRO, WD
		2.1.23.6.10 P361		ALE ASSESSMENT	GARDNER-CLAYSON, JA	USACE	PERRO, WD
			2.1.23.6.10.6 P3616	ALE PRELIMINARY ASSESSMENT SCREENING	GARDNER-CLAYSON, JA	UASCE	PERRO, WD
		2.1.23.6.20 P362		ALE REMEDIATION	GARDNER-CLAYSON, JA	USACE	PERRO, WD
			2.1.23.6.20.5 P3625	ALE REMEDIAL ACTION DESIGN	GARDNER-CLAYSON, JA	USACE	PERRO, WD
			2.1.23.6.20.6 P3626	ALE REMEDIAL ACTION IMPLEMENTATION	GARDNER-CLAYSON, JA	USACE	PERRO, WD

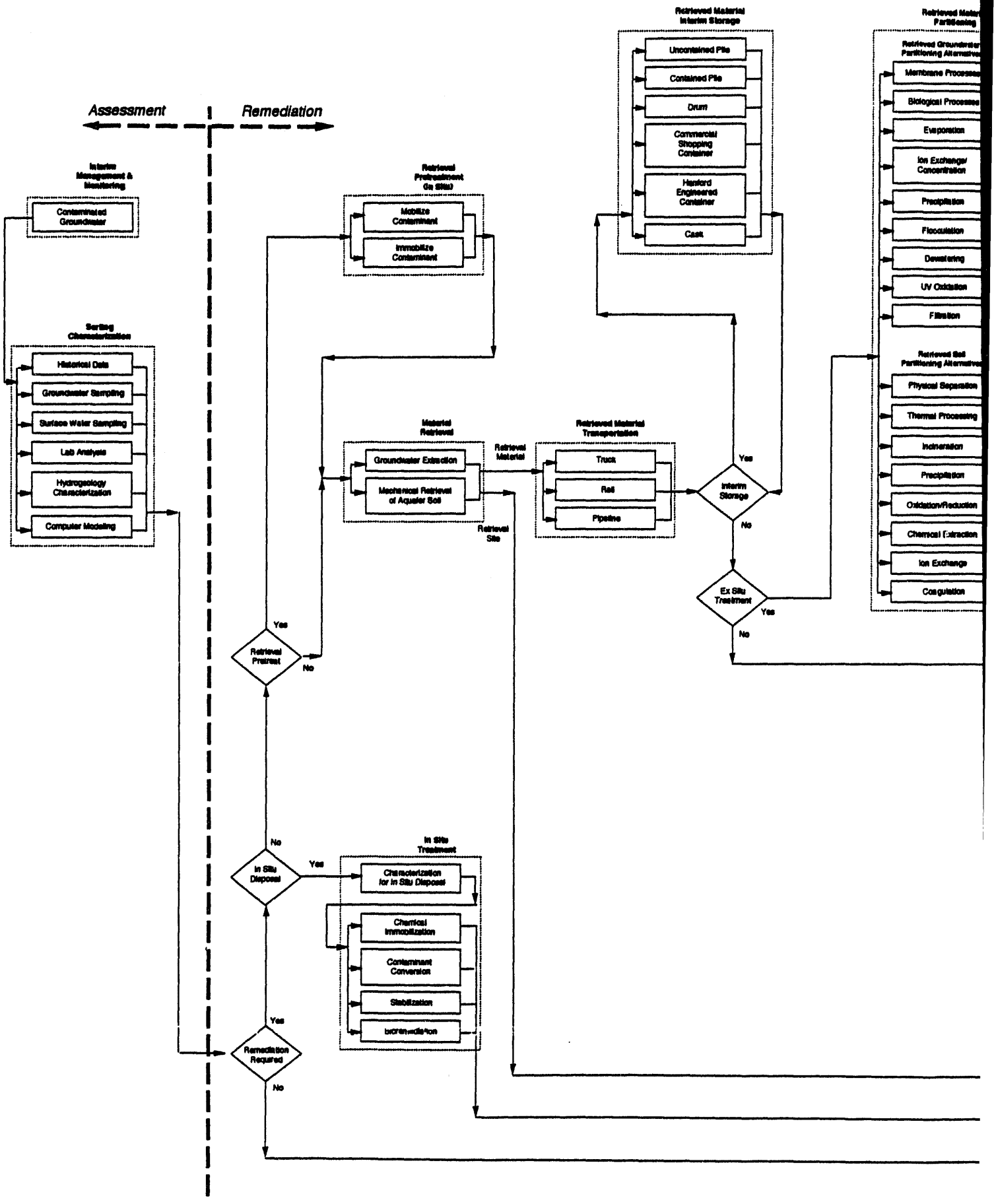
Table A2-3. Responsibility Assignment Matrix.

WESTINGHOUSE HANFORD RESPONSIBLE ORGANIZATION

23RI	200/300 REMEDIAL INVESTIGATION
ALE	ARID LAND ECOLOGICAL RESERVE
ARI	100 AREA REMEDIAL INVESTIGATION
CG	CERCLA GEOHYDROLOGY
DDP	D&D PROJECTS
DRCP	DECOMMISSIONING AND RCRA CLOSURE PROGRAM
EA/PRJ	ENVIRONMENTAL ACTIONS/PROJECTS
EA/TD	ENVIRONMENTAL ACTIONS/TECHNOLOGY DEVELOPMENT
EE	ENVIRONMENTAL ENGINEERING
EERA	ENVIRONMENTAL ENGINEERING REMEDIAL ACTION
EES	ENVIRONMENTAL ENGINEERING SUPPORT
EHPS	ENVIRONMENTAL/HEALTH/PESTICIDE SERVICES
ERA	EXPEDITED RESPONSE ACTION
IFSM	INACTIVE FACILITIES SURVEILLANCE/MAINTENANCE
RCA	RCRA CLOSURE ACTIVITIES
RP	REMEDIATION PROJECTS
USACE	U.S. ARMY CORPS OF ENGINEERS

ABBREVIATIONS

CENRTC	CAPITAL EQUIPMENT NOT RELATED TO CONSTRUCTION
NA	NOT APPLICABLE
RARA	RADIATION AREA REMEDIAL ACTION
RCRA	Resource Conservation and Recovery Act of 1976
S&M	SURVEILLANCE AND MAINTENANCE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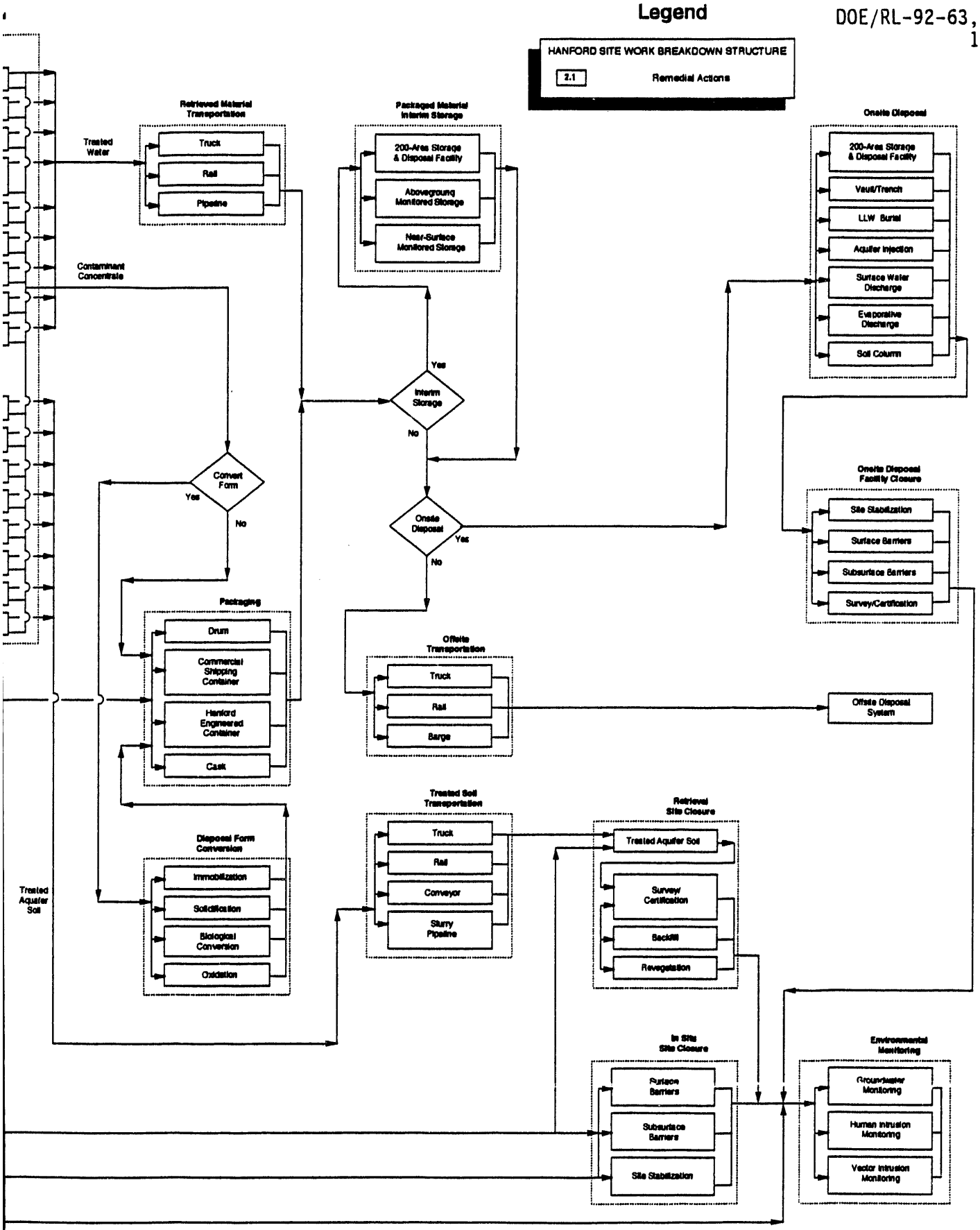
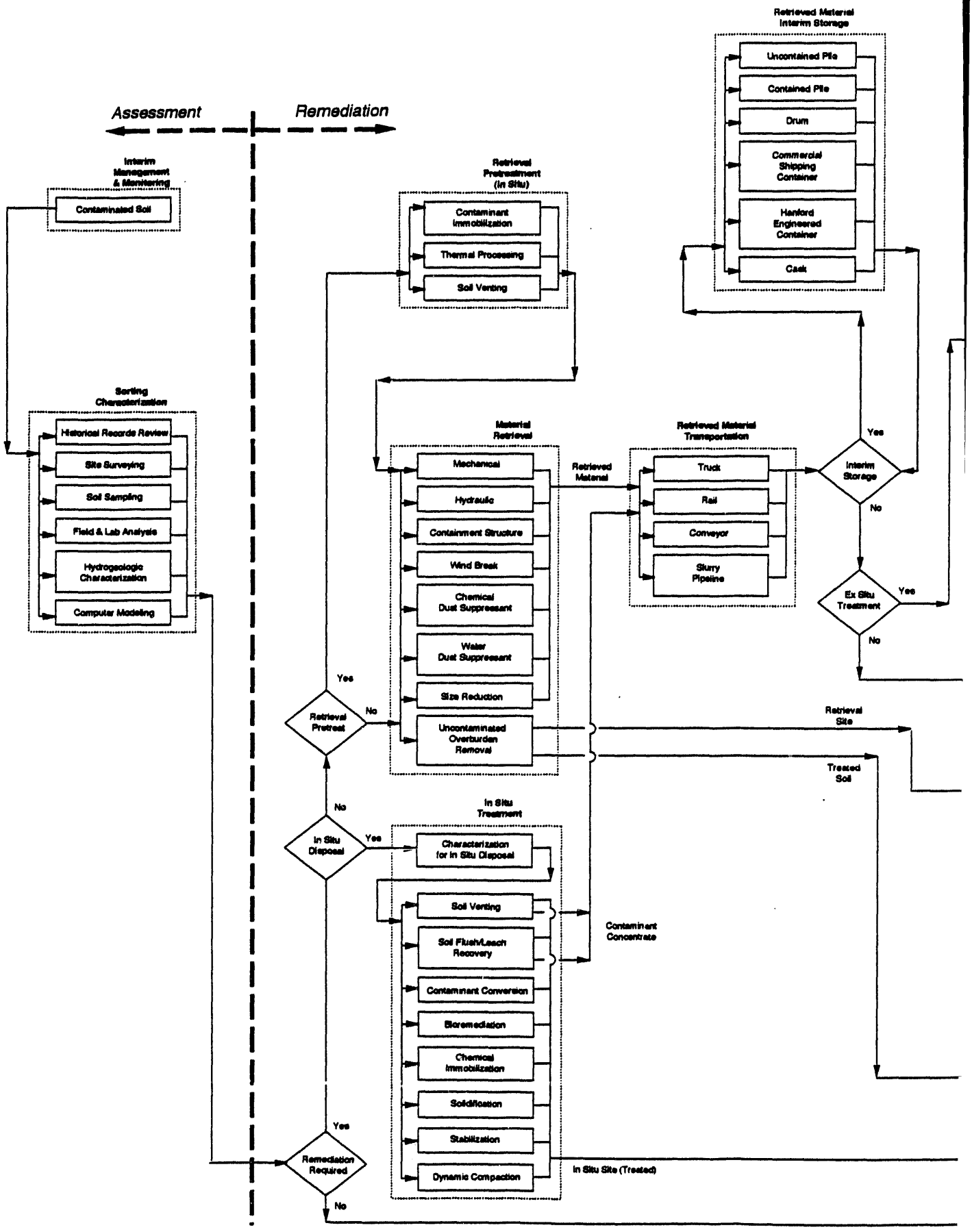
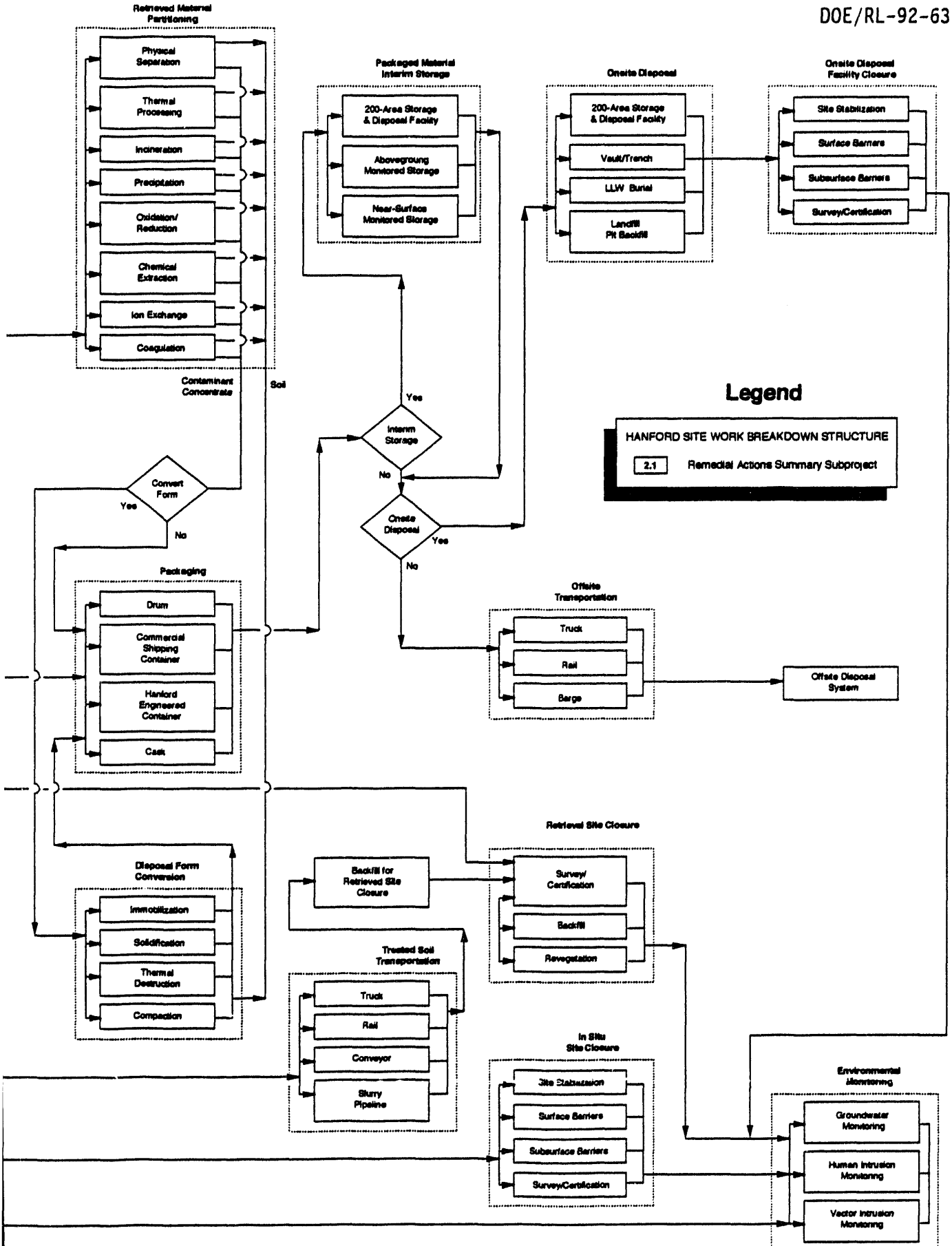
Remediation
Interim Management & Monitoring
Contaminated Groundwater
Sorting Characterization
Historical Data
Groundwater Sampling
Surface Water Sampling
Lab Analysis
Hydrogeology Characterization
Computer Modeling
Retrieval Pretreatment (In Situ)
Mobilize Contaminant
Immobilize Contaminant
Material Retrieval
Groundwater Extraction
Mechanical Retrieval of Aquifer Soil
Retrieval Material
Retrieval Site
Retrieved Material Transportation
Truck
Rail
Pipeline
Retrieved Material Interim Storage
Uncontained Pile
Contained Pile
Drum
Commercial Shipping Container
Hanford Engineered Container
Cask
Interim Storage
Yes
No
Ex Situ Treatment
Yes
No
Retrieved Material Partitioning
Retrieved Groundwater Partitioning Alternatives
Membrane Processes
Biological Processes
Evaporation
Ion Exchange/ Concentration
Precipitation
Flocculation
Dewatering
UV Oxidation
Filtration
Retrieved Soil Partitioning Alternatives
Physical Separation
Thermal Processing
Incineration
Precipitation
Oxidation/Reduction
Chemical Extraction
Ion Exchange
Coagulation
Retrieval Pretreat
Yes
No
In Situ Disposal
No
Yes
In Situ Treatment
Characterization for In Situ Disposal
Chemical Immobilization
Contaminant Conversion
Stabilization
bioremediation
Remediation Required
Yes
No

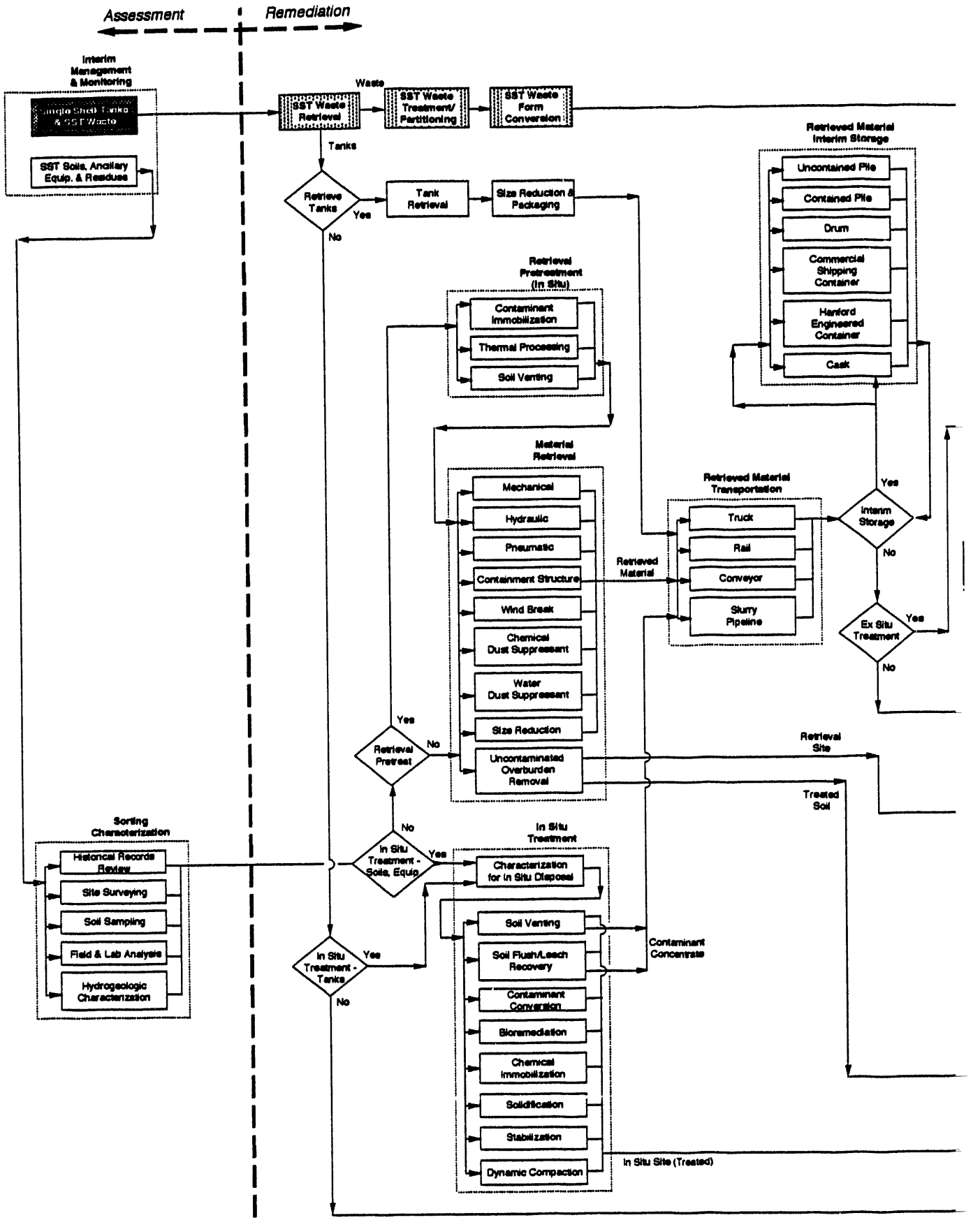


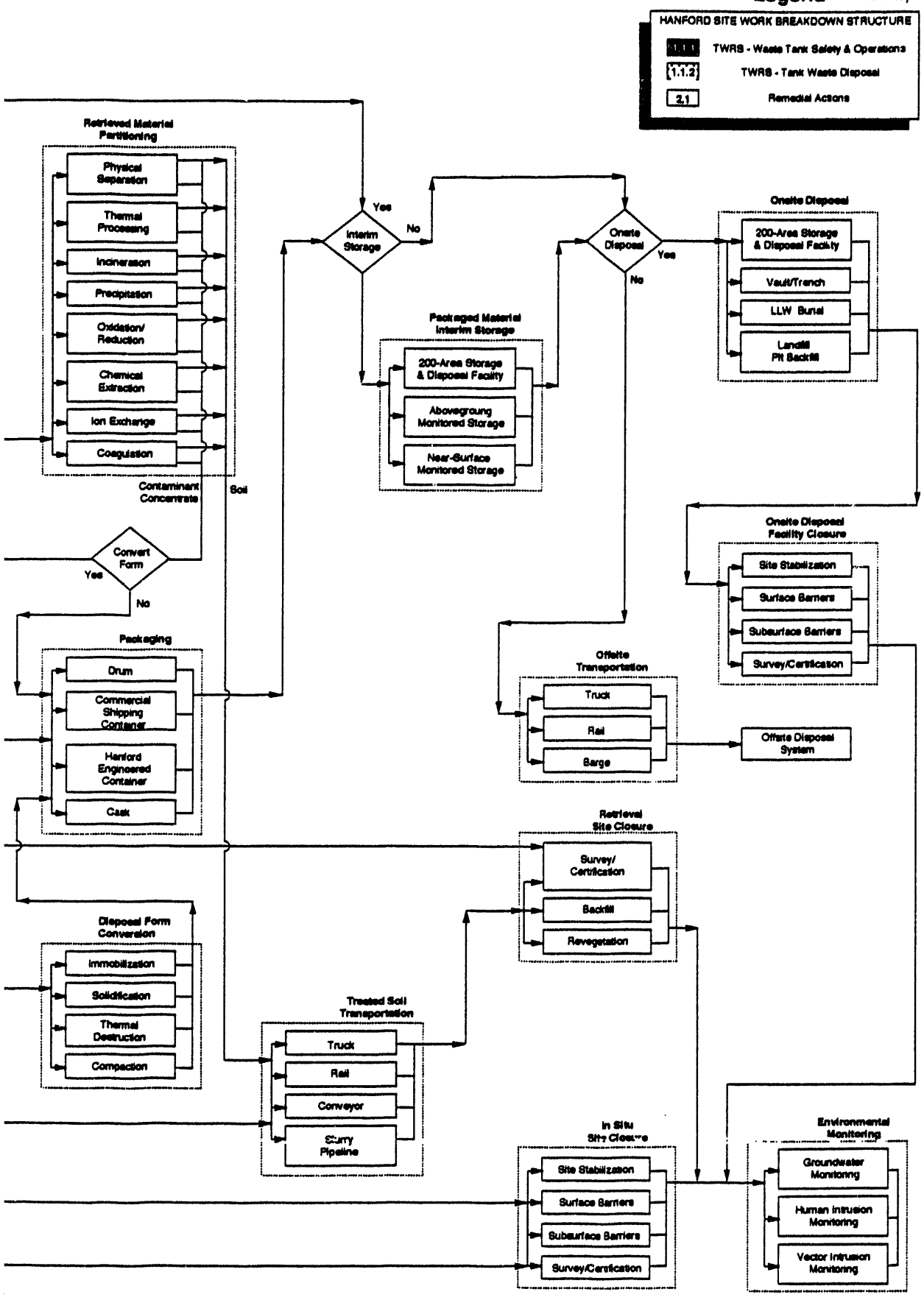
Logic Diagram A2-1. Contaminated Groundwater Disposition Logic Diagram.


Assessment
Remediation
Interim Management & Monitoring
Contaminated Soil
Sorting Characterization
Historical Records Review
Site Surveying
Soil Sampling
Field & Lab Analysis
Hydrogeologic Characterization
Computer Modeling
Retrieval Pretreatment (In Situ)
Contaminant Immobilization
Thermal Processing
Soil Venting
Retrieved Material Interim Storage
Uncontained Pile
Contained Pile
Drum
Commercial Shipping Container
Hanford Engineered Container
Cask
Material Retrieval
Mechanical
Hydraulic
Containment Structure
Wind Break
Chemical Dust Suppressant
Water Dust Suppressant
Size Reduction
Uncontaminated Overburden Removal
Retrieved Material
Retrieved Material Transportation
Truck
Rail
Conveyor
Slurry Pipeline
Interim Storage
Yes
No
Ex Situ Treatment
Yes
No
Retrieval Pretreat
Yes
No
Retrieval Site
Treated Soil
In Situ Disposal
No
Yes
In Situ Treatment
Characterization for In Situ Disposal
Soil Venting
Soil Flush/Leach Recovery
Contaminant Conversion
Bioremediation
Chemical Immobilization
Solidification
Stabilization
Dynamic Compaction
Contaminant Concentrate
In Situ Site (Treated)
Remediation Required
Yes
No



Logic Diagram A2-2. Contaminated Soil Disposition Logic Diagram.


Assessment
Remediation
Interim Management & Monitoring
Simple Shell Tanks & SST Waste
SST Soils, Ancillary Equip. & Residues
Waste
SST Waste Retrieval
SST Waste Treatment/ Partitioning
SST Waste Form Conversion
Tanks
Retrieve Tanks
Yes
No
Tank Retrieval
Size Reduction & Packaging
Retrieved Material Interim Storage
Uncontained Pile
Contained Pile
Drum
Commercial Shipping Container
Hanford Engineered Container
Cask
Retrieval Pretreatment (In Situ)
Contaminant Immobilization
Thermal Processing
Soil Venting
Material Retrieval
Mechanical
Hydraulic
Pneumatic
Containment Structure
Wind Break
Chemical Dust Suppressant
Water Dust Suppressant
Size Reduction
Uncontaminated Overburden Removal
Retrieved Material
Retrieved Material Transportation
Truck
Rail
Conveyor
Slurry Pipeline
Interim Storage
Ex Situ Treatment
Retrieval Pretreat
Retrieval Site
Treated Soil
Sorting Characterization
Historical Records Review
Site Surveying
Soil Sampling
Field & Lab Analysis
Hydrogeologic Characterization
In Situ Treatment - Soils, Equip.
In Situ Treatment - Tanks
In Situ Treatment
Characterization for In Situ Disposal
Soil Venting
Soil Flush/Leach Recovery
Contaminant Conversion
Bioremediation
Chemical Immobilization
Solidification
Stabilization
Dynamic Compaction
Contaminant Concentrate
In Situ Site (Treated)



Logic Diagram A2-3. Single-Shell Tanks Disposition Logic Diagram.

A3.0 PROGRAM SCHEDULE BASELINE

The RA Program element schedule is depicted in Figure A3-1 (APP A, Section A3.1). The schedul depicts key activities supporting DOE-HQ, DOE-RL and the Tri-Party Agreement milestones.

A3.1 MILESTONE CONTROL LOG

Table A3-1 (APP A, Section A3.2) is the MCL and contains the RA-specific DOE-HQ, DOE-RL, and TPA milestones for FY 1994.

A3.2 MILESTONE DESCRIPTION SHEETS

The MDS are presented as Table A3-2 (APP A, Section A3.3).

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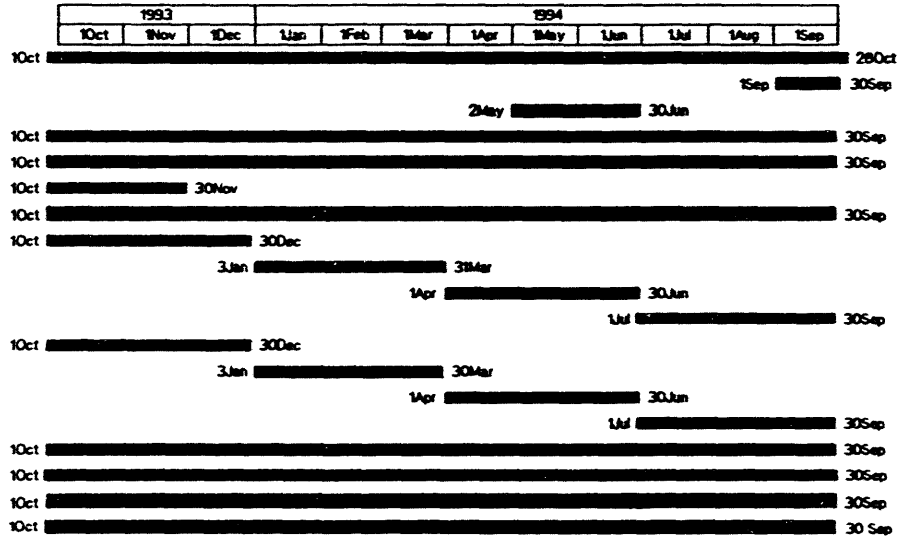
RADIATION AREA REMEDIAL ACTION/ UNDERGROUND STORAGE TANKS

1PJ121	ACREAGE DECONTAMINATION & INTERIM STABILIZATION		10Oct	28Oct
1PJ121C1.001	ISSUE REPORT SUMMARIZING FY94 ACTIVITIES INT. STAB.	*R	1Sep	30Sep
1PJ121C1.010	DEVELOPE DRAFT RARA INTERIM SCHEDULE FOR FY95	*R	24May	30Jun
1PJ121C1.020	IMPLEMENT REMEDIAL ACTION STRATEGY FY94 SCHEDULE	*R	10Oct	30Sep
1PJ122	RARA SURVEILLANCE AND MAINTENANCE		10Oct	30Sep
1PJ122C2.001	ISSUE RARA S & M REPORT SUMMARIZING FY93	*R	10Oct	30Nov
1PJ122C2.010	RESPOND TO RPR'S AS REQUIRED	*R	10Oct	30Sep
1PJ122C2.020.00	COMPLETE 100 AREA QUARTERLY SURVEILLANCE	*R	10Oct	30Dec
1PJ122C2.020.01	COMPLETE 100 AREA QUARTERLY SURVEILLANCE	*R	3Jan	31Mar
1PJ122C2.020.02	COMPLETE 100 AREA QUARTERLY SURVEILLANCE	*R	1Apr	30Jun
1PJ122C2.020.03	COMPELTE 100 AREA QUARTERLY SURVEILLANCE	*R	1Jul	30Sep
1PJ122C2.020.04	COMPLETE 200 AREA QUARTERLY SURVEILLANCE	*R	10Oct	30Dec
1PJ122C2.020.05	COMPLETE 200 AREA QUARTERLY SURVEILLANCE	*R	3Jan	30Mar
1PJ122C2.020.06	COMPLETE 200 AREA QUARTERLY SURVEILLANCE	*R	1Apr	30Jun
1PJ122C2.020.07	COMPLETE 200 AREA QUARTERLY SURVEILLANCE	*R	1Jul	30Sep
1PJ123	VEGETATION MANAGEMENT		10Oct	30Sep
1PJ123C3.001	COMPLETE REQUIRED AERIAL & GROUND APPLICATIONS	*R	10Oct	30Sep
1PJ221	UST REMOVALS		10Oct	30Sep
1PJ221C4.001	COMPLETE THE REMOVAL OF FOUR ORPHAN UST'S	*K	10Oct	30 Sep



LEGEND:

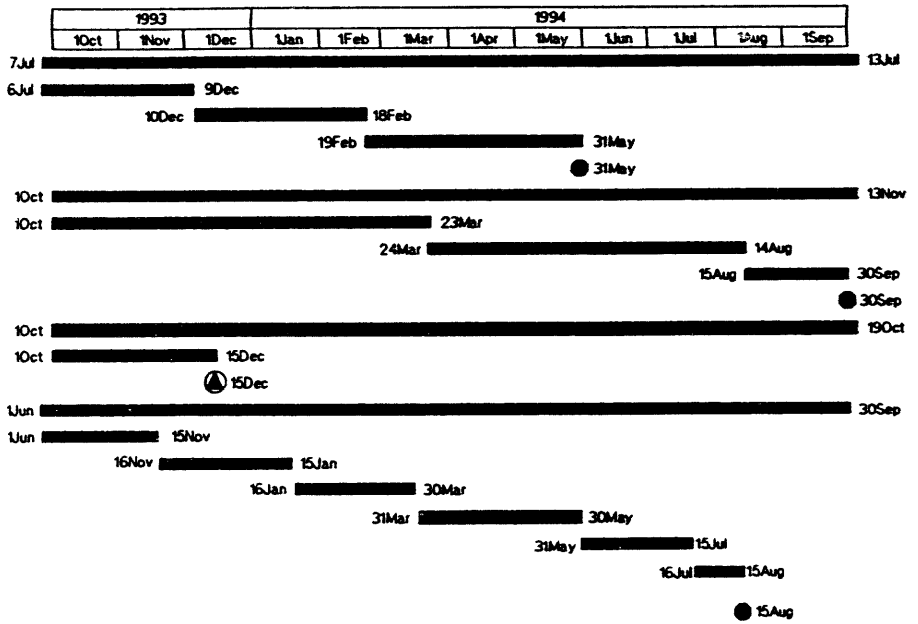
- TRI-PARTY AGREEMENT MILESTONE -T
- DOE-RL MAJOR MILESTONE - K
- DOE-HQ MAJOR MILESTONE - H
- KEY MILESTONE - R

Project: RARA/UST'S	Date: 7Dec93 12:33
RADIATION AREA REMEDIAL ACTION/UNDERGROUND STORAGE TANKS	
Page: 1	Scheduled by ER Program Control - Scheduling

Figure A3-1. Remedial Action Schedule. (sheet 1 of 25)

RCRA CLOSURES

1PV711	**1301/1325 CLOSURE PLAN**	7Jul	13Jul
1PV7110101	CLOSURE PLAN PREPARATION - DRAFT	6Jul	9Dec
1PV7110102	WHC/RL CONCURRENT REVIEW	10Dec	18Feb
1PV7110103	FINAL COMMENT INCORPORATION AND WHC/RL CONCURRENCE	19Feb	31May
1PV71010500	M-20-31 - Submit 1301-N/1325-N CLOSURE PLAN TO EPA/ECOLOGY		31May
1PV712	**1324-N/1324-NA CLOSURE PLAN**	10Oct	13Nov
1PV71201001	CLOSURE PLAN PREPARATION	10Oct	23Mar
1PV71201303	WHC REVIEW AND DOE-RL REVIEW	24Mar	14Aug
1PV71201305	WHC AND DOE-RL CONCURRENCE	15Aug	30Sep
1PV71201307	M-20-35 SUBMIT 1324/1324NA CLOSURE PLAN TO EPA/ECOLOGY		30Sep
1PVB11	**B-POND CLOSURE PLAN**	10Oct	19Oct
1PVB110A0A02	PREP & SUBMIT REV 1 CP TO ECOLOGY - CLEAN CLOSE A,B,C LOBES	10Oct	15Dec
1PVB110A0A03	PREP & SUBMIT REV 1 CP TO ECOLOGY - CLEAN CLOSE A,B,C LOBES		15Dec
1PVF11	**300 AREA PROCESS TRENCH CLOSURE PLAN**	1Jun	30Sep
1PVF110101	CLOSPURE PLAN PREPARATION AND AUTHOR REVIEW OF CP	1Jun	15Nov
1PVF110104	WHC CLOSURE PLAN REVIEW	16Nov	15Jan
1PVF110105	RL CLOSURE PLAN REVIEW	16Jan	30Mar
1PVF110106	DOE/HQ CLOSURE PLAN REIVEW	31Mar	30May
1PVF110106	OBTAIN APPROVALS	31May	15Jul
1PVF110106	PREPARE FOR SUBMITTAL TO EPA/ECOLOGY	16Jul	15Aug
1PVF1101M2032	M-20-32 SUBMIT 300 AREA PROCESS TRENCH CLOS/POST CLOSURE PLAN TO EPA/ECOLOGY		15Aug



LEGEND:

- TRI-PARTY AGREEMENT MILESTONE
- DOE-RL MAJOR MILESTONE
- DOE-HQ MAJOR MILESTONE
- KEY MILESTONE

Project: RCRA CLOSURES	Date: 9Dec93 12:39
RCRA CLOSURES	
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Figure A3-1. Remedial Action Schedule. (sheet 2 of 25)

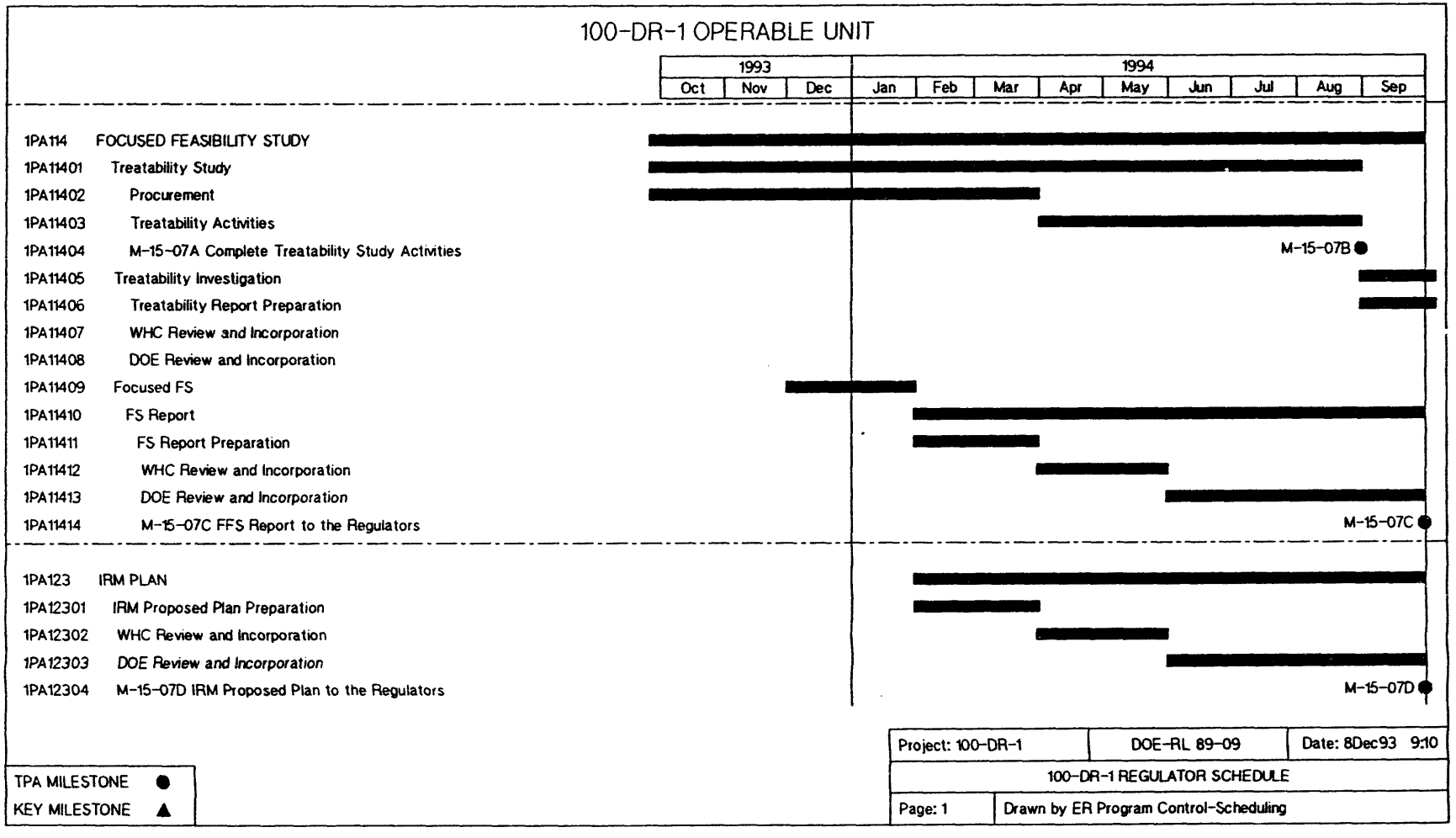

Figure A3-1. Remedial Action Schedule. (sheet 3 of 25)

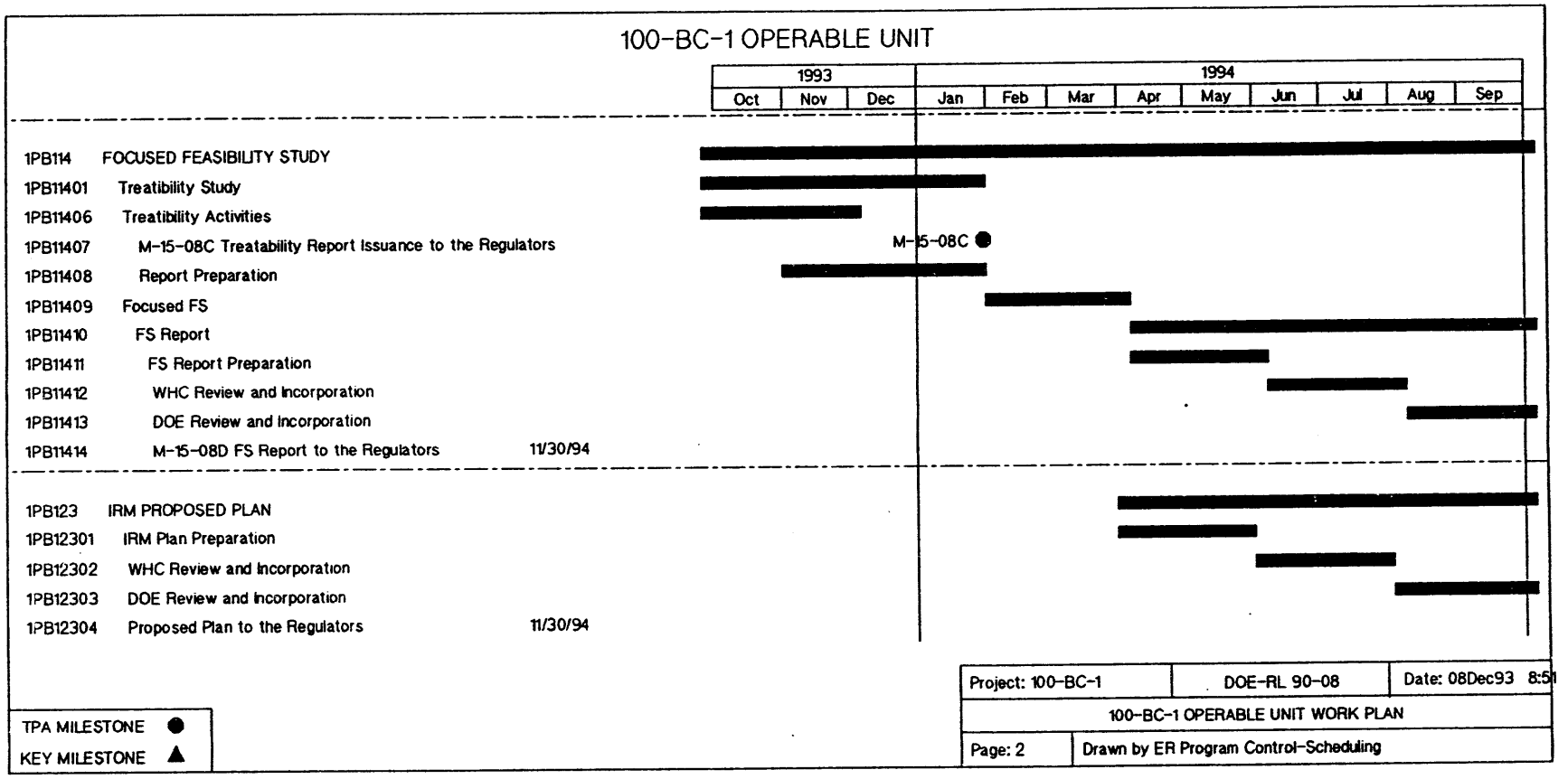

Figure A3-1. Remedial Action Schedule. (sheet 4 of 25)

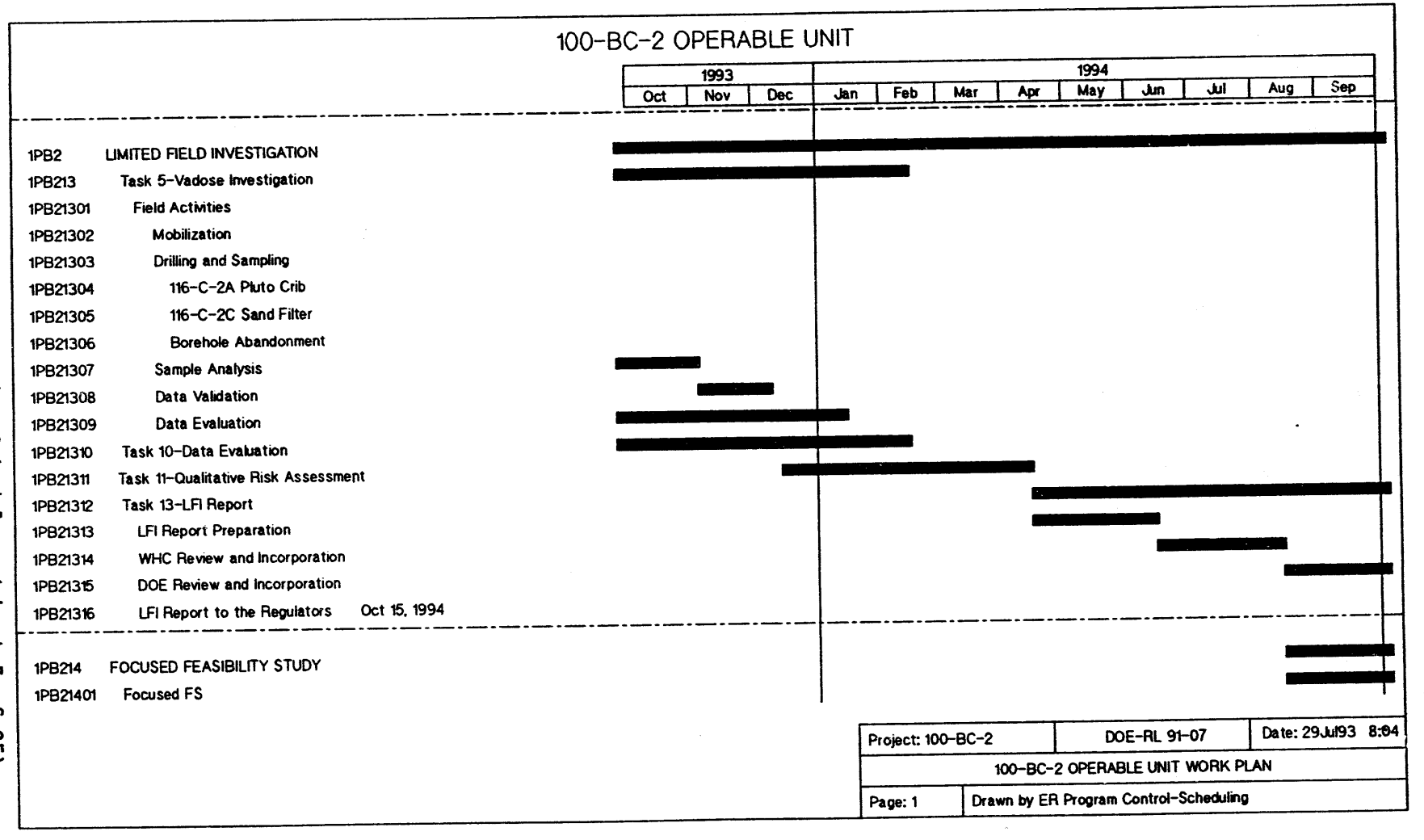

Figure A3-1. Remedial Action Schedule. (sheet 5 of 25)

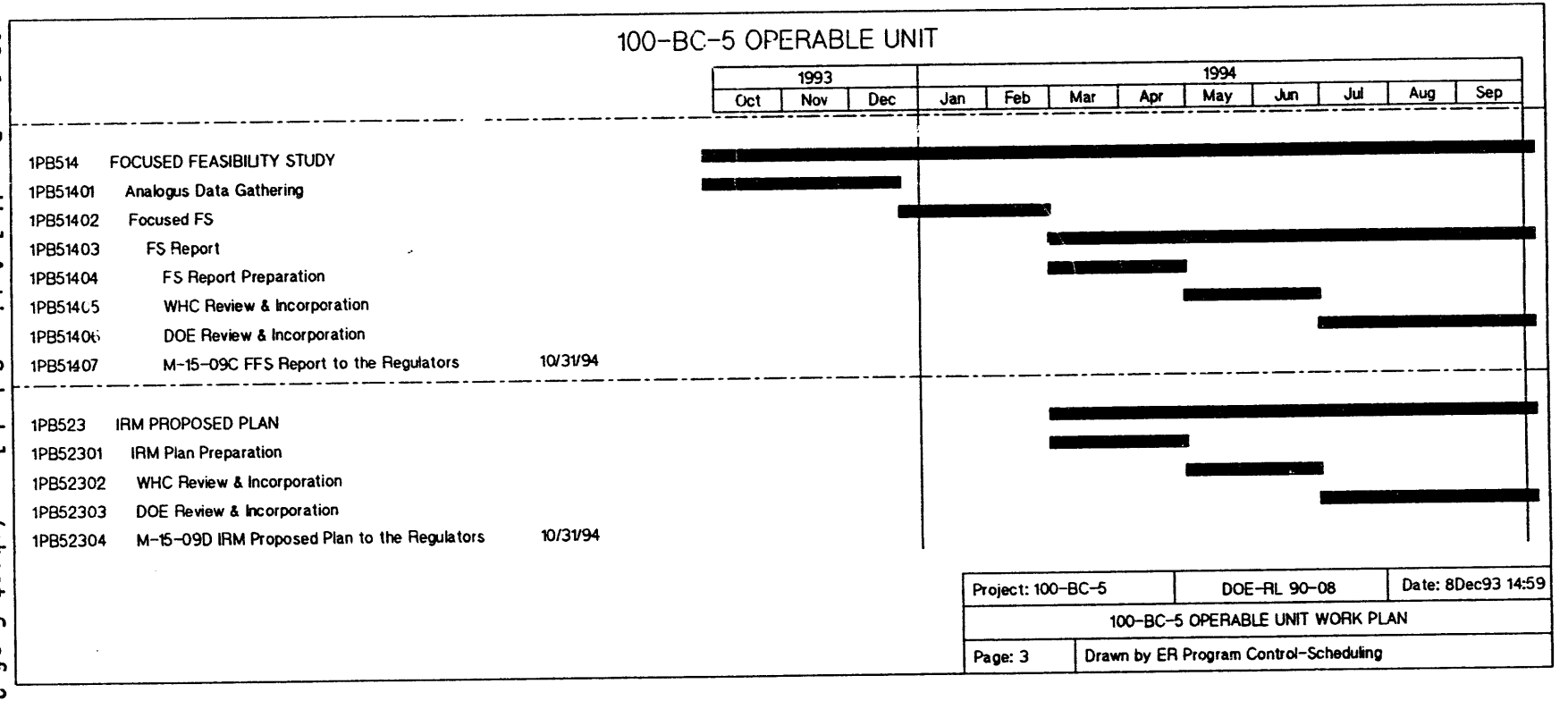

Figure A3-1. Remedial Action Schedule. (sheet 6 of 25)

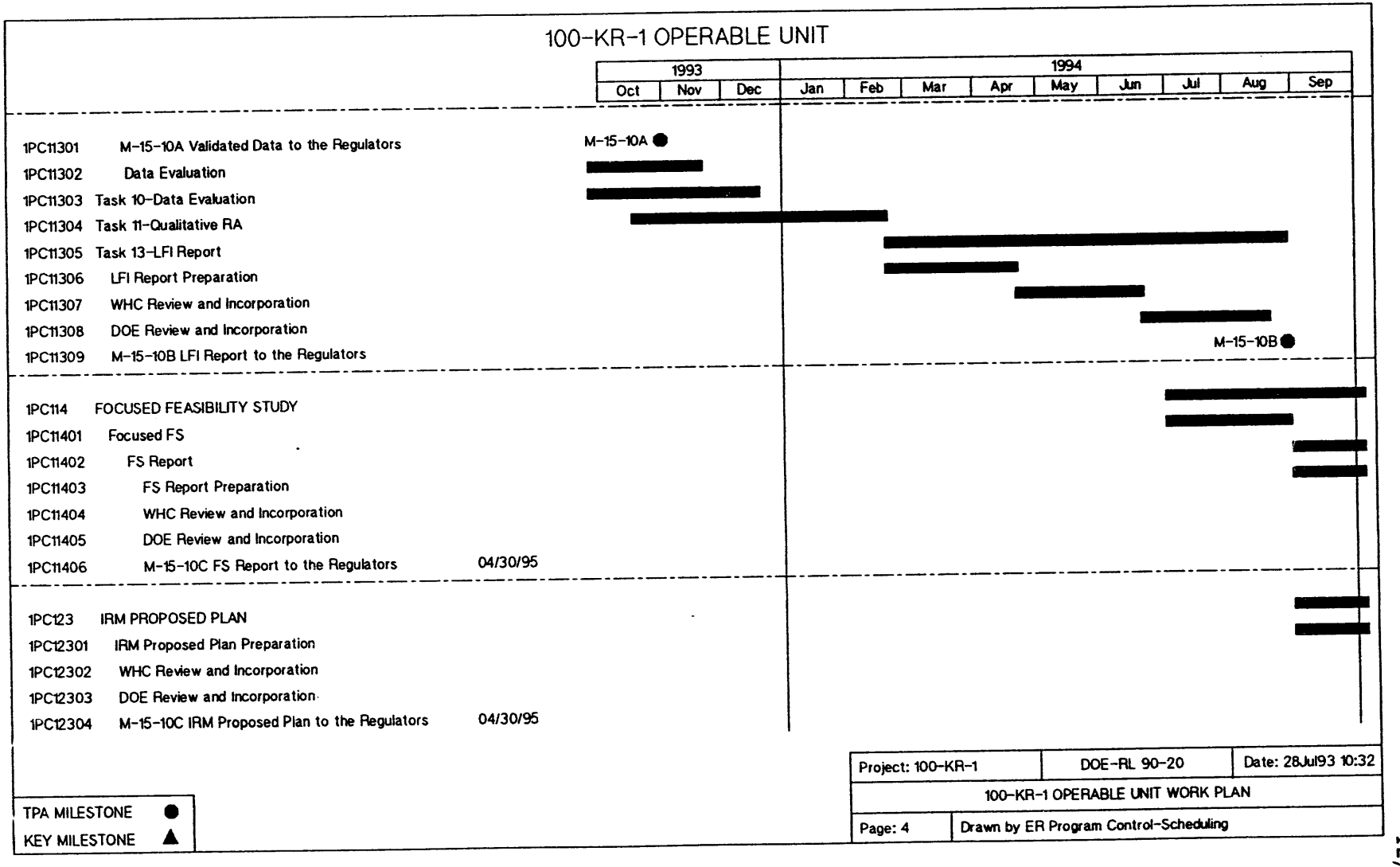

Figure A3-1. Remedial Action Schedule. (sheet 7 of 25)

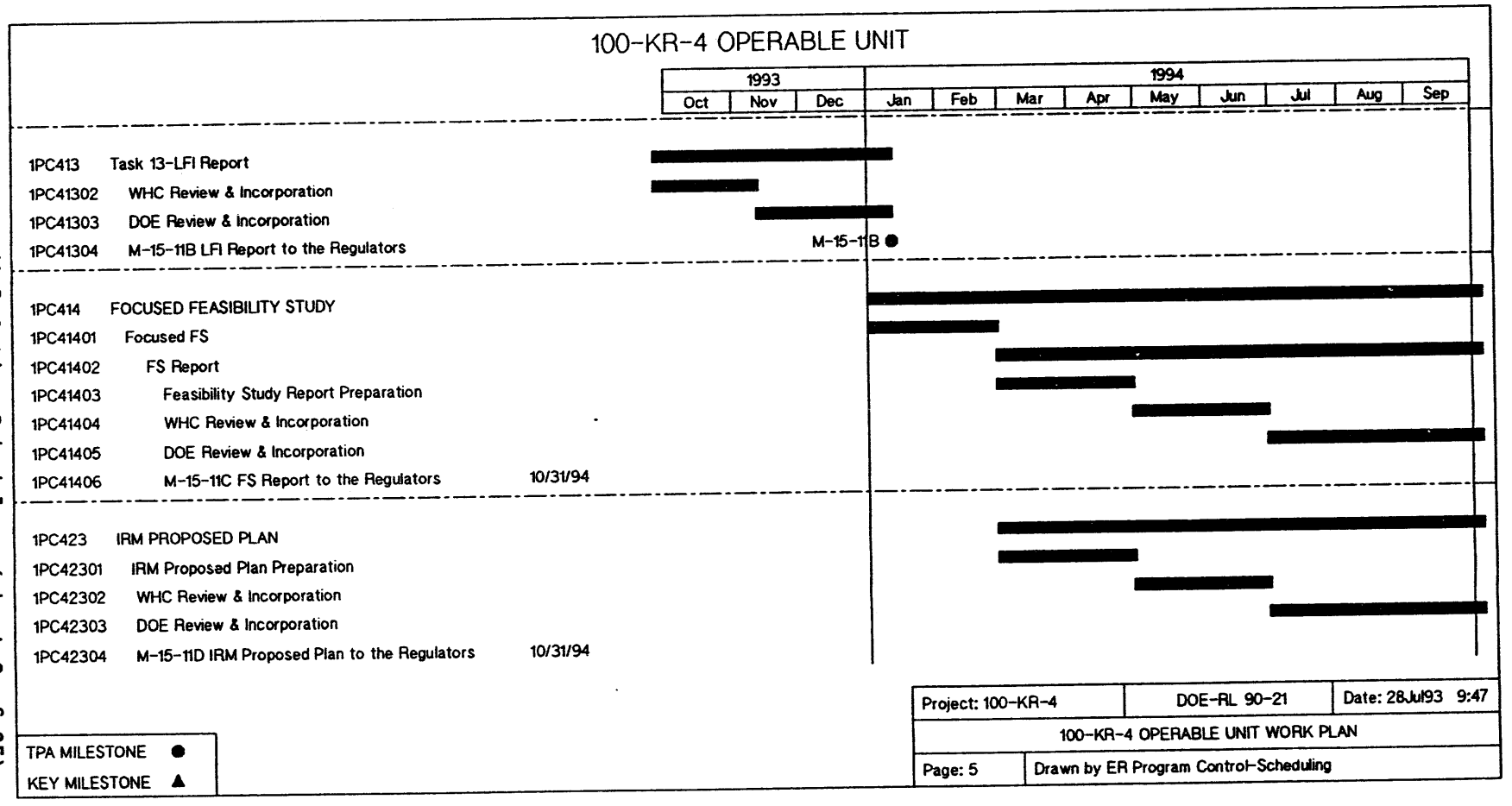

Figure A3-1. Remedial Action Schedule. (sheet 8 of 25)

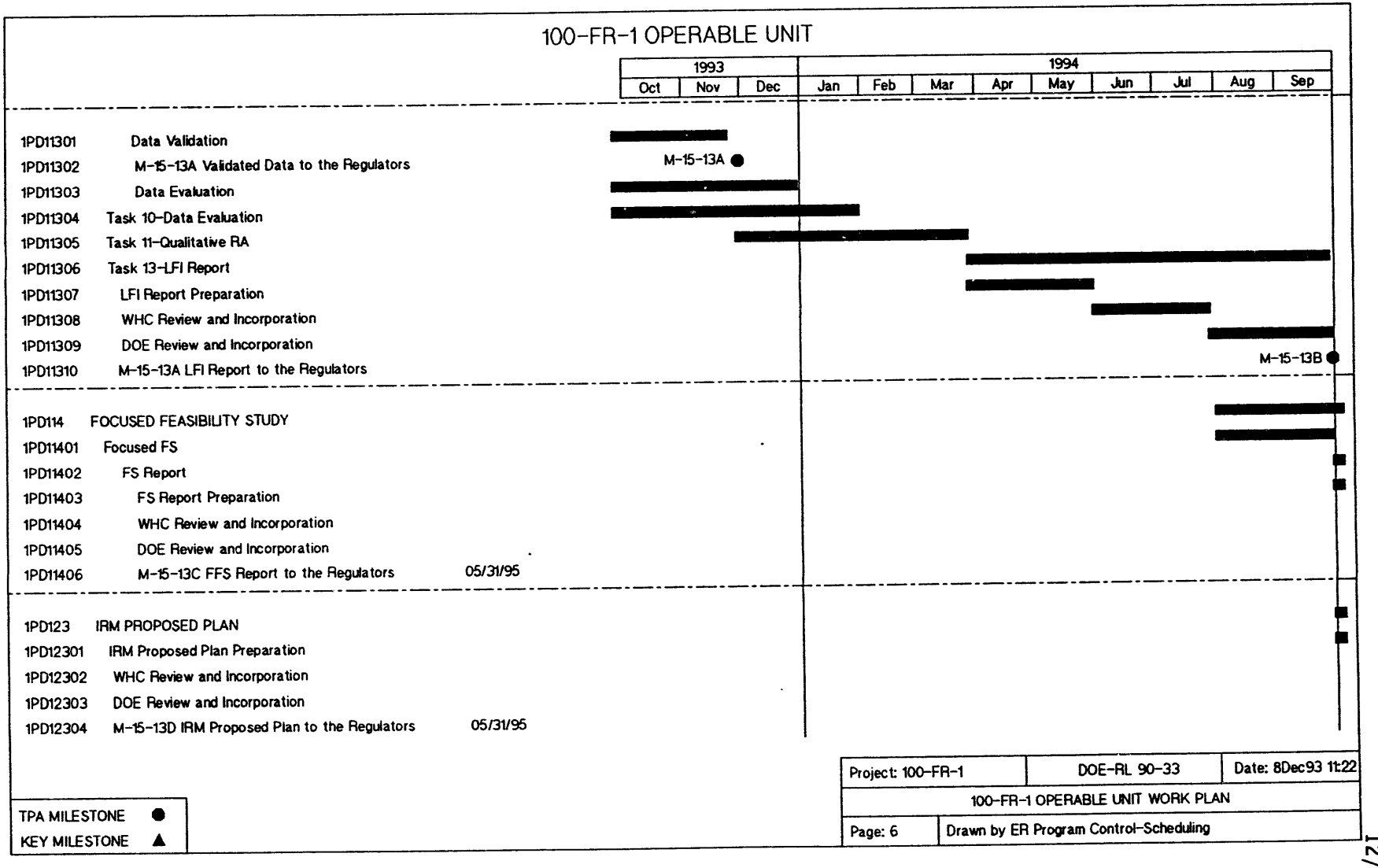

Figure A3-1. Remedial Action Schedule. (sheet 9 of 25)

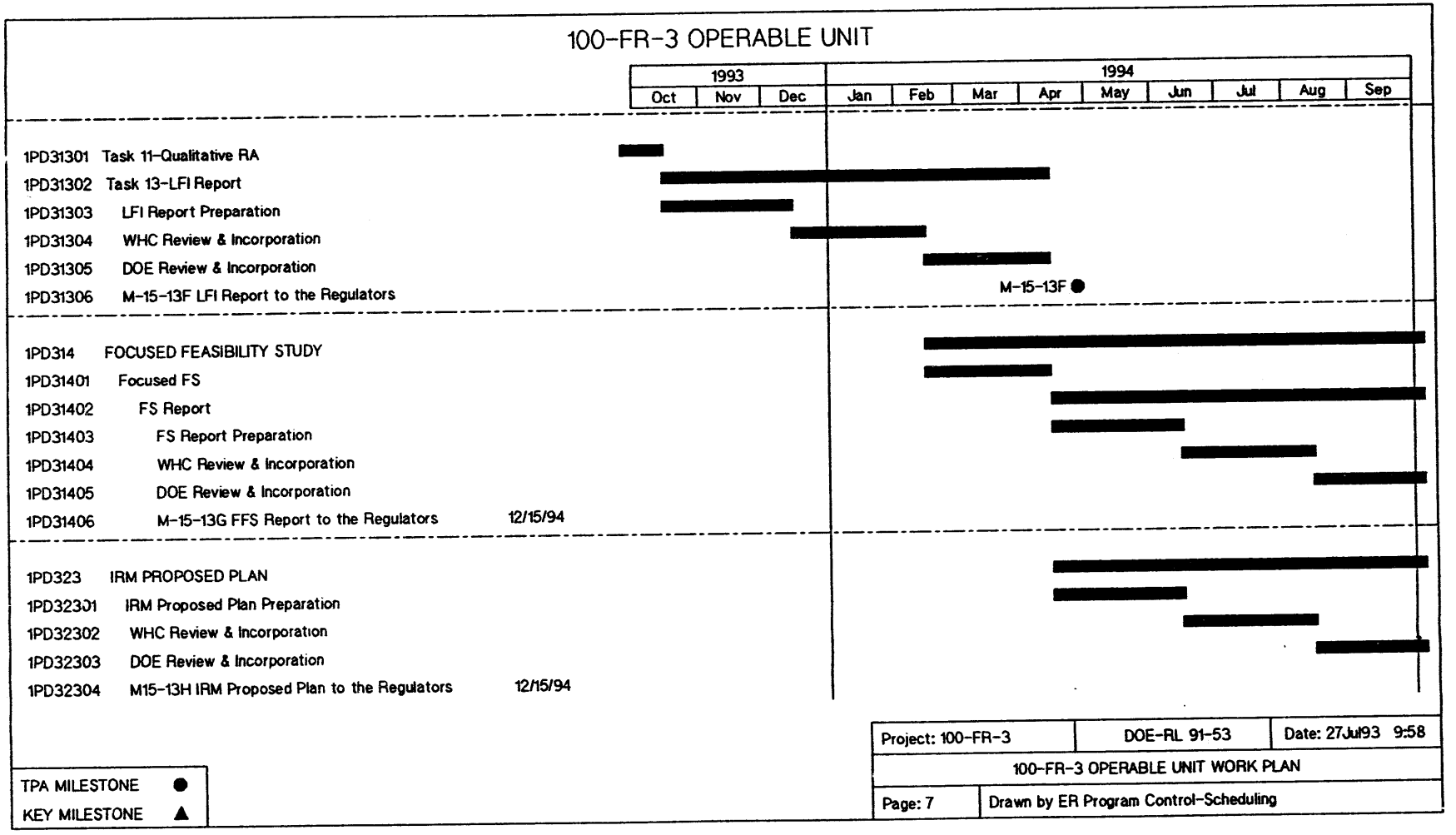

Figure A3-1. Remedial Action Schedule. (sheet 10 of 25)

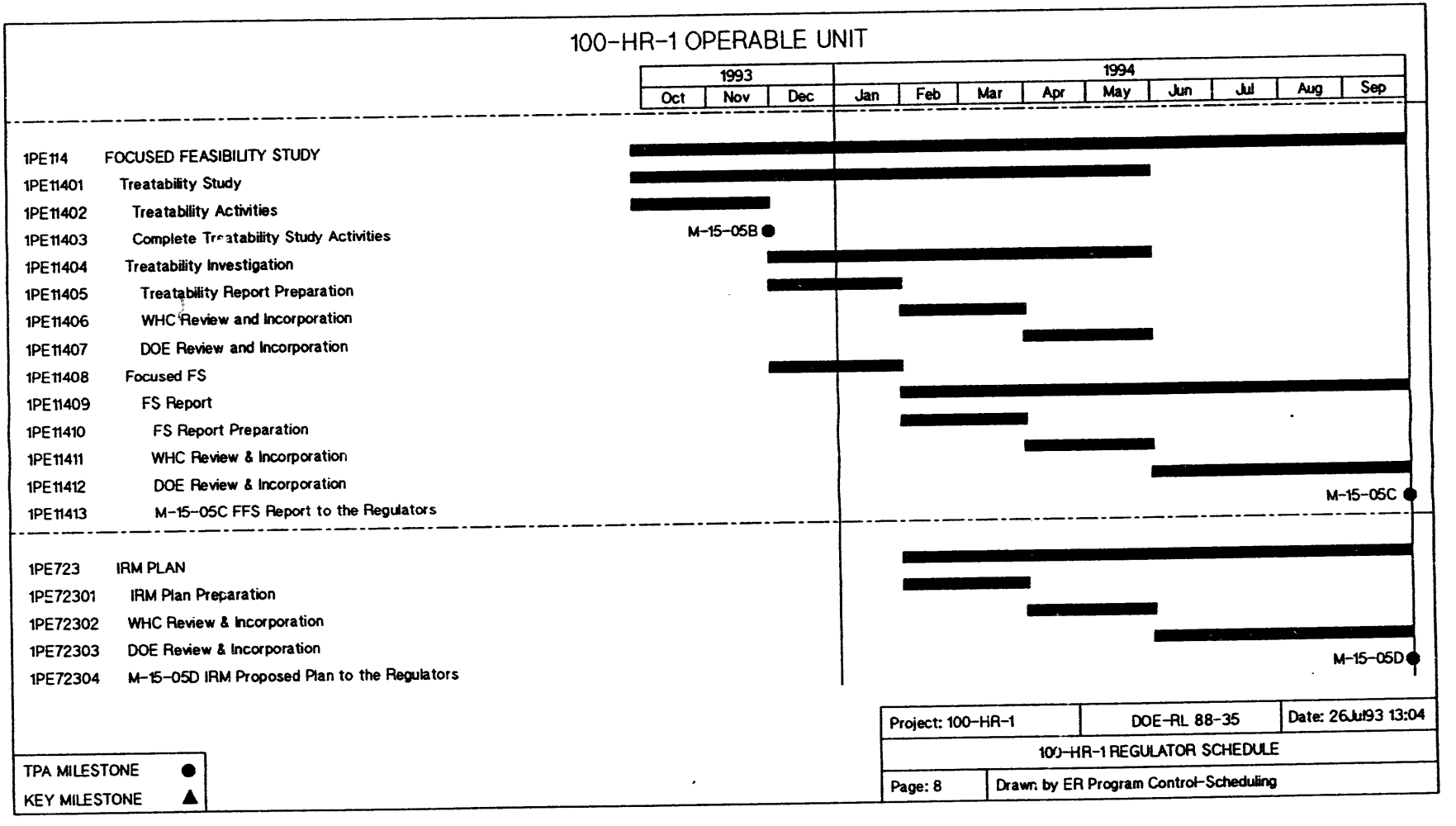

Figure A3-1. Remedial Action Schedule. (sheet 11 of 25)

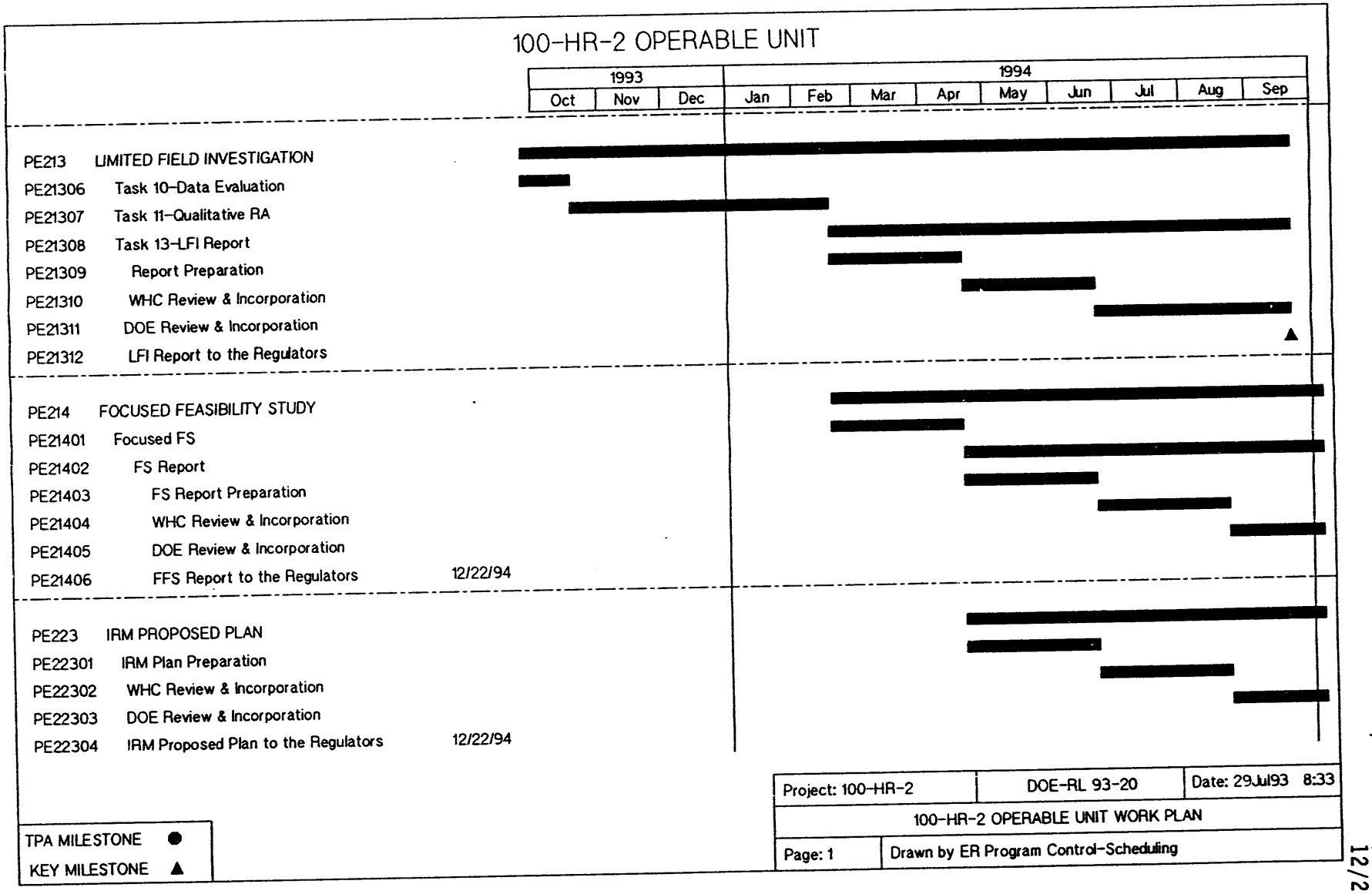

Figure A3-1. Remedial Action Schedule. (sheet 12 of 25)

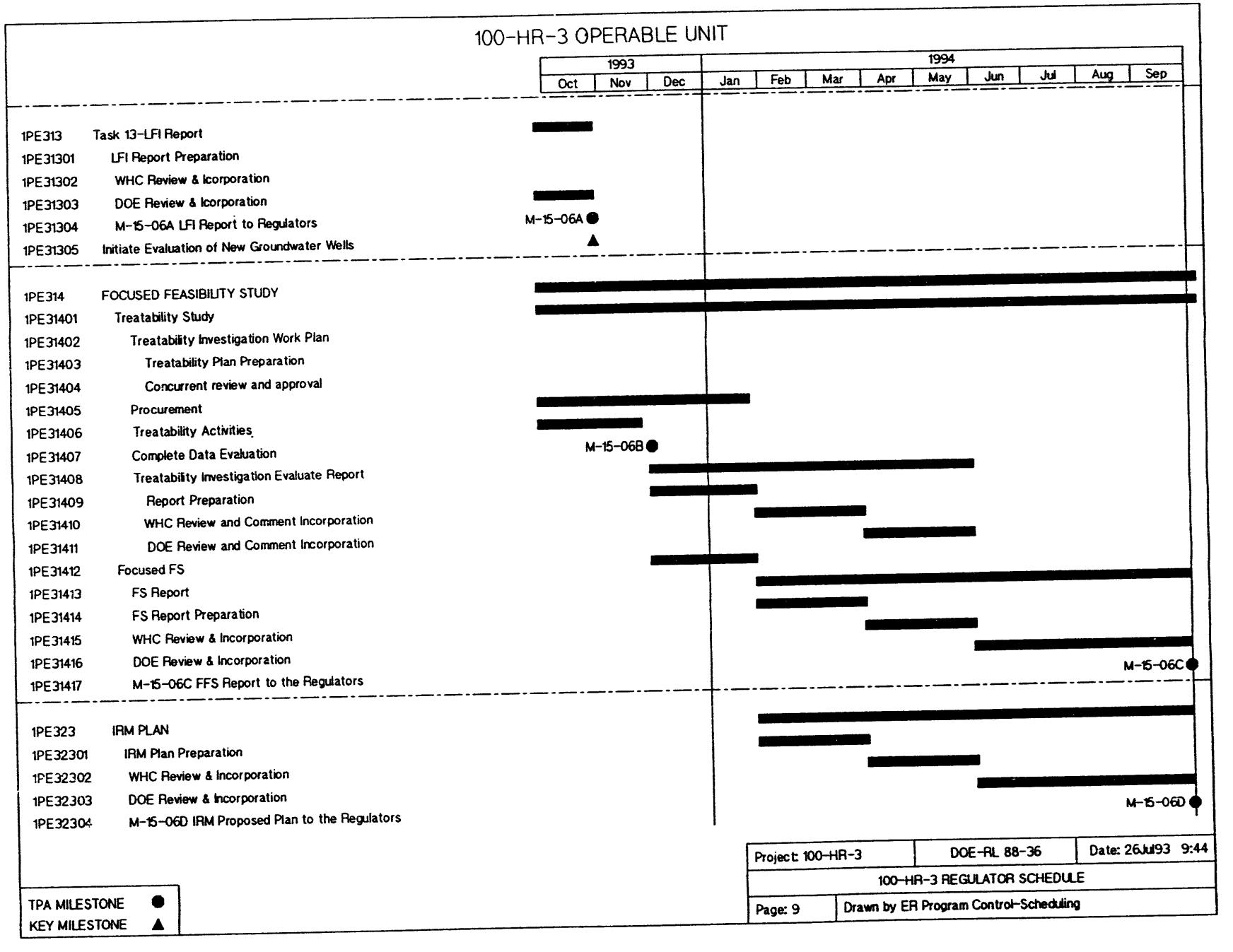

Figure A3-1. Remedial Action Schedule. (sheet 13 of 25)

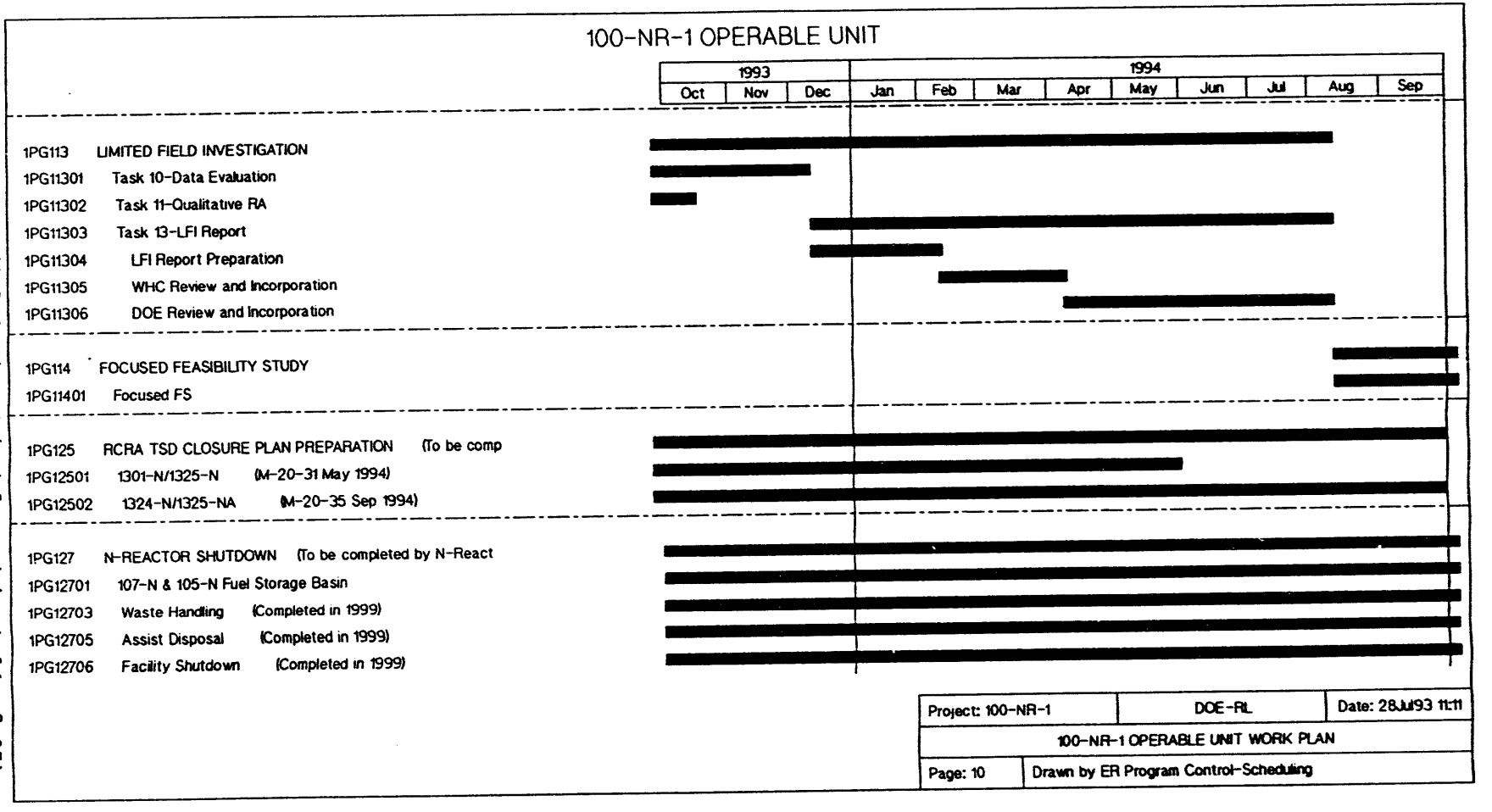

Figure A3-1. Remedial Action Schedule. (sheet 14 of 25)

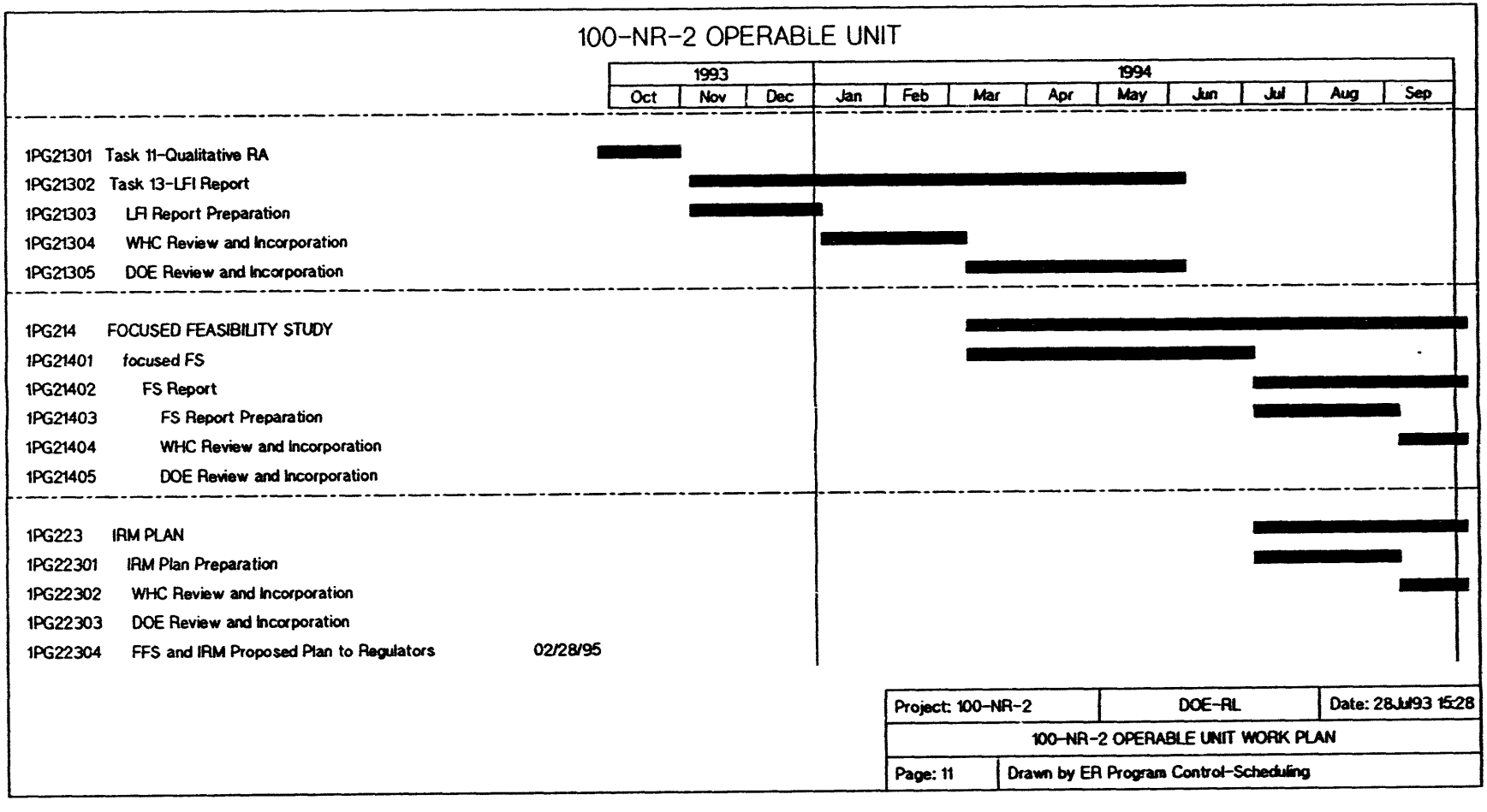

Figure A3-1. Remedial Action Schedule. (sheet 15 of 25)

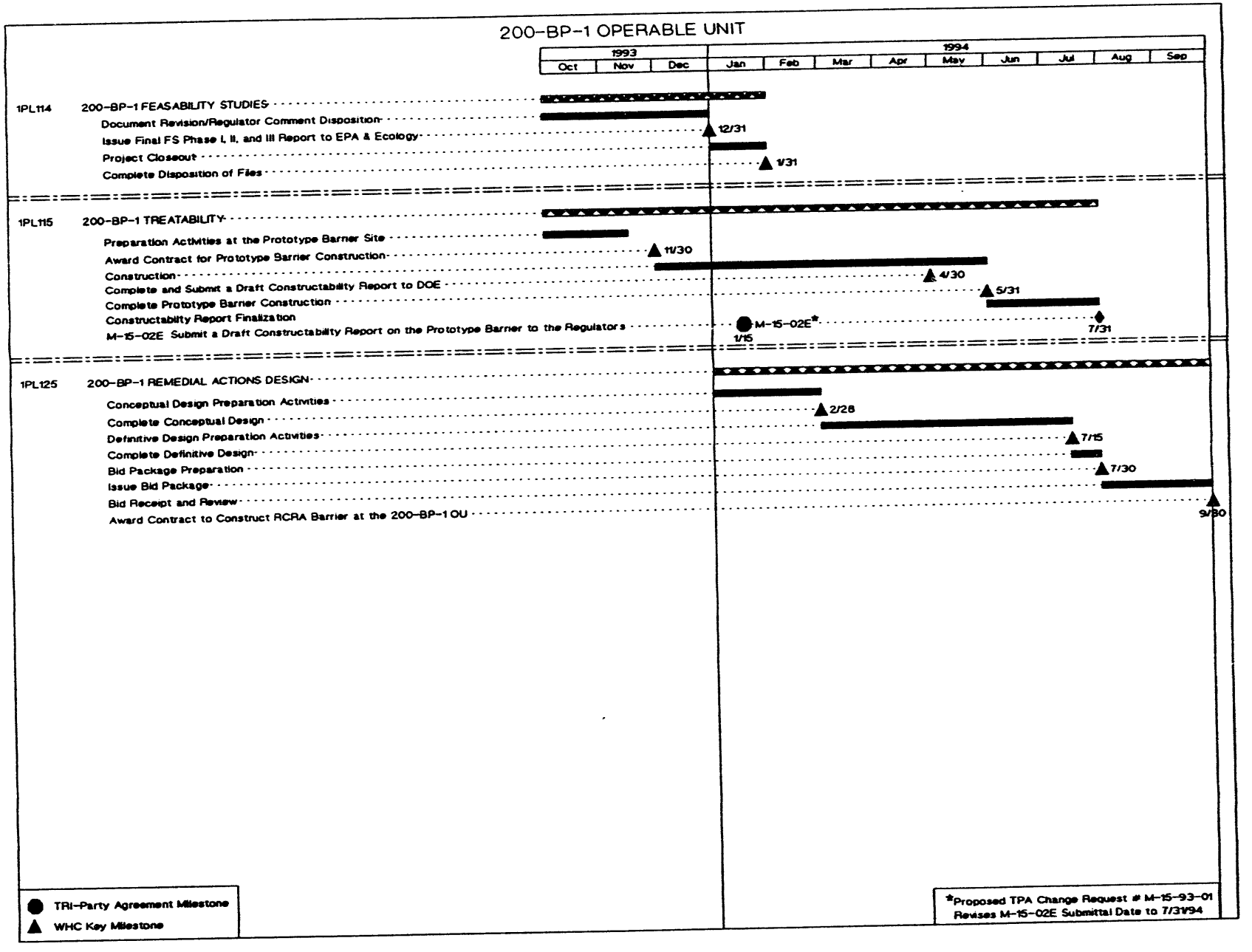

Figure A3-1. Remedial Action Schedule. (sheet 16 of 25)

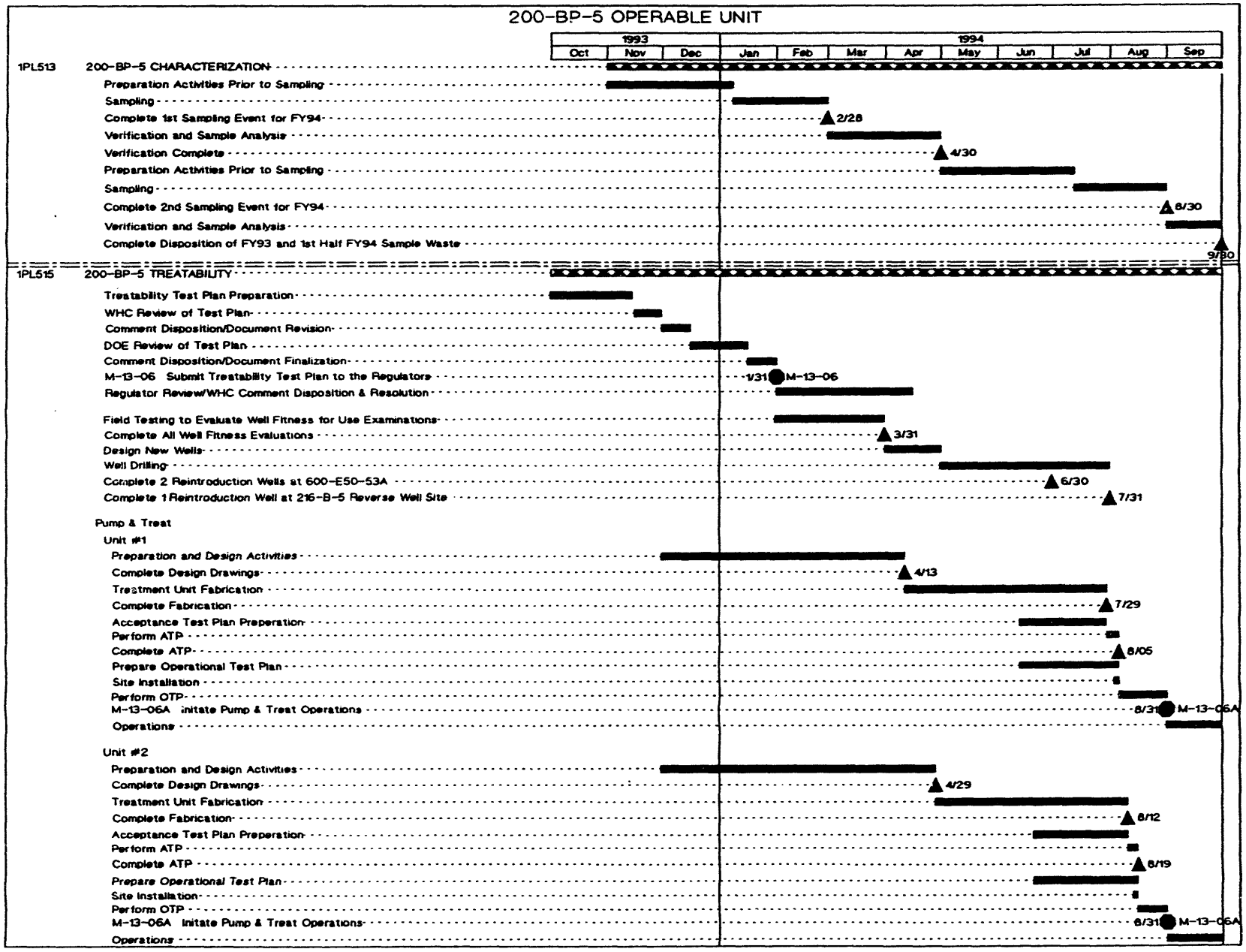

Figure A3-1. Remedial Action Schedule. (sheet 17 of 25)

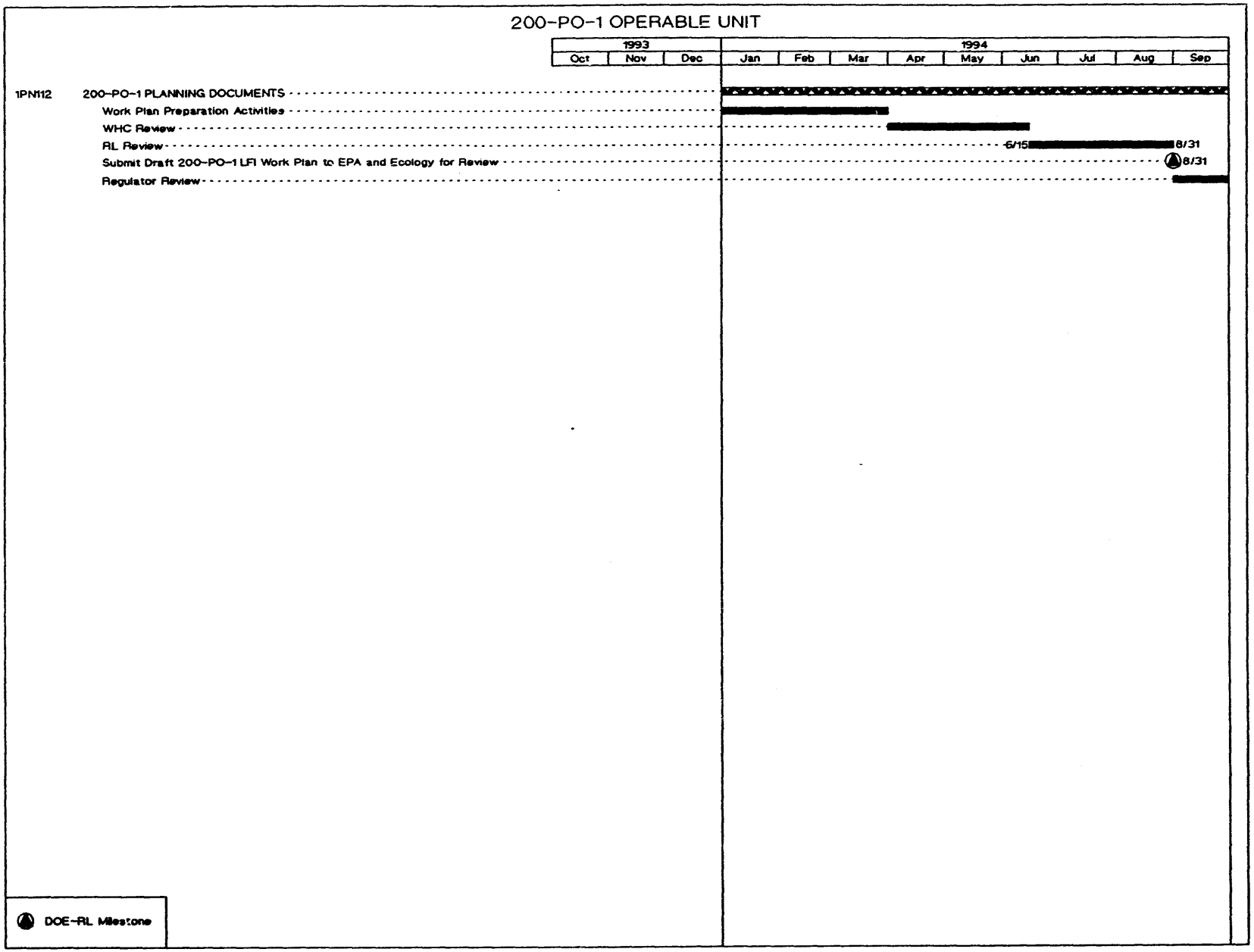

Figure A3-1. Remedial Action Schedule. (sheet 18 of 25)

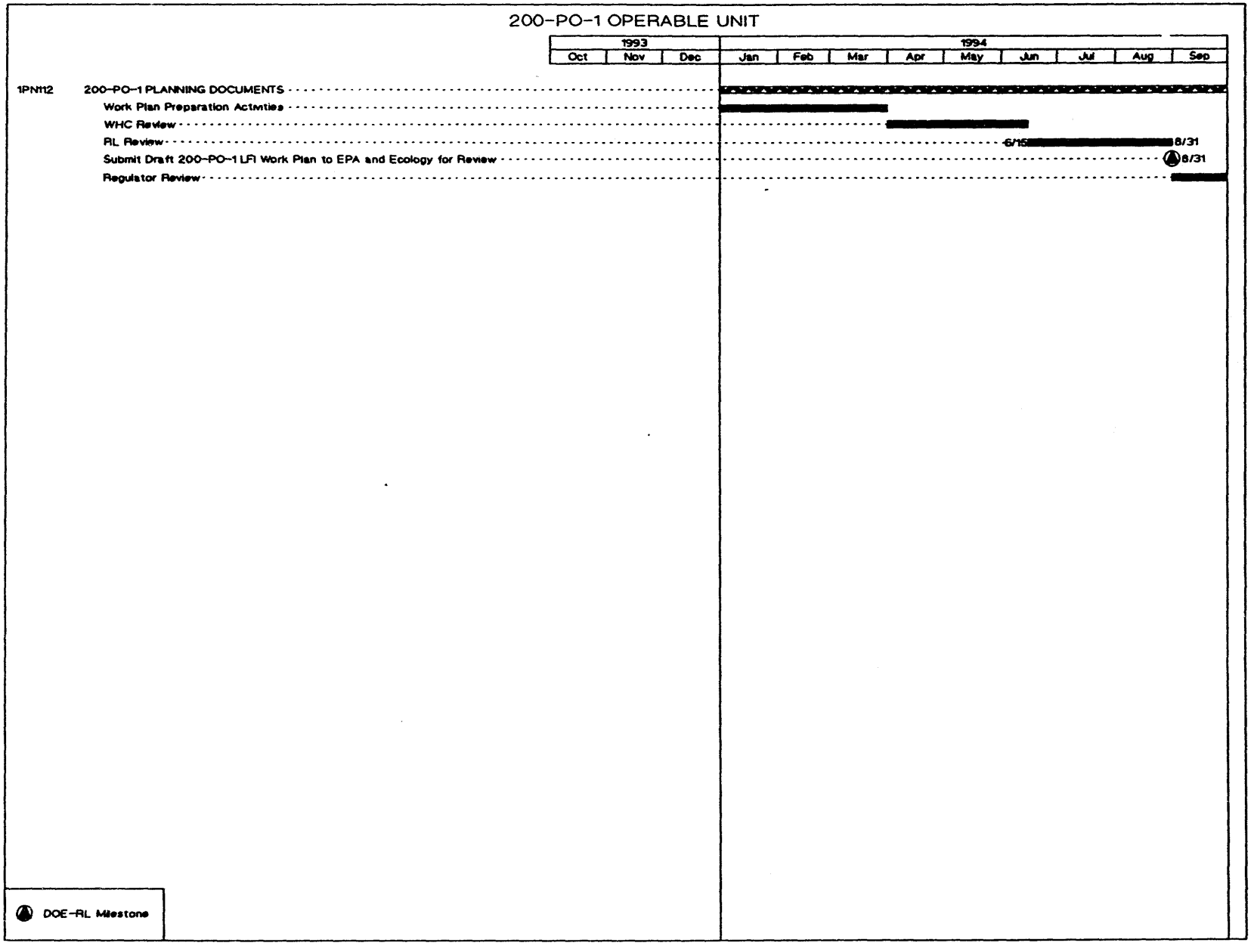

Figure A3-1. Remedial Action Schedule. (sheet 19 of 25)

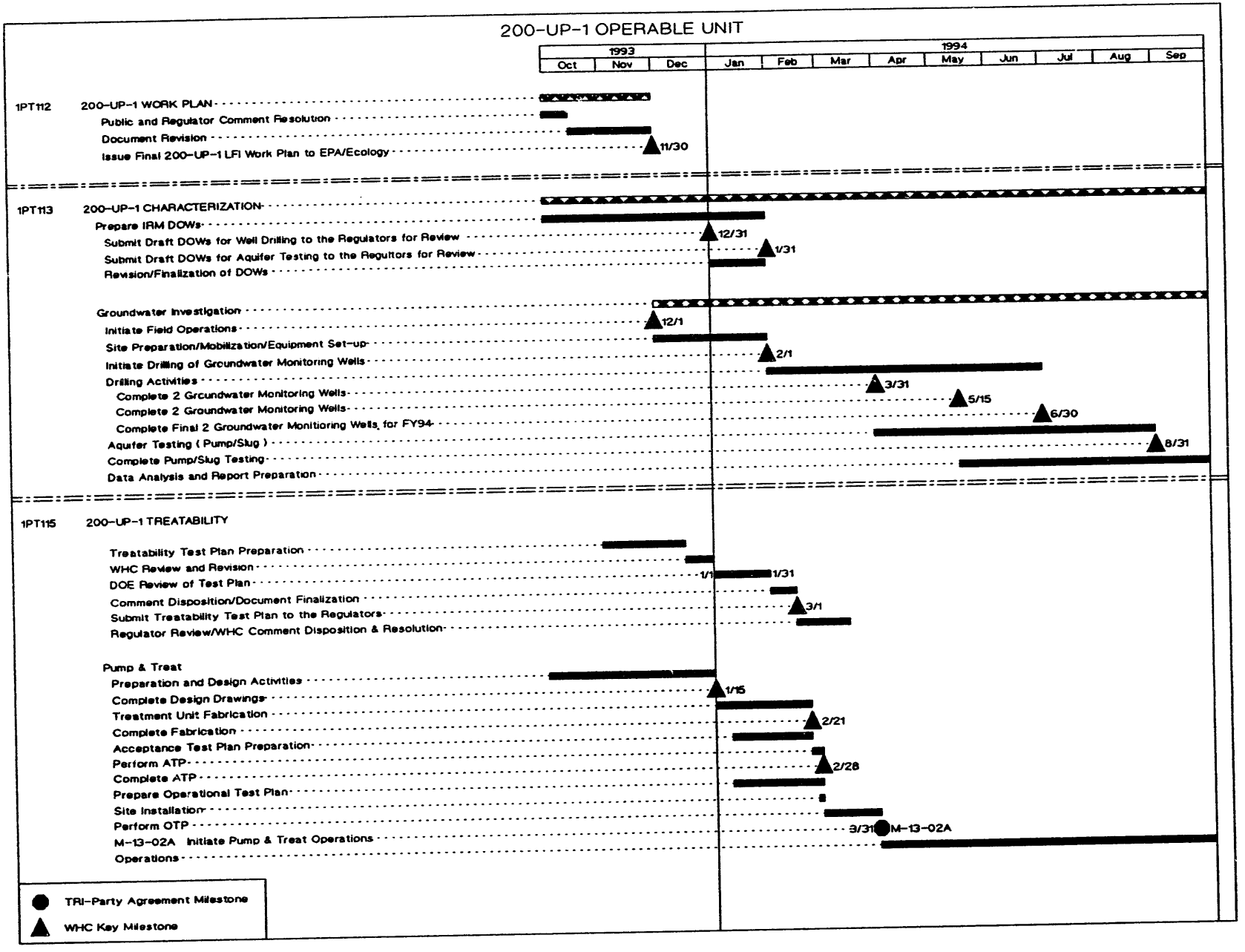

Figure A3-1. Remedial Action Schedule. (sheet 20 of 25)

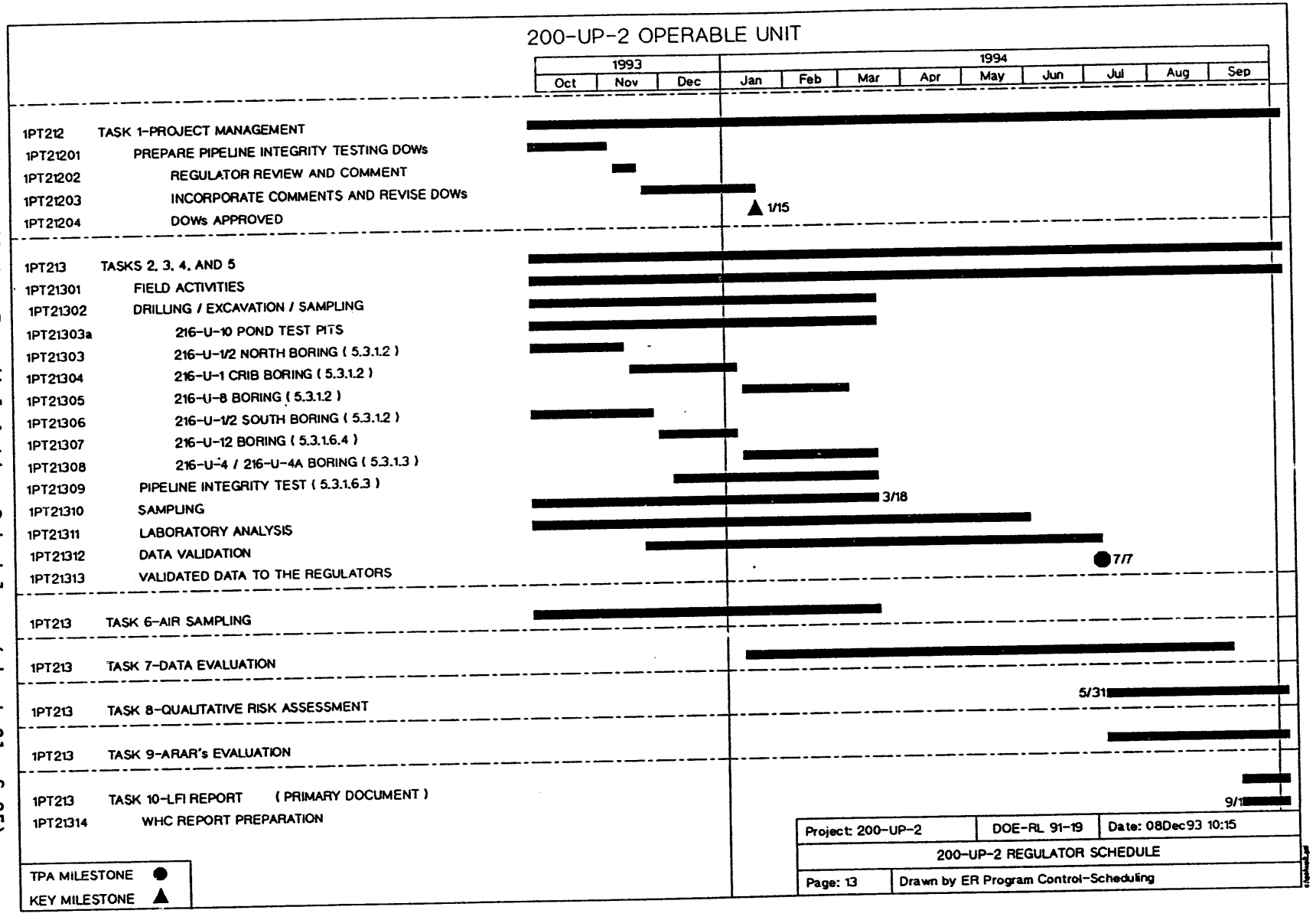

Figure A3-1. Remedial Action Schedule. (sheet 21 of 25)

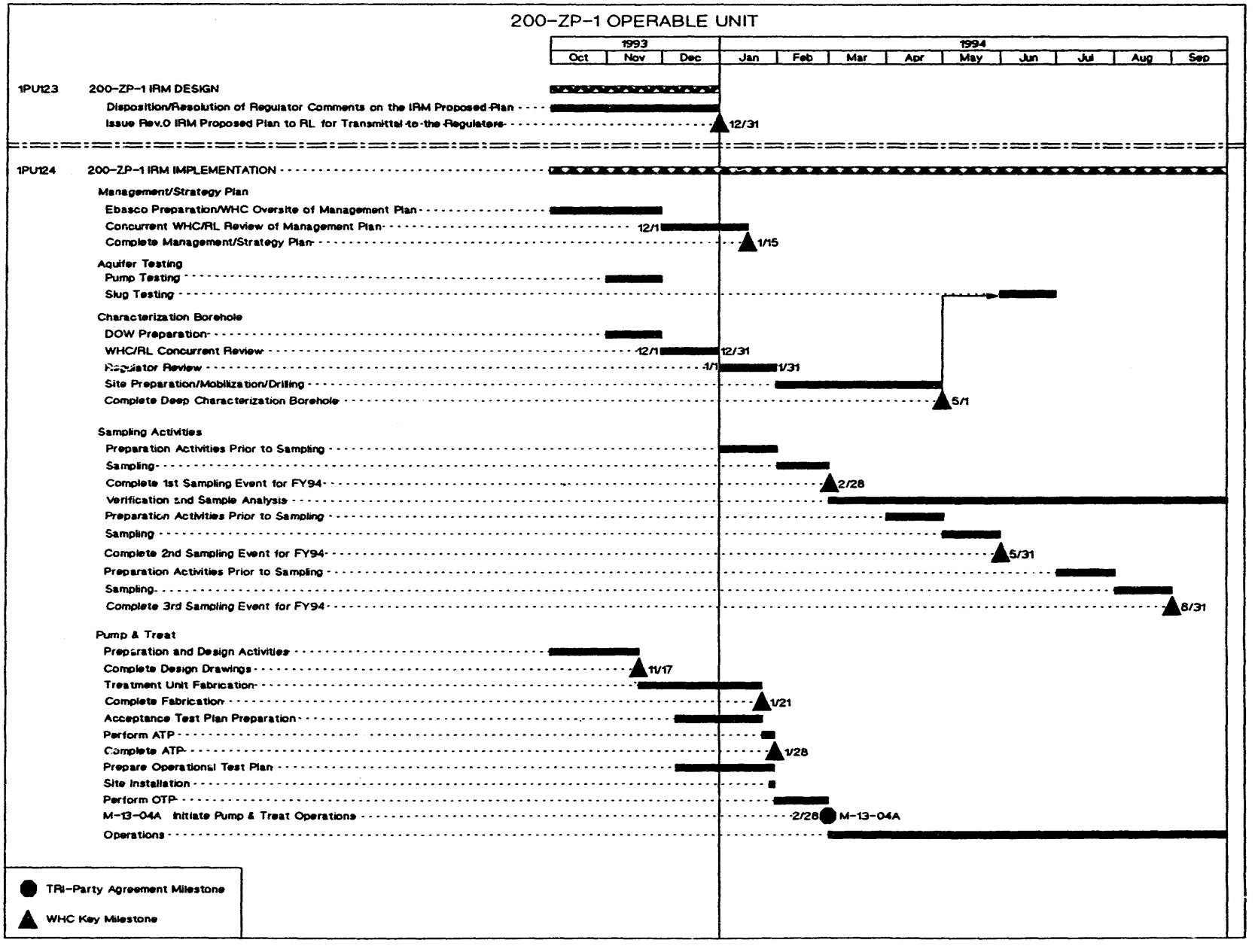

Figure A3-1. Remedial Action Schedule. (sheet 22 of 25)

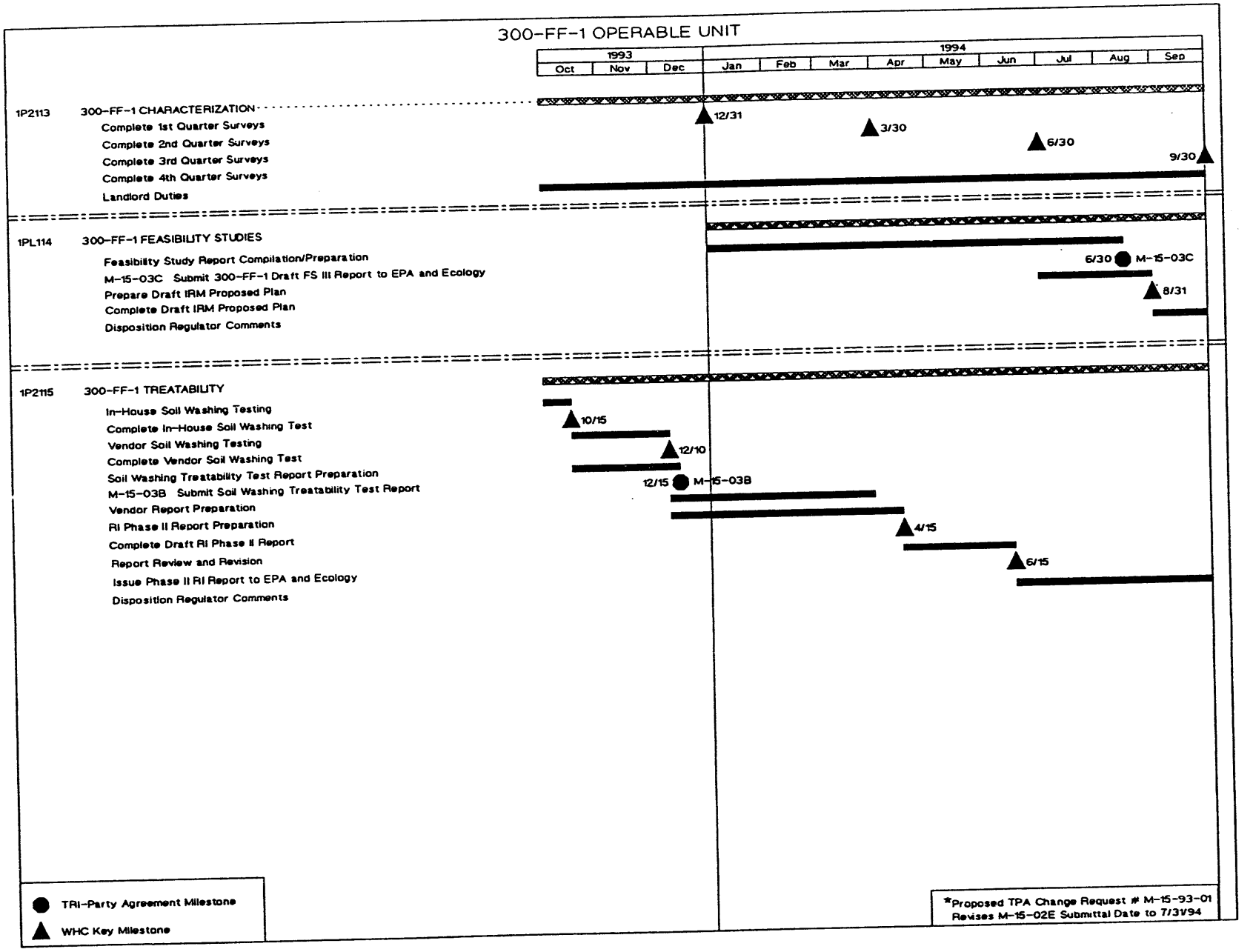

Figure A3-1. Remedial Action Schedule. (sheet 23 of 25)

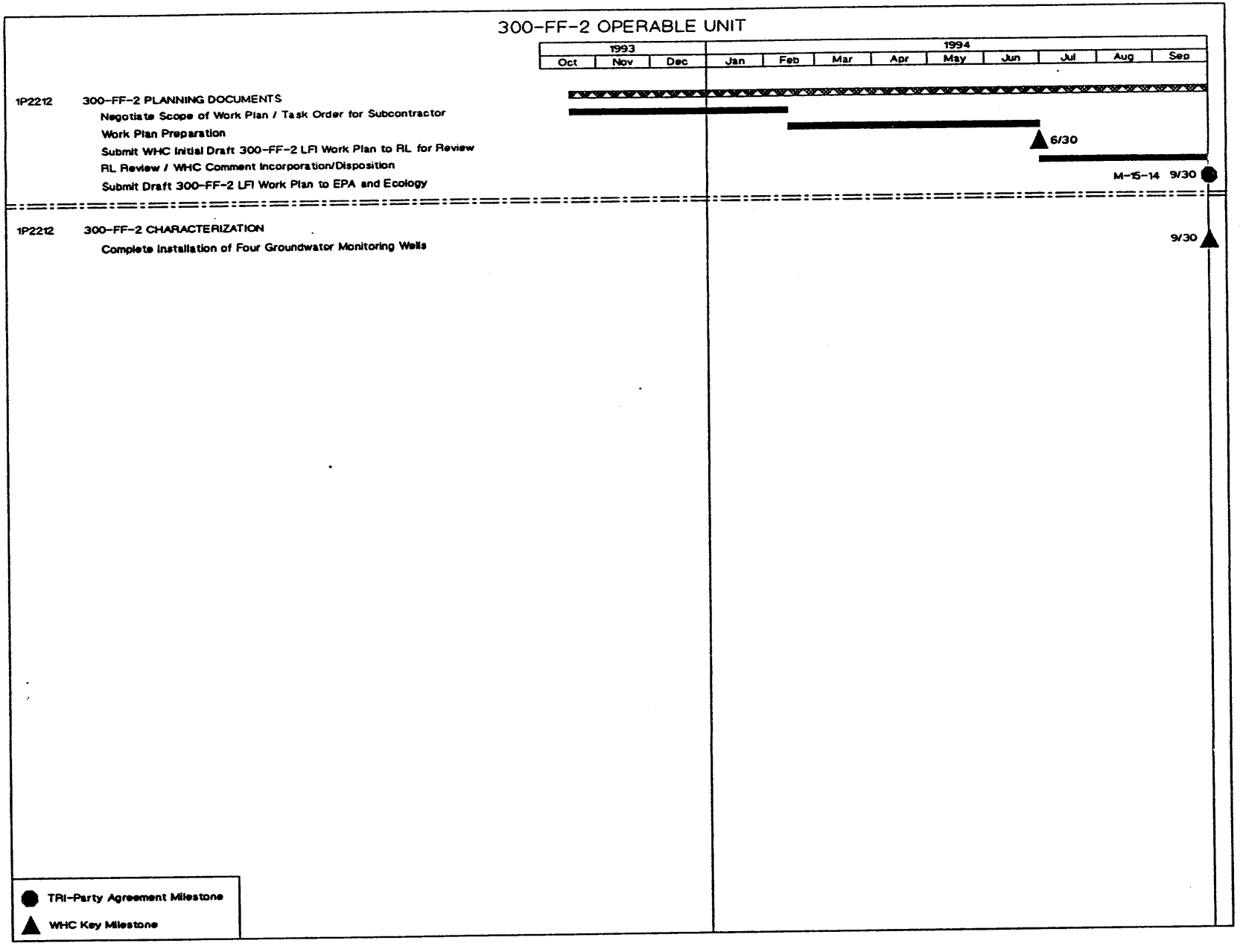

Figure A3-1. Remedial Action Schedule. (sheet 24 of 25)

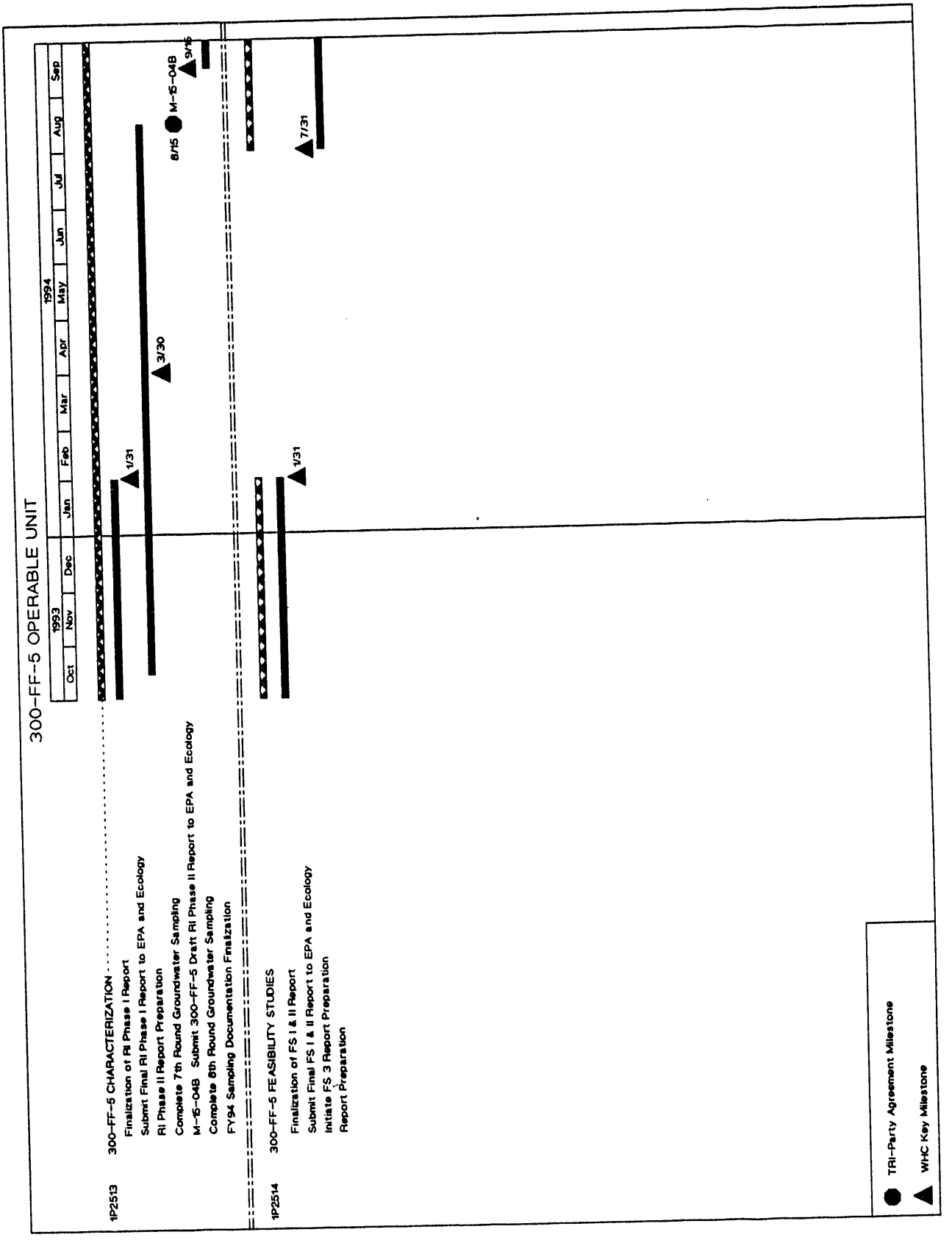

Figure A3-1. Remedial Action Schedule. (sheet 25 of 25)

Table A3-1. Hanford Environmental Restoration Milestone Control Log.

Hanford Environmental Restoration Program Remedial Actions

TYPE	Milestone ID	RL WBS	WHC WBS	Milestone description	Original baseline due date	CIN change authority	Baseline revision date
RL	1PJ-94-001	2.1.1.2.20.1	1PJ221	COMPLETE THE REMOVAL OF FOUR ORPHAN (USTs)	09/30/94		
TPA	1PV-94-001	2.1.2.7.10.1	1PV711	M-20-31 SUBMIT 1301-N/1325-N CLOSURE PLAN TO EPA/ECOLOGY	06/31/94		
TPA	1PV-94-002	2.1.2.7.10.2	1PV712	M-20-35 SUBMIT 1324-N/1324-NA CLOSURE PLAN TO EPA/ECOLOGY	09/30/94		
RL	1PV-94-003	2.1.2.9.10.1	1PVB11	SUBMIT REV-1 CLOSURE PLAN TO EPA/ECOLOGY FOR CLEAN CLOSURE OF LOBES A, B & C FOR PUBLIC COMMENT	12/15/93		
TPA	1PV-94-004	2.1.2.16.10.1	1PVF11	M-20-32 SUBMIT 300 AREA PROCESS TRENCHES STORAGE AND TREATMENT CLOSURE PLAN TO EPA/ECOLOGY	08/15/94		
TPA	1PA-94-001	2.1.4.1.10.4	1PA114	M-15-07C SUBMIT 100-DR-1 FOCUSED FEASIBILITY STUDY REPORT TO EPA/ECOLOGY	09/30/94		
TPA	1PA-94-002	2.1.4.1.10.4	1PA114	M-15-07D SUBMIT 100-DR-1 INTERIM REMEDIAL MEASURES PROPOSED PLAN TO EPA/ECOLOGY	09/30/94		
TPA	1PA-94-003	2.1.4.2.10.2	1PA212	M-13-05 SUBMIT 100-DR-2 OPERABLE UNIT WORK PLAN TO EPA/ECOLOGY	10/31/93		
TPA	1PC-94-001	2.1.6.1.10.3	1PC113	M-15-10A SUBMIT 100-KR-1 VALIDATED DATA TO EPA/ECOLOGY	10/31/93		05/31/93
TPA	1PC-94-002	2.1.6.1.10.3	1PC113	M-15-10B SUBMIT 100-KR-1 LIMITED FIELD INVESTIGATION REPORT TO EPA/ECOLOGY	08/31/94		
RL	1PC-94-003	2.1.6.2.10.2	1PC212	SUBMIT 100-KR-2 OPERABLE UNIT WORK PLAN TO EPA/ECOLOGY	02/28/94		
TPA	1PC-94-004	2.1.6.4.10.3	1PC413	M-15-11B SUBMIT 100-KR-4 LIMITED FIELD INVESTIGATION TO EPA/ECOLOGY	01/12/94		
TPA	1PD-94-001	2.1.7.1.10.3	1PD113	M-15-13A SUBMIT 100-FR-1 VALIDATED DATA TO EPA/ECOLOGY	11/30/93		09/17/93
TPA	1PD-94-002	2.1.7.1.10.3	1PD113	M-15-13B SUBMIT 100-FR-1 LIMITED FIELD INVESTIGATION TO EPA/ECOLOGY	09/30/94		
TPA	1PD-94-003	2.1.7.3.10.3	1PD313	M-15-13F SUBMIT 100-FR-3 LIMITED FIELD INVESTIGATION TO EPA/ECOLOGY	04/30/94		
RL	1PD-94-004	2.1.7.4.20.2	1PD422	SUBMIT NORTH SLOPE - ERA - CLEANUP/CLOSEOUT DOCUMENTATION TO EPA/ECOLOGY	09/30/94		
TPA	1PE-94-001	2.1.8.1.10.4	1PE114	M-15-05C SUBMIT 100-HR-1 FOCUSED FEASIBILITY STUDY TO EPA/ECOLOGY	09/30/94		
TPA	1PE-94-002	2.1.8.1.10.4	1PE114	M-15-05D SUBMIT 100-HR-1 INTERIM REMEDIAL MEASURES PROPOSED PLAN TO EPA/ECOLOGY	09/30/94		
TPA	1PE-94-003	2.1.8.3.10.3	1PE313	M-15-06A SUBMIT 100-HR-3 LIMITED FIELD INVESTIGATION TO EPA/ECOLOGY	10/31/93		
TPA	1PE-94-004	2.1.8.3.10.4	1PE314	M-15-06C SUBMIT 100-HR-3 FOCUSED FEASIBILITY STUDY TO EPA/ECOLOGY	09/30/94		
TPA	1PE-94-005	2.1.8.3.10.4	1PE314	M-15-06D SUBMIT 100-HR-3 INTERIM REMEDIAL MEASURES PROPOSED PLAN TO EPA/ECOLOGY	09/30/94		
TPA	1PE-94-006	2.1.8.3.10.5	1PE315	M-15-06B COMPLETE 100-HR-3 TREATABILITY STUDY ACTIVITIES	11/30/93		

Table A3-1. Hanford Environmental Restoration Milestone Control Log.

Hanford Environmental Restoration Program Remedial Actions (cont)

TYPE	Milestone ID	RL WBS	WHC WBS	Milestone description	Original baseline due date	CIN change authority	Baseline revision date
TPA	1PE-94-007	2.1.8.3.10.5	1PE315	M-15-06E BEGIN 100-HR-3 PUMP & TREAT OPERATIONS	08/31/94		
TPA	1PE-94-008	2.1.8.7.10.5	1PE715	M-15-07B COMPLETE 100-DR-1 TREATABILITY STUDY ACTIVITIES	08/31/94		
TPA	1PE-94-009	2.1.8.7.10.5	1PE715	M-15-08C SUBMIT 100-BC-1 TREATABILITY STUDY TO EPA/ECOLOGY	01/31/94		
TPA	1PE-94-010	2.1.8.7.10.5	1PE715	M-15-05B COMPLETE 100-HR-1 TREATABILITY TEST ACTIVITIES	11/30/93		
TPA	1PL-94-001	2.1.10.1.10.5	1PL115	M-15-02E SUBMIT DRAFT CONSTRUCTABILITY REPORT ON THE HANFORD BARRIER PROTOTYPE DEMONSTRATION AT 216-B-57 CRIB	01/15/94		
TPA	1PL-94-002	2.1.10.5.10.5	1PL515	M-13-06 SUBMIT 200-BP-5 DRAFT TREATABILITY TEST PLAN TO EPA/ECOLOGY	01/31/94		
TPA	1PL-94-003	2.1.10.5.10.5	1PL515	M-13-06A INITIATE 200-BP-5 PILOT-SCALE PUMP AND TREAT OPERATIONS	08/31/94		
TPA	1PL-94-004	2.1.10.10.10.2	1PLA12	M-13-07 SUBMIT INTEGRATED 200-BP-11 SOURCE OU AND 216-B-3 POND WORK/CLOSURE PLAN TO EPA/ECOLOGY	04/30/94		
RL	1PN-94-001	2.1.12.1.10.2	1PN112	F-13-SUBMIT DRAFT 200-PO-1 LFI WORK PLAN TO EPA/ECOLOGY	08/31/94		
TPA	1PT-94-001	2.1.16.1.10.5	1PT115	M-13-02A INITIATE 200-UP-1 PILOT-SCALE PUMP AND TREAT OPERATIONS	03/31/94		
RL	1PT-94-002	2.1.16.2.10.3	1PT213	SUBMIT 200-UP-2 VALIDATED DATA TO EPA/ECOLOGY	07/07/94		
TPA	1PU-94-001	2.1.17.1.20.4	1PU124	M-13-04A INITIATE 200-ZP-1 PILOT-SCALE PUMP AND TREAT OPERATIONS	02/28/94		
TPA	1P2-94-001	2.1.22.1.10.4	1P2114	M-15-03C SUBMIT 300-FF-1 DRAFT FEASIBILITY STUDY PHASE III REPORT TO EPA/ECOLOGY	08/15/94		
TPA	1P2-94-002	2.1.22.1.10.5	1P2115	M-15-03B SUBMIT SOIL WASHING TREATABILITY TEST REPORT - REMEDIAL INVESTIGATIONS PHASE II DRAFT REPORT TO EPA/ECOLOGY	12/15/93		
TPA	1P2-94-003	2.1.22.2.10.2	1P2212	M-15-14 SUBMIT DRAFT 300-FF-2 LFI WORK PLAN TO EPA/ECOLOGY	09/30/94		
TPA	1P2-94-004	2.1.22.5.10.3	1P2513	M-15-04B SUBMIT 300-FF-5 DRAFT RI PHASE II REPORT TO EPA/ECOLOGY	08/15/94		
HQ	1P3-94-001	2.1.23.1.20.1	1P3121	F-15 SUBMIT 1100-EM-1 REMEDIATION PROPOSED PLAN TO EPA/ECOLOGY	12/31/93		
HQ	1P3-94-002	2.1.23.6.20.6	1P3625	CLEAN UP ARID LANDS ECOLOGY FACILITY AND PROVIDE CLOSEOUT DOCUMENTATION	09/30/94		

Table A3-2. Milestone Description Sheets.

TITLE:	COMPLETE THE REMOVAL OF FOUR ORPHAN (USTs)				
MILESTONE ID #:	1PJ-94-001	**TYPE:**	RL		
DUE DATE:	09/30/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS				
RL WBS:	2.1.1.2.20.1	**FY94 WHC WBS:**	1PJ221		
DELIVERABLE:	COMPLETION IS THE REMOVAL OF 4 ORPHAN UNDERGROUND STORAGE TANKS AND THE ISSUANCE OF THE SITE ASSESSMENT AND CHECKLIST REPORTS TO RL FOR TRANSMITTAL TO ECOLOGY AFTER EACH TANK IS REMOVED CONSTITUTES COMPLETION OF THIS RL MILESTONE.				
ACTIVITY ENGINEER:	B.W. WYRICK	**COST ACCOUNT MGR:**	M.A. MIHALIC		
DOE MONITOR:	A.C. HARRIS				

TITLE:	M-20-31 SUBMIT 1301-N/1325-N CLOSURE PLAN TO EPA/ECOLOGY				
MILESTONE ID #:	1PV-94-001	**TYPE:**	TPA		
DUE DATE:	05/31/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS				
RL WBS:	2.1.2.7.10.1	**FY94 WHC WBS:**	1PV711		
DELIVERABLE:	SUBMISSION OF THE 1301-N / 1325-N LIQUID WASTE DISPOSAL FACILITIES CLOSURE PLAN TO ECOLOGY AND EPA CONSTITUTES COMPLETION OF THIS TPA MILESTONE.				
ACTIVITY ENGINEER:	B.W. WYRICK	**COST ACCOUNT MGR:**	F.A. RUCK, III		
DOE MONITOR:	H.R. TRUMBLE				

TITLE:	M-20-35 SUBMIT 1324-N / 1324-NA CLOSURE PLAN TO EPA/ECOLOGY				
MILESTONE ID #:	1PV-94-002	**TYPE:**	TPA		
DUE DATE:	09/30/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS				
RL WBS:	2.1.2.7.10.2	**FY94 WHC WBS:**	1PV712		
DELIVERABLE:	SUBMISSION OF THE 1324-N/1324-NA CLOSURE PLAN TO ECOLOGY AND EPA CONSTITUTES COMPLETION OF THIS TPA MILESTONE.				
ACTIVITY ENGINEER:	B.W. WYRICK	**COST ACCOUNT MGR:**	F.A. RUCK, III		
DOE MONITOR:	H.R. TRUMBLE				

Table A3-2. Milestone Description Sheets.

TITLE:	SUBMIT REV-1 CLOSURE PLAN TO EPA/ECOLOGY FOR CLEAN CLOSURE OF LOBES A, B, & C FOR PUBLIC COMMENT		
MILESTONE ID #:	1PV-94-003	**TYPE:**	RL
DUE DATE:	12/15/93	**REVISION DATE:**	**CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS		
RL WBS:	2.1.2.9.10.1	**FY94 WHC WBS:**	1PVB11
DELIVERABLE:	SUBMISSION OF THE REVISED CLOSURE PLAN TO EPA/ECOLOGY FOR CLEAN CLOSURE OF LOBES A, B, & C FOR PUBLIC COMMENT CONSTITUTES COMPLETION OF THIS RL MILESTONE.		
ACTIVITY ENGINEER:	B.W. WYRICK	**COST ACCOUNT MGR:**	F.A. RUCK, III
DOE MONITOR:	R.G. MCLEOD		

TITLE:	M-20-32 SUBMIT 300 AREA PROCESS TRENCHES STORAGE AND TREATMENT CLOSURE PLAN TO EPA/ECOLOGY		
MILESTONE ID #:	1PV-94-004	**TYPE:**	TPA
DUE DATE:	08/15/94	**REVISION DATE:**	**CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS		
RL WBS:	2.1.2.16.10.1	**FY94 WHC WBS:**	1PVF11
DELIVERABLE:	SUBMISSION OF THE 300 AREA PROCESS TRENCHES CLOSURE PLAN/POST CLOSURE PLAN TO ECOLOGY AND EPA CONSTITUTES COMPLETION OF THIS TPA MILESTONE.		
ACTIVITY ENGINEER:	B.W. WYRICK	**COST ACCOUNT MGR:**	F.A. RUCK, III
DOE MONITOR:	R.G. MCLEOD		

TITLE:	M-15-07C SUBMIT 100-DR-1 FOCUSED FEASIBILITY STUDY REPORT TO EPA/ECOLOGY		
MILESTONE ID #:	1PA-94-001	**TYPE:**	TPA
DUE DATE:	09/30/94	**REVISION DATE:**	**CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS		
RL WBS:	2.1.4.1.10.4	**FY94 WHC WBS:**	1PA114
DELIVERABLE:	SUBMISSION OF THE FFS REPORT TO EPA/ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.		
ACTIVITY ENGINEER:	J.K. PATTERSON	**COST ACCOUNT MGR:**	N.M. NAIKNIMBALKER
DOE MONITOR:	E.D. GOLLER		

Table A3-2. Milestone Description Sheets.

TITLE:	M-15-07D SUBMIT 100-DR-1 INTERIM REMEDIAL MEASURES PROPOSED PLAN TO EPA/ECOLOGY				
MILESTONE ID #:	1PA-94-002	**TYPE:**	TPA		
DUE DATE:	09/30/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS				
RL WBS:	2.1.4.1.10.4	**FY94 WHC WBS:**	1PA114		
DELIVERABLE:	SUBMISSION OF THE IRM PROPOSED PLAN TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.				
ACTIVITY ENGINEER:	J.K. PATTERSON	**COST ACCOUNT MGR:**	N.M. NAIKNIMBALKER		
DOE MONITOR:	E.D. GOLLER				

TITLE:	M-13-05 SUBMIT 100-DR-2 OPERABLE UNIT WORK PLAN TO EPA/ECOLOGY				
MILESTONE ID #:	1PA-94-003	**TYPE:**	TPA		
DUE DATE:	10/31/93	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS				
RL WBS:	2.1.4.2.10.2	**FY94 WHC WBS:**	1PA212		
DELIVERABLE:	SUBMISSION OF THE OPERABLE UNIT WORK PLAN TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.				
ACTIVITY ENGINEER:	J.K. PATTERSON	**COST ACCOUNT MGR:**	N.M. NAIKNIMBALKER		
DOE MONITOR:	E.D. GOLLER				

TITLE:	M-15-10A SUBMIT THE 100-KR-1 VALIDATED DATA TO EPA/ECOLOGY				
MILESTONE ID #:	1PC-94-001	**TYPE:**	TPA		
DUE DATE:	10/31/93	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS				
RL WBS:	2.1.6.1.10.3	**FY94 WHC WBS:**	1PC113		
DELIVERABLE:	SUBMISSION OF THE VALIDATED DATA TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.				
ACTIVITY ENGINEER:	J.K. PATTERSON	**COST ACCOUNT MGR:**	N.M. NIAKNIMBALKER		
DOE MONITOR:	E.D. GOLLER				

Table A3-2. Milestone Description Sheets.

TITLE:	M-15-10B SUBMIT 100-KR-1 LIMITED FIELD INVESTIGATION REPORT TO EPA/ECOLOGY
MILESTONE ID #:	1PC-94-002 **TYPE:** TPA
DUE DATE:	08/31/94 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS
RL WBS:	2.1.6.1.10.3 **FY94 WHC WBS:** 1PC113
DELIVERABLE:	SUBMISSION OF THE LIMITED FIELD INVESTIGATION REPORT TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.
ACTIVITY ENGINEER:	J.K. PATTERSON **COST ACCOUNT MGR:** N.M. NIAKNIMBALKER
DOE MONITOR:	E.D. GOLLER

TITLE:	SUBMIT 100-KR-2 OPERABLE UNIT WORK PLAN TO EPA/ECOLOGY
MILESTONE ID #:	1PC-94-003 **TYPE:** RL
DUE DATE:	02/28/94 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS
RL WBS:	2.1.6.2.10.2 **FY94 WHC WBS:** 1PC212
DELIVERABLE:	SUBMISSION OF THE OPERABLE UNIT WORK PLAN TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.
ACTIVITY ENGINEER:	J.K. PATTERSON **COST ACCOUNT MGR:** N.M. NIAKNIMBALKER
DOE MONITOR:	E.D. GOLLER

TITLE:	M-15-11B SUBMIT 100-KR-4 LIMITED FIELD INVESTIGATION TO EPA/ECOLOGY
MILESTONE ID #:	1PC-94-004 **TYPE:** TPA
DUE DATE:	01/12/94 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS
RL WBS:	2.1.6.4.10.3 **FY94 WHC WBS:** 1PC413
DELIVERABLE:	SUBMISSION OF THE LIMITED FIELD INVESTIGATION TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.
ACTIVITY ENGINEER:	J.K. PATTERSON **COST ACCOUNT MGR:** R.L. BIGGERSTAFF
DOE MONITOR:	E.D. GOLLER

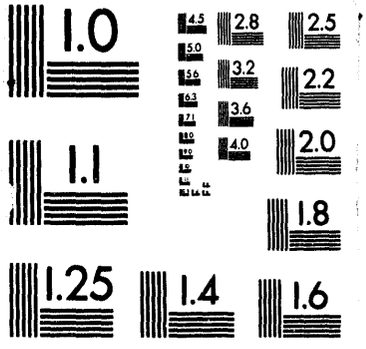
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Table A3-2. Milestone Description Sheets.

TITLE:	M-15-13A SUBMIT 100-FR-1 VALIDATED DATA TO EPA/ECOLOGY
MILESTONE ID #:	1PD-94-001 **TYPE:** TPA
DUE DATE:	11/30/93 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS
RL WBS:	2.1.7.1.10.3 **FY94 WHC WBS:** 1PD113
DELIVERABLE:	SUBMISSION OF THE VALIDATED DATA REPORT TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.
ACTIVITY ENGINEER:	J.K. PATTERSON **COST ACCOUNT MGR:** J.M. AYRES
DOE MONITOR:	E.D. GOLLER

TITLE:	M-15-13B SUBMIT 100-FR-1 LIMITED FIELD INVESTIGATION TO EPA/ECOLOGY
MILESTONE ID #:	1PD-94-002 **TYPE:** TPA
DUE DATE:	09/30/94 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS
RL WBS:	2.1.7.1.10.3 **FY94 WHC WBS:** 1PD113
DELIVERABLE:	SUBMISSION OF THE LIMITED FIELD INVESTIGATION REPORT TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.
ACTIVITY ENGINEER:	J.K. PATTERSON **COST ACCOUNT MGR:** J.M. AYRES
DOE MONITOR:	E.D. GOLLER

TITLE:	M-15-13F SUBMIT 100-FR-3 LIMITED FIELD INVESTIGATION TO EPA/ECOLOGY
MILESTONE ID #:	1PD-94-003 **TYPE:** TPA
DUE DATE:	04/30/94 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS
RL WBS:	2.1.7.3.10.3 **FY94 WHC WBS:** 1PD313
DELIVERABLE:	SUBMISSION OF THE LIMITED FIELD INVESTIGATION REPORT TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.
ACTIVITY ENGINEER:	J.K. PATTERSON **COST ACCOUNT MGR:** S.E. VUKELICH
DOE MONITOR:	E.D. GOLLER

Table A3-2. Milestone Description Sheets.

TITLE:	SUBMIT NORTH SLOPE - ERA - CLEANUP/CLOSEOUT DOCUMENTATION TO EPA/ECOLOG'		
MILESTONE ID #:	1PD-94-004	**TYPE:**	RL
DUE DATE:	09/30/94	**REVISION DATE:**	**CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS		
RL WBS:	2.1.7.4.20.2	**FY94 WHC WBS:**	1PD422
DELIVERABLE:	SUBMISSION OF THE NORTH SLOPE CLOSEOUT DOCUMENTATION TO RL CONSTITUTES COMPLETION OF THIS RL MILESTONE.		
ACTIVITY ENGINEER:	J.K. PATTERSON	**COST ACCOUNT MGR:**	S.E. VUKELICH
DOE MONITOR:	E.D. GOLLER		

TITLE:	15-05C SUBMIT 100-HR-1 FOCUSED FEASIBILITY STUDY REPORT TO EPA/ECOLOGY		
MILESTONE ID #:	1PE-94-001	**TYPE:**	TPA
DUE DATE:	09/30/94	**REVISION DATE:**	**CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS		
RL WBS:	2.1.8.1.10.4	**FY94 WHC WBS:**	1PE114
DELIVERABLE:	SUBMISSION OF THE FOCUSED FEASIBILITY STUDY REPORT TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.		
ACTIVITY ENGINEER:	J.K. PATTERSON	**COST ACCOUNT MGR:**	J.M. AYRES
DOE MONITOR:	E.D. GOLLER		

TITLE:	M-15-05D SUBMIT 100-HR-1 INTERIM REMEDIAL MEASURES PROPOSED PLAN TO EPA/ECOLOGY		
MILESTONE ID #:	1PE-94-002	**TYPE:**	TPA
DUE DATE:	09/30/94	**REVISION DATE:**	**CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS		
RL WBS:	2.1.8.1.10.4	**FY94 WHC WBS:**	1PE114
DELIVERABLE:	SUBMISSION OF THE INTERIM REMEDIAL MEASURES PROPOSED PLAN TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.		
ACTIVITY ENGINEER:	J.K. PATTERSON	**COST ACCOUNT MGR:**	J.M. AYRES
DOE MONITOR:	E.D. GOLLER		

Table A3-2. Milestone Description Sheets.

TITLE:	M-15-06A SUBMIT 100-HR-3 LIMITED FIELD INVESTIGATION REPORT TO EPA/ECOLOGY
MILESTONE ID #:	1PE-94-003 **TYPE:** TPA
DUE DATE:	10/31/93 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS
RL WBS:	2.1.8.3.10.3 **FY94 WHC WBS:** 1PE313
DELIVERABLE:	SUBMISSION OF THE 100-HR-3 LIMITED FIELD INVESTIGATION REPORT TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.
ACTIVITY ENGINEER:	J.K. PATTERSON **COST ACCOUNT MGR:** S.E. VUKELICH
DOE MONITOR:	E.D. GOLLER

TITLE:	M-15-06C SUBMIT 100-HR-3 FOCUSED FEASIBILITY STUDY REPORT TO EPA/ECOLOGY
MILESTONE ID #:	1PE-94-004 **TYPE:** TPA
DUE DATE:	09/30/94 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS
RL WBS:	2.1.8.3.10.4 **FY94 WHC WBS:** 1PE314
DELIVERABLE:	SUBMISSION OF THE 100-HR-3 FOCUSED FEASIBILITY STUDY REPORT TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.
ACTIVITY ENGINEER:	J.K. PATTERSON **COST ACCOUNT MGR:** S.E. VUKELICH
DOE MONITOR:	E.D. GOLLER

TITLE:	M-15-06D SUBMIT 100-HR-3 INTERIM REMEDIAL MEASURES PROPOSED PLAN TO EPA/ECOLOGY
MILESTONE ID #:	1PE-94-005 **TYPE:** TPA
DUE DATE:	09/30/94 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS
RL WBS:	2.1.8.3.10.4 **FY94 WHC WBS:** 1PE314
DELIVERABLE:	SUBMISSION OF THE 100-HR-3 FOCUSED FEASIBILITY STUDY REPORT TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.
ACTIVITY ENGINEER:	J.K PATTERSON **COST ACCOUNT MGR:** S.E. VUKELICH
DOE MONITOR:	E.D. GOLLER

Table A3-2. Milestone Description Sheets.

TITLE:	M-15-06B COMPLETE 100-HR-3 TREATABILITY STUDY ACTIVITIES		
MILESTONE ID #:	1PE-94-006	**TYPE:**	TPA
DUE DATE:	11/30/93	**REVISION DATE:**	**CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS		
RL WBS:	2.1.8.3.10.5	**FY94 WHC WBS:**	1PE315
DELIVERABLE:	COMPLETION OF THE 100-HR-3 TREATABILITY STUDY ACTIVITIES AND SUBMITTAL OF THE STUDIES REPORT CONSTITUTES COMPLETION OF THIS TPA MILESTONE.		
ACTIVITY ENGINEER:	J.K. PATTERSON	**COST ACCOUNT MGR:**	R.P. HENCKEL
DOE MONITOR:	E.D. GOLLER		

TITLE:	M-15-06E BEGIN 100-HR-3 PUMP & TREAT OPERATIONS		
MILESTONE ID #:	1PE-94-007	**TYPE:**	TPA
DUE DATE:	08/31/94	**REVISION DATE:**	**CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS		
RL WBS:	2.1.8.3.10.5	**FY94 WHC WBS:**	1PE315
DELIVERABLE:	STARTUP OF THE 100-HR-3 PUMP & TREAT OPERATIONS CONSTITUTES COMPLETION OF THIS TPA MILESTONE.		
ACTIVITY ENGINEER:	J.K. PATTERSON	**COST ACCOUNT MGR:**	R.P. HENCKEL
DOE MONITOR:	E.D. GOLLER		

TITLE:	M-15-07B COMPLETE 100-DR-1 TREATABILITY STUDY ACTIVITIES		
MILESTONE ID #:	1PE-94-008	**TYPE:**	TPA
DUE DATE:	08/31/94	**REVISION DATE:**	**CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS		
RL WBS:	2.1.8.7.10.5	**FY94 WHC WBS:**	1PE715
DELIVERABLE:	COMPLETION OF THE TREATABILITY STUDY ACTIVITIES AND SUBMITTAL OF THE STUDIES REPORT CONSTITUTES COMPLETION OF THIS TPA MILESTONE.		
ACTIVITY ENGINEER:	J.K. PATTERSON	**COST ACCOUNT MGR:**	R.P. HENCKEL
DOE MONITOR:	E.D. GOLLER		

Table A3-2. Milestone Description Sheets.

TITLE:	M-15-08C SUBMIT 100-BC-1 TREATABILITY STUDY REPORT TO EPA/ECOLOGY				
MILESTONE ID #:	1PE-94-009	**TYPE:**	TPA		
DUE DATE:	01/31/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS				
RL WBS:	2.1.8.7.10.5	**FY94 WHC WBS:**	1PE715		
DELIVERABLE:	SUBMISSION OF THE TREATABILITY STUDY REPORT TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.				
ACTIVITY ENGINEER:	J.K. PATTERSON	**COST ACCOUNT MGR:**	R.P. HENCKEL		
DOE MONITOR:	E.D. GOLLER				

TITLE:	M-15-05B COMPLETE 100-HR-1 TREATABILITY TEST ACTIVITIES				
MILESTONE ID #:	1PE-94-010	**TYPE:**	TPA		
DUE DATE:	11/30/93	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS				
RL WBS:	2.1.8.7.10.5	**FY94 WHC WBS:**	1PE715		
DELIVERABLE:	COMPLETION OF THE 100-HR-1 TREATABILITY STUDY ACTIVITIES AND SUBMITTAL OF THE STUDIES REPORT CONSTITUTES COMPLETION OF THIS TPA MILESTONE.				
ACTIVITY ENGINEER:	J.K. PATTERSON	**COST ACCOUNT MGR:**	R.P. HENCKEL		
DOE MONITOR:	E.D. GOLLER				

TITLE:	M-15-02E SUBMIT DRAFT CONSTRUCTABILITY REPORT ON THE HANFORD BARRIER PROTOTYPE DEMONSTRATION AT THE 216-B-57 CRIB				
MILESTONE ID #:	1PL-94-001	**TYPE:**	TPA		
DUE DATE:	01/15/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS				
RL WBS:	2.1.10.1.10.5	**FY94 WHC WBS:**	1PL115		
DELIVERABLE:	SUBMISSION OF THE DRAFT CONSTRUCTABILITY REPORT TO EPA/ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.				
ACTIVITY ENGINEER:	H.D. DOWNEY	**COST ACCOUNT MGR:**	R.A. CARLSON		
DOE MONITOR:	P.M. PAK				

Table A3-2. Milestone Description Sheets.

TITLE:	M-13-06 SUBMIT 200-BP-5 DRAFT TREATABILITY TEST PLAN TO EPA/ECOLOGY		
MILESTONE ID #:	1PL-94-002	**TYPE:**	TPA
DUE DATE:	01/31/94	**REVISION DATE:**	**CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS		
RL WBS:	2.1.10.5.10.5	**FY94 WHC WBS:**	1PL515
DELIVERABLE:	SUBMISSION OF THE DRAFT TREATABILITY TEST PLAN TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.		
ACTIVITY ENGINEER:	H.D. DOWNEY	**COST ACCOUNT MGR:**	R.A. CARLSON
DOE MONITOR:	P.M. PAK		

TITLE:	M-13-06A INITIATE 200-BP-5 PILOT-SCALE PUMP AND TREAT OPERATIONS		
MILESTONE ID #:	1PL-94-003	**TYPE:**	TPA
DUE DATE:	08/31/94	**REVISION DATE:**	**CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS		
RL WBS:	2.1.10.5.10.5	**FY94 WHC WBS:**	1PL515
DELIVERABLE:	PHYSICAL START UP OF PUMP AND TREAT SYSTEMS CONSTITUTES COMPLETION OF THE TPA MILESTONE		
ACTIVITY ENGINEER:	H.D. DOWNEY	**COST ACCOUNT MGR:**	R.A. CARLSON
DOE MONITOR:	P.M. PAK		

TITLE:	M-13-07 SUBMIT INTEGRATED 200-BP-11 SOURCE O.U. AND 216-B-3 POND WORK/CLOSURE PLAN TO EPA/ECOLOGY		
MILESTONE ID #:	1PL-94-004	**TYPE:**	TPA
DUE DATE:	04/30/94	**REVISION DATE:**	**CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS		
RL WBS:	2.1.10.10.10.2	**FY94 WHC WBS:**	1PLA12
DELIVERABLE:	SUBMISSION OF THE INTEGRATED 200-BP-11 SOURCE O.U. AND 216-B-3 POND WORK/CLOSURE PLAN TO EPA/ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.		
ACTIVITY ENGINEER:	H.D. DOWNEY	**COST ACCOUNT MGR:**	R.A. CARLSON
DOE MONITOR:	P.M. PAK		

Table A3-2. Milestone Description Sheets.

TITLE:	F-13 SUBMIT DRAFT 200-PO-1 LFI WORK PLAN TO EPA/ECOLOGY				
MILESTONE ID #:	1PN-94-001	**TYPE:**	RL		
DUE DATE:	08/31/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS				
RL WBS:	2.1.12.1.10.2	**FY94 WHC WBS:**	1PN112		
DELIVERABLE:	SUBMISSION OF THE OPERABLE UNIT LFI WORK PLAN TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS MILESTONE.				
ACTIVITY ENGINEER:	H.D. DOWNEY	**COST ACCOUNT MGR:**	R.A. CARLSON		
DOE MONITOR:	P.M. PAK				

TITLE:	M-13-02A INITIATE 200-UP-1 PILOT-SCALE PUMP AND TREAT OPERATIONS				
MILESTONE ID #:	1PT-94-001	**TYPE:**	TPA		
DUE DATE:	03/31/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS				
RL WBS:	2.1.16.1.10.5	**FY94 WHC WBS:**	1PT115		
DELIVERABLE:	PHYSICAL START UP OF PUMP AND TREAT SYSTEMS CONSTITUTES COMPLETION OF THIS TPA MILESTONE.				
ACTIVITY ENGINEER:	H.D. DOWNEY	**COST ACCOUNT MGR:**	R.A. CARLSON		
DOE MONITOR:	P.M. PAK				

TITLE:	SUBMIT 200-UP-2 VALIDATED DATA TO EPA/ECOLOGY				
MILESTONE ID #:	1PT-94-002	**TYPE:**	RL		
DUE DATE:	07/07/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS				
RL WBS:	2.1.16.2.10.3	**FY94 WHC WBS:**	1PT213		
DELIVERABLE:	SUBMITTAL OF VALIDATED DATA TO EPA/ECOLOGY CONSTITUTES COMPLETION OF THIS RL MILESTONE.				
ACTIVITY ENGINEER:	H.D. DOWNEY	**COST ACCOUNT MGR:**	R.A. CARLSON		
DOE MONITOR:	P.M. PAK				

Table A3-2. Milestone Description Sheets.

TITLE:	M-13-04A INITIATE 200-ZP-1 PILOT-SCALE PUMP AND TREAT OPERATIONS		
MILESTONE ID #:	1PU-94-001	**TYPE:**	TPA
DUE DATE:	02/28/94	**REVISION DATE:**	**CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS		
RL WBS:	2.1.17.1.20.4	**FY94 WHC WBS:**	1PU124
DELIVERABLE:	PHYSICAL START UP OF PUMP AND TREAT SYSTEMS CONSTITUTES COMPLETION OF THIS TPA MILESTONE.		
ACTIVITY ENGINEER:	H.D. DOWNEY	**COST ACCOUNT MGR:**	R.A. CARLSON
DOE MONITOR:	P.M. PAK		

TITLE:	M-15-03C SUBMIT 300-FF-1 DRAFT FEASIBILITY STUDY PHASE III REPORT TO EPA/ECOLOGY		
MILESTONE ID #:	1P2-94-001	**TYPE:**	TPA
DUE DATE:	08/15/94	**REVISION DATE:**	**CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS		
RL WBS:	2.1.22.1.10.4	**FY94 WHC WBS:**	1P2114
DELIVERABLE:	SUBMISSION OF THE DRAFT FEASIBILITY STUDY REPORT TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.		
ACTIVITY ENGINEER:	H.D. DOWNEY	**COST ACCOUNT MGR:**	R.A. CARLSON
DOE MONITOR:	P.M. PAK		

TITLE:	M-15-03B SUBMIT THE SOIL WASHING TREATABILITY TEST REPORT - REMEDIAL INVESTIGATIONS PHASE II DRAFT REPORT TO EPA/ECOLOGY		
MILESTONE ID #:	1P2-94-002	**TYPE:**	TPA
DUE DATE:	12/15/93	**REVISION DATE:**	**CIN:**
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS		
RL WBS:	2.1.22.1.10.5	**FY94 WHC WBS:**	1P2115
DELIVERABLE:	SUBMISSION OF THE DRAFT REPORT TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.		
ACTIVITY ENGINEER:	H.D. DOWNEY	**COST ACCOUNT MGR:**	R.A. CARLSON
DOE MONITOR:	P.M. PAK		

Table A3-2. Milestone Description Sheets.

TITLE:	M-15-14 SUBMIT DRAFT 300-FF-2 LFI WORK PLAN TO EPA/ECOLOGY				
MILESTONE ID #:	1P2-94-003	**TYPE:**	TPA		
DUE DATE:	09/30/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS				
RL WBS:	2.1.22.2.10.2	**FY94 WHC WBS:**	1P2212		
DELIVERABLE:	SUBMISSION OF THE DRAFT LFI WORK PLAN TO EPA/ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.				
ACTIVITY ENGINEER:	H.D. DOWNEY	**COST ACCOUNT MGR:**	R.A. CARLSON		
DOE MONITOR:	P.M. PAK				

TITLE:	M-15-04B SUBMIT 300-FF-5 DRAFT RI PHASE II REPORT TO EPA/ECOLOGY				
MILESTONE ID #:	1P2-94-004	**TYPE:**	TPA		
DUE DATE:	08/15/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS				
RL WBS:	2.1.22.5.10.3	**FY94 WHC WBS:**	1P2513		
DELIVERABLE:	SUBMISSION OF THE DRAFT RI REPORT TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.				
ACTIVITY ENGINEER:	H.D. DOWNEY	**COST ACCOUNT MGR:**	R.A. CARLSON		
DOE MONITOR:	P.M. PAK				

TITLE:	F-15 SUBMIT 1100-EM-1 REMEDIATION PROPOSED PLAN				
MILESTONE ID #:	1P3-94-001	**TYPE:**	HQ		
DUE DATE:	12/31/93	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS				
RL WBS:	2.1.23.1.20.1	**FY94 WHC WBS:**	1P3121		
DELIVERABLE:	SUBMISSION OF THE 1100-EM-1 REMEDIATION PROPOSED PLAN TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS HQ MILESTONE.				
ACTIVITY ENGINEER:	W.D. PERRO	**COST ACCOUNT MGR:**	T. PARKHILL		
DOE MONITOR:	W.D. PERRO				

Table A3-2. Milestone Description Sheets.

TITLE:	CLEAN UP ARID LANDS ECOLOGY FACILITY AND PROVIDE CLOSEOUT DOCUMENTATION				
MILESTONE ID #:	1P3-94-002	**TYPE:**	HQ		
DUE DATE:	09/30/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER REMEDIAL ACTIONS				
RL WBS:	2.1.23.6.20.6	**FY94 WHC WBS:**	1P3625		
DELIVERABLE:	SUBMISSION OF CLOSEOUT DOCUMENTATION FOR THE CLEANUP OF THE ARID ECOLOGY FACILITY TO EPA AND ECOLOGY CONSTITUTES COMPLETION OF THIS HQ MILESTONE.				
ACTIVITY ENGINEER:	W.D. PERRO	**COST ACCOUNT MGR:**	T. PARKHILL		
DOE MONITOR:	W.D. PERRO				

A4.0 PROGRAM COST BASELINE

Table A4-1 presents the RA Program funding deviations between the FYWP funding and the baseline. Section A1.5 contains the specific narrative for these deviations.

The total ER Program funding deviation between the FYWP and the baseline are summarized in Table 4-3 of the Mission Section of this document.

Indentation in Title Column displays the "roll-up" function within the program and provides line item identification.

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Table A4-1. Remedial Actions Program Fiscal Year 1994 Work Plan Versus Baseline Funding ($000).

			FY 1994 ($000)		
ADS #	WBS	Title	FWYP	Baseline	Change
3000	PF	Single-Shell Tank Closures	$408	$1,223	($815)
3010	PJ	RARA/USTs	$7,342	$7,709	($367)
3020	PV	RCRA Closures	$4,326	$4,145	$181
3100	PA	100-DR	$1,193	$5,077	($3,884)
3105	PB	100-BC	$3,869	$5,739	($1,870)
3110	PC	100-KR	$2,084	$4,113	($2,029)
3115	PD	100-FR	$6,376	$5,953	$423
3120	PE	100-HR	$17,764	$11,479	$6,285
3125	PG	100-NR	$2,923	$5,476	($2,553)
3200	PL	200-BP	$11,258	$18,631	($7,373)
3210	PN	200-PO	$297	$478	($181)
3225	PS	200-TP	$0	$78	($78)
3230	PT	200-UP	$11,594	$13,990	($2,396)
3235	PU	200-ZP	$9,777	$11,389	($1,612)
3300	P2	300-FF	$4,827	$5,820	($993)
3390	P3	1100-EM	$7,583	$7,583	$0
	P	Remedial Actions	$91,621	$108,883	($17,262)

ADS# = activity data sheet number
FY = fiscal year
FYWP = fiscal year work plan
RARA = radiation area remedial actions
RCRA = Resource Conservation and Recovery Act of 1976
UST = Underground Storage Tank
WBS = work breakdown structure

A5.0 PROGRAM FUNDING BASELINE

The RA Program funding is displayed in Table A5-1 at the activity level and summarized to the total RA Program funding by major participant. The summarized ER program funding requirements are included in the Mission Section of this document.

Indentation in Title Column displays the "roll-up" function within the program and provides line item identification.

The questions marks (?) in the 3rd level of the WBS column indicate a summary of assessment (XX?1) or remediation (XX?2) dollars within an operable unit.

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Table A5-1. Remedial Actions Program Fiscal Year 1994 Funding Baseline Summary ($000). (sheet 1 of 3)

			FYWP 1994 ($000)			
ADS #	WBS	Title	WHC	USACE	RL	Total
3010	PJ12	RARA Common Activities - Remediation	$6,856	$0	$0	$6,856
3010	PJ22	UST Common Activities - Remediation	$486	$0	$0	$486
3010	PJ?2	RARA/USTs - Remediation	$7,342	$0	$0	$7,342
3010	PJ	RARA/USTs	$7,342	$0	$0	$7,342
3020	PV11	RCRA Common Activities Assessment	$423	$0	$0	$423
3020	PV31	RCRA 100-DR Assessment	$337	$0	$0	$337
3020	PV71	RCRA 100-NR Assessment	$430	$0	$0	$430
3020	PVB1	RCRA 200 Area B (BP) Assessment	$1,577	$0	$0	$1,577
3020	PVB2	RCRA 200 Area B (BP) Remediation	$461	$0	$0	$461
3020	PVB	RCRA 200 Area B (BP)	$2,038	$0	$0	$2,038
3020	PVS1	RCRA 200 Area S (RO) Assessment	$244	$0	$0	$244
3020	PVU1	RCRA 200 Area UP Assessment	$242	$0	$0	$242
3020	PVI1	RCRA 200 Area IU Assessment	$219	$0	$0	$219
3020	PVF1	RCRA 200 Area FF Assessment	$393	$0	$0	$393
3020	PV?1	RCRA Closures - Assessment	$3,865	$0	$0	$3,865
3020	PV?2	RCRA Closures - Remediation	$461	$0	$0	$461
3020	PV	RCRA Closures	$4,326	$0	$0	$4,326
3000	PF11	SST Closure Common Activities Assessment	$0	$0	$0	$0
3000	PFA1	SST 200 Area A (PO) Assessment	$0	$0	$0	$0
3000	PFS1	SST 200 Area S (RO) Assessment	$0	$0	$0	$0
3000	PFT1	SST 200 Area T (TP) Assessment	$408	$0	$0	$408
3000	PF?1	Single-Shell Tank Closures - Assessment	$408	$0	$0	$408
3000	PF	Single-Shell Tank Closures	$408	$0	$0	$408
3100	PA11	100-DR-1 Assessment	$615	$0	$0	$615
3100	PA21	100-DR-2 Assessment	$578	$0	$0	$578
3100	PA?1	100-DR - Assessment	$1,193	$0	$0	$1,193
3100	PA	100-DR	$1,193	$0	$0	$1,193
3105	PB11	100-BC-1 - Assessment	$1,956	$0	$0	$1,956
3105	PB21	100-BC-2 Assessment	$466	$0	$0	$466
3105	PB51	100-BC-5 Assessment	$1,250	$0	$0	$1,250
3105	PB62	100-IU-1 Remediation	$197	$0	$0	$197
3105	PB?1	100-BC - Assessment	$3,672	$0	$0	$3,672
3105	PB?2	100-BC - Remediation	$197	$0	$0	$197
3105	PB	100-BC	$3,869	$0	$0	$3,869
3110	PC11	100-KR-1 Assessment	$0	$0	$0	$0
3110	PC21	100-KR-2 Assessment	$920	$0	$0	$920
3110	PC41	100-KR-4 Assessment	$694	$0	$0	$694
3110	PC?1	100-KR - Assessment	$2,084	$0	$0	$2,084
3110	PC	100-KR	$2,084	$0	$0	$2,084

Table A5-1. Remedial Actions Program Fiscal Year 1994 Funding Baseline Summary ($000). (sheet 2 of 3)

			FYWP 1994 ($000)			
ADS #	WBS	Title	WHC	USACE	RL	Total
3115	PD11	100-FR-1 Assessment	$471	$0	$0	$471
3115	PD31	100-FR-3 Assessment	$957	$0	$0	$957
3115	PD41	100-IU-3 Assessment	$0	$1,976	$0	$1,976
3115	PD42	100-IU-3 Remediation	$2,972	$0	$0	$2,972
3115	PD4	100-IU-3	$2,972	$1,976	$0	$4,948
3115	PD?1	100-FR - Assessment	$1,428	$1,976	$0	$3,404
3115	PD?2	100-FR - Remediation	$2,972	$0	$0	$2,972
3115	PD	100-FR	$4,400	$1,976	$0	$6,376
3120	PE11	100-HR-1 Assessment	$397	$0	$0	$397
3120	PE21	100-HR-2 Assessment	$754	$0	$0	$754
3120	PE31	100-HR-3 Assessment	$3,648	$0	$0	$3,648
3120	PE62	100-IU-5 Remediation	$50	$0	$0	$50
3120	PE71	100 NPL Common Assessment	$12,915	$0	$0	$12,915
3120	PE?1	100-HR - Assessment	$17,714	$0	$0	$17,714
3120	PE?2	100-HR - Remediation	$50	$0	$0	$50
3120	PE	100-HR	$17,764	$0	$0	$17,764
3125	PG11	100-NR-1 Assessment	$463	$0	$0	$463
3125	PG21	100-NR-2 Assessment	$669	$0	$0	$669
3125	PG22	100-NR-2 Remediation	$1,791	$0	$0	$1,791
3125	PG2	100-NR-2	$2,460	$0	$0	$2,460
3125	PG?1	100-NR - Assessment	$1,132	$0	$0	$1,132
3125	PG?2	100-NR - Remediation	$1,791	$0	$0	$1,791
3125	PG	100-NR	$2,923	$0	$0	$2,923
3200	PL11	200-BP-1 Assessment	$3,007	$0	$0	$3,007
3200	PL12	200-BP-1 Remediation	$2,355	$0	$0	$2,355
3200	PL1	200-BP-1	$5,362	$0	$0	$5,362
3200	PL41	200-BP-4 Assessment	$0	$0	$0	$0
3200	PL51	200-BP-5 Assessment	$4,781	$0	$0	$4,781
3200	PL71	200-BP-8 Assessment	$0	$0	$0	$0
3200	PLA1	200-BP-11 Assessment	$523	$0	$0	$523
3200	PLB1	200 NPL Common Assessment	$562	$0	$0	$562
3200	PLB2	200 NPL Common Remediation	$30	$0	$0	$30
3200	PLB	200 NPL Common Activities	$592	$0	$0	$592
3200	PL?1	200-BP - Assessment	$8,873	$0	$0	$8,873
3200	PL?2	200-BP - Remediation	$2,385	$0	$0	$2,385
3200	PL	200-BP	$11,258	$0	$0	$11,258
3210	PN11	200-PO-1 Assessment	$297	$0	$0	$297
3210	PN41	200-PO-5 Assessment	$0	$0	$0	$0
3210	PN?1	200-PO - Assessment	$297	$0	$0	$297
3210	PN	200-PO	$297	$0	$0	$297
3225	PS11	200-TP-1 Assessment	$0	$0	$0	$0
3225	PS?1	200-TP - Assessment	$0	$0	$0	$0
3225	PS	200-TP	$0	$0	$0	$0

Table A5-1. Remedial Actions Program Fiscal Year 1994 Funding Baseline Summary ($000). (sheet 3 of 3)

			FYWP 1994 ($000)			
ADS #	WBS	Title	WHC	USACE	RL	Total
3230	PT11	200-UP-1 Assessment	$4,477	$0	$0	$4,477
3230	PT21	200-UP-2 Assessment	$7,117	$0	$0	$7,117
3230	PT?1	200-UP - Assessment	$11,594	$0	$0	$11,594
3230	PT	200-UP	$11,594	$0	$0	$11,594
3235	PU11	200-ZP-1 Assessment	$0	$0	$0	$0
3235	PU12	200-ZP-1 Remediation	$4,058	$0	$0	$4,058
3235	PU1	200-ZP-1	$4,058	$0	$0	$4,058
3235	PU22	200-ZP-2 Remediation	$5,719	$0	$0	$5,719
3235	PU?1	200-ZP - Assessment	$0	$0	$0	$0
3235	PU?2	200-ZP - Remediation	$9,777	$0	$0	$9,777
3235	PU	200-ZP	$9,777	$0	$0	$9,777
3300	P211	300-FF-1 Assessment	$2,027	$0	$0	$2,027
3300	P212	300-FF-1 Remediation	$0	$0	$0	$0
3300	P21	300-FF-1	$2,027	$0	$0	$2,027
3300	P221	300-FF-2 Assessment	$1,586	$0	$0	$1,586
3300	P251	300-FF-5 Assessment	$1,188	$0	$0	$1,188
3300	P262	300-IU-1 Remediation	$26	$0	$0	$26
3300	P2?1	300-FF - Assessment	$4,801	$0	$0	$4,801
3300	P2?2	300-FF - Remediation	$26	$0	$0	$26
3300	P2	300-FF	$4,827	$0	$0	$4,827
3390	P312	1100-EM-1 Remediation	$0	$1,001	$0	$1,001
3390	P322	1100-EM-2 Remediation	$0	$366	$0	$366
3390	P332	1100-EM-3 Remediation	$0	$310	$0	$310
3390	P342	1100-IU-1 Remediation	$0	$4,752	$0	$4,752
3390	P362	ALE Facility Remediation	$0	$1,154	$0	$1,154
3390	P3?2	1100-EM - Remediation	$0	$7,583	$0	$7,583
3390	P3	1100-EM	$0	$7,583	$0	$7,583
	P??1	Remedial Actions - Assessment	$57,061	$1,976	$0	$59,037
	P??2	Remedial Actions - Remediation	$25,001	$7,583	$0	$32,584
	P	Remedial Actions	$82,062	$9,559	$0	$91,621

ADS# = activity data sheet number
ALE = Arid Lands Ecology
ER = environmental restoration
FYWP = fiscal year work plan
NPL = "National Priorities List"
RARA = radiation area remedial actions
RCRA = Resource Conservation and Recovery Act of 1976
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
UST = Underground Storage Tank
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

A6.0 PROGRAM STAFFING BASELINE

The RA Program staffing baseline FTEs are presented in Table A6-1. The FTEs are displayed by activity level and summarized to the total RA Program FTE requirement. The summarized ER Program FTE requirements are included in the Mission Section of this document.

Indentation in Title Column displays the "roll-up" function within the program and provides line item identification.

The question marks (?) in the 3rd level of the WBS column indicate a summary of assessment (XX?1) or remediation (XX?2) FTEs within an operable unit.

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Table A6-1. Remedial Actions Program Fiscal Year 1994 Work Force, Full-Time Equivalents Funding Baseline (FTE). (sheet 1 of 3)

			FYWP 1994 FTEs			
ADS #	WBS	Title	WHC	USACE	RL	Total
3010	PJ12	RARA Common Activities - Remediation	58.5	0.0	0.0	58.5
3010	PJ22	UST Common Activities - Remediation	1.7	0.0	0.0	1.7
3010	PJ?2	RARA/USTs - Remediation	60.2	0.0	0.0	60.2
3010	PJ	RARA/USTs	60.2	0.0	0.0	60.2
3020	PV11	RCRA Common Activities Assessment	1.5	0.0	0.0	1.5
3020	PV31	RCRA 100-DR Assessment	2.5	0.0	0.0	2.5
3020	PV71	RCRA 100-NR Assessment	3.0	0.0	0.0	3.0
3020	PVB1	RCRA 200 Area B (BP) Assessment	11.2	0.0	0.0	11.2
3020	PVB2	RCRA 200 Area B (BP) Remediation	0.8	0.0	0.0	0.8
3020	PVB	RCRA 200 Area B (BP)	12.0	0.0	0.0	12.0
3020	PVS1	RCRA 200 Area S (RO) Assessment	1.8	0.0	0.0	1.8
3020	PVU1	RCRA 200 Area UP Assessment	1.9	0.0	0.0	1.9
3020	PVI1	RCRA 200 Area IU Assessment	2.2	0.0	0.0	2.2
3020	PVF1	RCRA 200 Area FF Assessment	1.7	0.0	0.0	1.7
3020	PV?1	RCRA Closures - Assessment	25.8	0.0	0.0	25.8
3020	PV?2	RCRA Closures - Remediation	6.5	0.0	0.0	6.5
3020	PV	RCRA Closures	32.3	0.0	0.0	32.3
3000	PF11	SST Closure Common Activities Assessment	0.0	0.0	0.0	0.0
3000	PFA1	SST 200 Area A (PO) Assessment	0.0	0.0	0.0	0.0
3000	PFS1	SST 200 Area S (RO) Assessment	0.0	0.0	0.0	0.0
3000	PFT1	SST 200 Area T (TP) Assessment	1.2	0.0	0.0	1.2
3000	PF?1	Single-Shell Tank Closures - Assessment	1.2	0.0	0.0	1.2
3000	PF	Single-Shell Tank Closures	1.2	0.0	0.0	1.2
3100	PA11	100-DR-1 Assessment	0.8	0.0	0.0	0.8
3100	PA21	100-DR-2 Assessment	1.1	0.0	0.0	1.1
3100	PA?1	100-DR - Assessment	1.9	0.0	0.0	1.9
3100	PA	100-DR	1.9	0.0	0.0	1.9
3105	PB11	100-BC-1 - Assessment	16.6	0.0	0.0	16.6
3105	PB21	100-BC-2 Assessment	0.2	0.0	0.0	0.2
3105	PB51	100-BC-5 Assessment	2.8	0.0	0.0	2.8
3105	PB62	100-IU-1 Remediation	1.2	0.0	0.0	1.2
3105	PB?1	100-BC - Assessment	19.6	0.0	0.0	19.6
3105	PB?2	100-BC - Remediation	1.2	0.0	0.0	1.2
3105	PB	100-BC	20.8	0.0	0.0	20.8
3110	PC11	100-KR-1 Assessment	0.0	0.0	0.0	0.0
3110	PC21	100-KR-2 Assessment	3.3	0.0	0.0	3.3
3110	PC41	100-KR-4 Assessment	2.3	0.0	0.0	2.3
3110	PC?1	100-KR - Assessment	6.0	0.0	0.0	6.0
3110	PC	100-KR	6.0	0.0	0.0	6.0

Table A6-1. Remedial Actions Program Fiscal Year 1994 Work Force, Full-Time Equivalents Funding Baseline (FTE). (sheet 2 of 3)

			FYWP 1994 FTEs			
ADS #	WBS	Title	WHC	USACE	RL	Total
3115	PD11	100-FR-1 Assessment	0.1	0.0	0.0	0.1
3115	PD31	100-FR-3 Assessment	2.0	0.0	0.0	2.0
3115	PD41	100-IU-3 Assessment	0.0	15.8	0.0	15.8
3115	PD42	100-IU-3 Remediation	2.7	0.0	0.0	2.7
3115	PD4	100-IU-3	2.7	15.8	0.0	18.5
3115	PD?1	100-FR - Assessment	2.1	15.8	0.0	17.9
3115	PD?2	100-FR - Remediation	2.7	0.0	0.0	2.7
3115	PD	100-FR	4.8	15.8	0.0	20.6
3120	PE11	100-HR-1 Assessment	0.0	0.0	0.0	0.0
3120	PE21	100-HR-2 Assessment	1.7	0.0	0.0	1.7
3120	PE31	100-HR-3 Assessment	12.4	0.0	0.0	12.4
3120	PE62	100-IU-5 Remediation	0.5	0.0	0.0	0.5
3120	PE71	100 NPL Common Assessment	49.8	0.0	0.0	49.8
3120	PE?1	100-HR - Assessment	63.9	0.0	0.0	63.9
3120	PE?2	100-HR - Remediation	0.5	0.0	0.0	0.5
3120	PE	100-HR	64.4	0.0	0.0	64.4
3125	PG11	100-NR-1 Assessment	0.2	0.0	0.0	0.2
3125	PG21	100-NR-2 Assessment	0.8	0.0	0.0	0.8
3125	PG22	100-NR-2 Remediation	2.0	0.0	0.0	2.0
3125	PG2	100-NR-2	2.8	0.0	0.0	2.8
3125	PG?1	100-NR - Assessment	1.0	0.0	0.0	1.0
3125	PG?2	100-NR - Remediation	2.0	0.0	0.0	2.0
3125	PG	100-NR	3.0	0.0	0.0	3.0
3200	PL11	200-BP-1 Assessment	1.2	0.0	0.0	1.2
3200	PL12	200-BP-1 Remediation	1.1	0.0	0.0	1.1
3200	PL1	200-BP-1	2.3	0.0	0.0	2.3
3200	PL41	200-BP-4 Assessment	0.0	0.0	0.0	0.0
3200	PL51	200-BP-5 Assessment	17.7	0.0	0.0	17.7
3200	PL71	200-BP-8 Assessment	0.0	0.0	0.0	0.0
3200	PLA1	200-BP-11 Assessment	1.9	0.0	0.0	1.9
3200	PLB1	200 NPL Common Assessment	1.8	0.0	0.0	1.8
3200	PLB2	200 NPL Common Remediation	0.2	0.0	0.0	0.2
3200	PLB	200 NPL Common Activities	2.0	0.0	0.0	2.0
3200	PL?1	200-BP - Assessment	22.6	0.0	0.0	22.6
3200	PL?2	200-BP - Remediation	1.3	0.0	0.0	1.3
3200	PL	200-BP	23.9	0.0	0.0	23.9
3210	PN11	200-PO-1 Assessment	1.3	0.0	0.0	1.3
3210	PN41	200-PO-5 Assessment	0.0	0.0	0.0	0.0
3210	PN?1	200-PO - Assessment	1.3	0.0	0.0	1.3
3210	PN	200-PO	1.3	0.0	0.0	1.3
3225	PS11	200-TP-1 Assessment	0.0	0.0	0.0	0.0
3225	PS?1	200-TP - Assessment	0.0	0.0	0.0	0.0
3225	PS	200-TP	0.0	0.0	0.0	0.0

Table A6-1. Remedial Actions Program Fiscal Year 1994 Work Force, Full-Time Equivalents Funding Baseline (FTE). (sheet 3 of 3)

			FYWP 1994 FTEs			
ADS #	WBS	Title	WHC	USACE	RL	Total
3230	PT11	200-UP-1 Assessment	19.6	0.0	0.0	19.6
3230	PT21	200-UP-2 Assessment	13.8	0.0	0.0	13.8
3230	PT?1	200-UP - Assessment	33.4	0.0	0.0	33.4
3230	PT	200-UP	33.4	0.0	0.0	33.4
3235	PU11	200-ZP-1 Assessment	0.0	0.0	0.0	0.0
3235	PU12	200-ZP-1 Remediation	15.9	0.0	0.0	15.9
3235	PU1	200-ZP-1	15.9	0.0	0.0	15.9
3235	PU22	200-ZP-2 Remediation	20.0	0.0	0.0	20.0
3235	PU?1	200-ZP - Assessment	0.0	0.0	0.0	0.0
3235	PU?2	200-ZP - Remediation	35.9	0.0	0.0	35.9
3235	PU	200-ZP	35.9	0.0	0.0	35.9
3300	P211	300-FF-1 Assessment	4.8	0.0	0.0	4.8
3300	P212	300-FF-1 Remediation	0.0	0.0	0.0	0.0
3300	P21	300-FF-1	4.8	0.0	0.0	4.8
3300	P221	300-FF-2 Assessment	1.4	0.0	0.0	1.4
3300	P251	300-FF-5 Assessment	5.0	0.0	0.0	5.0
3300	P262	300-IU-1 Remediation	0.3	0.0	0.0	0.3
3300	P2?1	300-FF - Assessment	11.2	0.0	0.0	11.2
3300	P2?2	300-FF - Remediation	0.3	0.0	0.0	0.3
3300	P2	300-FF	11.5	0.0	0.0	11.5
3390	P312	1100-EM-1 Remediation	0.0	8.0	0.0	8.0
3390	P322	1100-EM-2 Remediation	0.0	3.0	0.0	3.0
3390	P332	1100-EM-3 Remediation	0.0	2.6	0.0	2.6
3390	P342	1100-IU-1 Remediation	0.0	38.0	0.0	38.0
3390	P362	ALE Facility Remediation	0.0	9.2	0.0	9.2
3390	P3?2	1100-EM - Remediation	0.0	60.8	0.0	60.8
3390	P3	1100-EM	0.0	60.8	0.0	60.8
	P??1	Remedial Actions - Assessment	190.0	15.8	0.0	205.8
	P??2	Remedial Actions - Remediation	110.6	60.8	0.0	171.4
	P	Remedial Actions	300.6	76.6	0.0	377.2

ADS# = activity data sheet number
ALE = Arid Lands Ecology
ER = environmental restoration
FTE = full-time equivalent
FYWP = fiscal year work plan
NPL = "National Priorities List"
RARA = radiation area remedial actions
RCRA = Resource Conservation and Recovery Act of 1976
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
UST = Underground Storage Tank
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

A7.0 PROGRAM WORKSCOPE CARRYOVER

Carryover information will be provided on approval of the Class I change request documenting carryover workscope, milestones, and funds.

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A8.0 REFERENCES

Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 USC 9601 et seq.

DOE-RL, 1993, "Guidance for Fiscal Year (FY) 1994 Environmental Restoration (ER) Program Unfunded Activities", letter 94-EPB-001, Mr. Freeberg to Mr. Anderson, dated October 22, 1993.

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WAC 173-360, *Underground Storage Tank Regulations*, Washington State Department of Ecology, Olympia, Washington.

EPA, 1986, *Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods*, SW-846, 3rd Edition, U.S. Environmental Protection Agency, Washington, D.C.

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APPENDIX B

DECONTAMINATION AND DECOMMISSIONING ACTION PROGRAM

APPENDIX B

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GLOSSARY

AAMS	aggregate area management study
AAP	affirmative action plan
ACM	asbestos containing material
Admin	Administration
ADS	activity data sheet
AIP	agreement in principal
AIU	agreement in understanding
ALE	Arid Lands Ecology (Reserve)
ARAR	applicable or relevant and appropriate requirements
ASI	Advanced Sciences, Incorporated
ATSDR	Agency for Toxic Substances and Disease Registry
BAM	baseline analysis matrix
BDAT	best demonstrated available technology
BOP	balance of plant
CAMU	corrective action management unit
CDR	conceptual design report
CERCLA	*Comprehensive Environmental Response, Compensation, and Liability Act of 1980*
CFR	Code of Federal Regulations
CLP	contract laboratory program
CMP	configuration management plan
CRADA	Cooperative Research and Development Agreement
CY	calendar year
D&D	decontamination and decommissioning
DCP	document control plan
DF	disposal facilities
DOE	U.S. Department of Energy
DOE-HQ	U.S. Department of Energy, Headquarters
DOE-RL	U.S. Department of Energy, Richland Operations Office
DOW	description of work
Ecology	Washington State Department of Ecology
EE/CA	engineering evaluation/cost analysis
EGW	200 East Area groundwater
EII	environmental investigation instruction
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
equip	equipment
ER	environmental restoration
ERA	expedited response action
ERB	engineering review board
ERDF	Environmental Restoration Disposal Facility
ERMC	environmental restoration management contractor
ERO	environmental restoration operations
ERPO	environmental restoration program office
ERSDF	environmental restoration storage and disposal facility

GLOSSARY (cont)

FDB	functional design basis
FDC	functional design criteria
FDS	financial data system
FEMP	facility effluent monitoring plan(s)
FFS	focused feasibility study
FS	feasibility study
FSPRD	Final Surplus Production Reactor Decommissioning
FTE	full-time equivalent
FY	fiscal year
FYP	fiscal year plan
FYWP	fiscal year work plan
G&A	general and administrative
GAO	General Accounting Office
GIS	geographic information system
govt	government
HASM	Hanford Analytical Services Management
HEIS	Hanford Environmental Information System
HGP	Hanford Generating Plant
HEHF	Hanford Environmental Health Facility
HLAN	Hanford Local Area Network
HRA	Hanford remedial action
HSAAP	Hanford Site Asbestos Abatement Program
IMS	information management system
IMSP	information management system plan
IROD	interim record of decision
IRM	interim response measure
ISV	in-situ vitrification
JCS	job control system
KEH	Kaiser Engineers Hanford Company
lab	laboratory
LDR	land disposal restrictions
LFI	limited field investigation
LIMS	laboratory information management system
LRPP	long-range planning program
M&O	maintenance and operations
MCL	milestone control log
MDS	milestone description sheets
mgmt	management

GLOSSARY (cont)

MOU	memorandum of understanding
MSA	major system acquisition
MYPP	multi-year program plan
NEPA	*National Environmental Policy Act of 1969*
NOD	notice of deficiency
NPC	notice of project closeout
NPL	National Priorities List
NRDA	National Resource Damage Assessment
NRDWL	nonradioactive dangerous waste landfill
NW	northwest
OMB	Office of Management and Budget
OU	operable unit
PAS	preliminary assessment screening
PFP	plutonium finishing plant
PM&S	program management and support
PNL	Pacific Northwest Laboratory
Pu Conc	plutonium concentration
PUREX	plutonium-uranium extraction
QA	quality assurance
QASR	quality assurance system requirements
QTR	quality training requirement
RA	remedial action
RAM	responsibility assignment matrix
RARA	radiation area remedial action
RCRA	*Resource Conservation and Recovery Act of 1976*
REDOX	reduction oxidation
RFI-CMS	RCRA facility investigation/corrective measure studies
RFP	request for proposal
RI	remedial investigation
RIDS	record inventory disposition schedule
RI/FS	remedial investigation/feasibility study
RL	U.S. Department of Energy, Richland Operations Office
RLID	Richland implementation document
RLP	Richland procurement instruction
RMP	records management plan
RMWDF	radioactive mixed waste disposal facility
ROD	record of decision
S&M	surveillance and maintenance
SEMP	systems engineering management plan
SMS	site management system
SPRD	Surplus Production Reactor Decommissioning
SST	single-shell tank

GLOSSARY (cont)

SWEC	Stone & Webster Engineering Corporation
Sys. Eng	systems engineering
TPA	Tri-Party Agreement
TRU	transuranic
Tri-Party Agreement	*Hanford Federal Facility Agreement and Consent Order*
TSD	treatment, storage, and/or disposal
USACE	U.S. Army Corps of Engineers
USACE/PM	U.S. Army Corps of Engineers/Program Manager
USGS	U.S. Geological Survey
UST	underground storage tank
WAC	Washington Administrative Code
WBS	work breakdown structure
Westinghouse Hanford	Westinghouse Hanford Company
WGW	200 West Area groundwater
WHC	Westinghouse Hanford Company
WIDS	waste information data system

B1.0 DECONTAMINATION AND DECOMMISSIONING ACTION PROGRAM DESCRIPTION

This appendix contains the program objectives, assumptions and constraints, WBS structures, schedules, and fiscal information for the Decontamination and Decommissioning (D&D) Action Program.

B1.1 DECONTAMINATION AND DECOMMISSIONING PROGRAM STATEMENT

Program statements for Surplus Facility and N Reactor are provided in the following sections.

B1.1.1 Surplus Facility Program Statement

The Surplus Facility D&D Program is responsible for providing on-going S&M activities to ensure surplus facilities located on the Hanford Site are maintained in a minimum safe shutdown condition until final disposition is accomplished through the D&D Program. There are currently 99 surplus buildings identified in the D&D Program that have no future long-term use under the current ER mission. Typical surplus facilities include production reactors, reprocessing plants, and various ancillary and support facilities. Using the risk assessment completed in FY 1993, on-going S&M (and associated corrective activities) will focus on those facilities that have undergone the greatest deterioration and represent the greatest risk to human health and the environment.

Currently, all of the surplus facilities identified in the D&D Program reside in either the 100 or the 200 Areas. Presently, there are no 300 Area, 1100 Area, 400 Area, or 600 Area surplus facilities assigned to the ER Program through the FY 1999 baseline timeframe.

B1.1.2 N Reactor Program Statement

The N Reactor subproject element provides for maintaining a minimum safe condition for N Reactor and associated facilities. On September 23, 1991, the DOE-HQ notified DOE-RL to cease N Reactor preservation activities and initiate the transition to decommissioning. The N Reactor facilities are being maintained in a regulatory compliant state until funding is received from the DOE-HQ to begin execution of the *N Reactor Shutdown Program Plan* (WHC 1992). On completion of the deactivation plan, N Reactor facilities will be held in a stabilized condition that will require only minimal S&M until final decommissioning.

B1.2 DECONTAMINATION AND DECOMMISSIONING PROGRAM OBJECTIVES

The D&D Program objectives for the Surplus Facility and N Reactor programs are provided in the following sections.

B1.2.1 Surplus Facility Program Objective

The overall objective of the Surplus Facility D&D Program is to maintain D&D surplus facilities in a minimally safe condition until final decommissioning. The following are the D&D Program objectives:

- Maintain surplus facilities in a minimally safe condition in compliance with applicable DOE Orders and regulations. Continue S&M (and corrective activities, as necessary) ensuring surplus facilities are maintained in an environmentally and industrially safe manner

- Continue engineering services that support the Surplus Production Reactor Decommissioning (SPRD) EIS preferred alternative for reactor disposal

- Continue with phased-approach strategy to accelerate demolition of ancillary and processing facilities in support of the Agreement in Principle, dated March 31, 1993

- Continue to serve as the model and focal point for sitewide planning, coordination and integration of all asbestos abatement activities, placing special emphasis on those facilities that pose the greatest asbestos containing material (ACM) exposure and risk to human health and the environment.

B1.2.2 N Reactor Program Objective

The overall objective of the N Reactor program is to maintain the N Reactor facilities in a state compliant with applicable DOE and regulatory requirements until final decommissioning. The N Reactor program includes the following specific objectives:

- Maintain the N Reactor facilities in compliance with applicable DOE, federal, and state regulations while awaiting funding to execute the *N Reactor Shutdown Program Plan* (WHC 1992)

- Plan and prepare for implementation of N Basin cleanup activities including draining the basin water, cleaning and stabilizing basin surfaces, and disposing of contaminated sediment materials from within the N Basin and associated systems

- Continue RCRA closure activities at 100-N Area sites

- Continue planning for and initiation of the shoreline dose reduction activities

- Provide for modifications to facilities to reduce future S&M requirements where appropriate
- Handle and dispose of radioactive, dangerous, and mixed wastes from 100-N facilities
- Provide required environmental monitoring and surveillance.

B1.3 DECONTAMINATION AND DECOMMISSIONING PROGRAM PRIORITIES

The D&D Program priorities for FY 1994 are addressed in the Mission portion of this document.

B1.4 DECONTAMINATION AND DECOMMISSIONING PROGRAM ASSUMPTIONS AND CONSTRAINTS

Assumptions and constraints for the Surplus Facility and N Reactor programs are provided in the following sections.

B1.4.1 Surplus Facility Assumptions and Constraints

- All of the surplus facilities assigned to the Surplus Facility D&D Program will be maintained in a minimum safe condition via S&M until final decommissioning.
- Responsibility for funding the 300 Area Hot Cell cleanout effort will be transferred to Waste Management in FY 1994.
- Required NEPA documentation and regulatory permitting actions (air/water) will be approved in time to support the Surplus Facility D&D Program compliant to the Agreement in Principle.
- Where practical, D&D remedial activities will be integrated with the past-practice strategy cleanup effort.
- Funding will be available to support the final SPRD EIS ROD for one-piece, reactor core removal.
- No funding will be required after FY 1993 for 201-C Strontium Semiworks S&M.

B1.4.2 N Reactor Assumptions and Constraints

- N Reactor will be maintained in a minimum compliant state awaiting funding to execute the N Reactor Deactivation Program Plan.
- RCRA closure plans for the 1301-N Liquid Waste Disposal Facility, 1325-N Liquid Waste Disposal Facility, and 1324N/NA Surface Impoundment/Percolation Pond will be submitted in FY 1994.

- Required NEPA documentation and air permitting actions will be in place by March 31, 1994, to allow initiation of N Basin cleanup and facility shutdown execution.

B1.5 MAJOR DEVIATIONS FROM THE BASELINE

Major deviations between the FYWP and the baseline, as identified in Section B4.0, Table B4-1, are summarized as follows ($000):

ADS 3500 (Asbestos Abatement)
FYWP $2,085 Baseline $2,611 Change -$526

Decreased funding is due to non-EM-40 Programs assuming financial responsibility for those asbestos abatement activities scheduled in non-EM-40 priority facilities on the Hanford Site. The FY 1994 focus of the EM-40 Program will target EM-40 funding for overall, sitewide management of the Hanford Site Asbestos Abatement Program (HSAAP) and field abatement activities associated with those facilities that reside under EM-40 responsibility and control.

ADS 3510 (100 Area D&D) FYWP $12,090 Baseline $7,792 Change +$4,298

During the FY 1994 FYWP review process, increased funding was identified to accelerate initiation/completion of many D&D activities resulting from the 105-F Corrective Activities, AIP and the SPRD EIS ROD. Specifically, additional dollars have been established in this ADS to support the following:

- Final preparation, review, and issuance of the risk assessment/cost comparison study resulting from the 105-F Corrective Action findings

- Acceleration of priority 1 safety upgrades and procurement of requisite (capital) equipment in support of both the risk assessment and the AIP

- Acceleration of facility demolition (including detonation of the 70-foot high steel beams), scrap material recycling, disposal of hazardous materials, and completion of 190-B Complex project in support of the AIP

- Preparation and issuance of the draft EE/CA for the Effluent Riverlines in support of the AIP

- Initiation and submittal of the 105-C Reactor CDR for Westinghouse Hanford review and approval by September 1994, in support of the approved SPRD EIS ROD (September 14, 1993). Compliant to DOE Order 4700.1, additional funds also have been established under this ADS to cover project management and oversight costs required to support the conceptual engineering effort in FY 1994.

ADS 3520 (200 Area D&D) FYWP $6,793 Baseline $8,145 Change -$1,352

Decrease funding is due to elimination of the steam assessment for the 271/221-U Facility (U-Plant). With electrical heaters installed June 1993, steam will not be required to heat the 271/221-U Facility in FY 1994.

Change due to the inclusion of the 1301/1325-N Liquid Waste Disposal Facilities and the 1324/1324NA Surface Impoundment/Percolation Pond closure plans in the RARA Closure ADS that were previously included in the N Reactor ADS. The impact of this change was reduced because of repricing and revised estimates.

ADS 3600 (N Reactor) FYWP $20,962 Baseline $21,600 Change -$638

RCRA closure activities at the 100-N Area have been transferred from the N Reactor end function (UN) to the RCRA Closure end function (PV). Funding totalling $503K was transferred along with this workscope. Changes to RCRA closure plan preparation requirements have produced $500K in efficiency savings that were reprogrammed to Environmental Permitting for N Basin cleanup activities.

N Basin cleanup, as well as building/systems deactivation activities, will be initiated in FY 1994. The funding was provided as a result of minimizing routine operational maintenance, repairs, and modifications for 1 year to allow prioritization of shutdown and deactivation activities. These routine activities will be reinstituted in FY 1995.

Deactivation of the Hanford Generating Plant will commence in FY 1994, however, with minimal funding for sampling requirements. The initiation of the workscope is in response to DOE-RL requirements.

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B2.0 PROGRAM TECHNICAL BASELINE

This section contains the WBS and the RAM for the D&D Program.

B2.1 WORK BREAKDOWN STRUCTURE

The WBS charts for this program have been excluded per a waiver from the DOE-RL Office of Planning and Integration. The WBS is displayed by line number in Table B2-1 of this appendix.

B2.2 WORK BREAKDOWN STRUCTURE DICTIONARY

The WBS Dictionary is developed to the cost account level in the Part I-Index, Table B2-1. The complete D&D WBS structure, including outyear activities is displayed in an effort to portray the range of effort that these activities cover. The activities that are not part of the FY 1994 workscope are shaded to differentiate the FY efforts from the total workscope. Applicable pages of the Part I-Index are extracted for this appendix.

Table B2-2 contains the WBS Dictionary, Part II-Element Definition work sheets. Work sheets are included for D&D activities at the MSA subproject and MSA activity WBS levels for WHC and USACE directed workscope. In addition, work sheets to the cost account level are included for selected D&D activities under the direction of the USACE in lieu of cost account authorizations. While the WBS Part II-Element Definition worksheets at the subproject level might depict workscope beyond FY 1994, the worksheets included at the activity level address only FY 1994 workscope.

B2.3 RESPONSIBILITY ASSIGNMENT MATRIX

The D&D Program RAM is shown in Table B2-3. The title, SMS and FDS WBS to the cost account level, as well as the responsible manager and DOE-RL contact, are identified.

B2.4 DECONTAMINATION AND DECOMMISSIONING LOGIC DIAGRAM

The Surplus Facilities Disposition Logic Diagram, Logic Diagram B2-1, illustrates the process by which facilities are characterized, decontaminated, and decommissioned as part of the cleanup activities. All facilities on the Hanford Site ultimately will require decommissioning.

The facilities can be divided into two major groups: (1) facilities that currently exist and (2) facilities required in the future to support the cleanup activities. The first group of facilities is a constant that must be addressed independent of the future Hanford Site direction. This group is discussed in three groups: (a) listed surplus facilities, (b) unlisted facilities, and (c) major operating facilities. The future facilities

requiring decommissioning depend on the processing capabilities selected to support cleanup activities and will remain a variable until the processing configuration becomes firm.

Once the mission for a given facility has been completed, the facility will undergo deactivation. However, if no new mission is identified, the facility will be placed under surveillance until such time as decommissioning is initiated. Decommissioning consists of several functional activities, the principal ones being decontamination, demolition, entombment, and site restoration. For different facilities, different combinations of these functions could be implemented, depending on the particular strategy carried out for site cleanup.

Because of the complexity of this program, there is no attempt at this time to develop the logic diagram down to the cost account level.

Within the D&D Program Logic Diagram, the functional elements building the paths are as follows:

- Interim management and monitoring
- Deactivation
- Inventory disposition
- Surveillance
- Facility characterization
- Decommissioning pretreatment
- Decontamination
- Demolition
- Entombment
- Entombment site closure
- Material partitioning
- Packaging
- Interim storage
- Onsite disposal
- Transportation to offsite disposal facility
- Site restoration
- Environmental monitoring.

The WBS charts for this program have been excluded per a waiver from the DOE-RL Office of Planning and Integration. The WBS is displayed by line number in Table B2-1 of this appendix.

Figure B2-1. Work Breakdown Structure Charts.

U. S. DEPARTMENT OF ENERGY

Table B2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
PART I - INDEX

DOE F1332.10
(11-84)

FORM APPROVED
OMB NO. 1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
28		X					Decontamination and Decommissioning	1.4.10.1.2	(U)		2.2	
29			X				Asbestos Abatement	1.4.10.1.2.1	(UV)	EW201040	2.2.1	3500
30				X			Asbestos Abatement Common Activities	1.4.10.1.2.1.1	(UV1)	EW2010401	2.2.1.1	3500
31					X		Assessment	1.4.10.1.2.1.1.1	(UV11)	EW2010401	2.2.1.1.10	3500
32					X		Remediation	1.4.10.1.2.1.1.2	(UV12)	EW2010402	2.2.1.1.20	3500
33						X	Asbestos Abatement	1.4.10.1.2.1.1.2.1	(UV121)	EW2010401	2.2.1.1.20.1	3500
34			X				100 Areas D&D	1.4.10.1.2.2	(UB)	EW201040	2.2.2	3510
35				X			100 Areas Common Activities	1.4.10.1.2.2.1	(UB1)	EW201040	2.2.2.1	3510
36					X		Assessment	1.4.10.1.2.2.1.1	(UB11)	EW2010401	2.2.2.1.10	3510
37						X	S&M 100 Areas Common Activities	1.4.10.1.2.2.1.1.1	(UB111)	EW2010401	2.2.2.1.10.1	3510
38						X	100/200 Risk Assessment Upgrades	1.4.10.1.2.2.1.1.2	(UB112)	EW2010401	2.2.2.1.10.2	3510
38a						X	Effluent Pipeline ERA	1.4.10.1.2.2.1.1.5	(UB115)	EW2010401	2.2.2.1.10.5	3510
39					X		Remediation	1.4.10.1.2.2.1.2	(UB12)	EW2010402	2.2.2.1.20	3510
40						X	100/200 Areas Risk Assessment	1.4.10.1.2.2.1.2.1	(UB121)	EW2010402	2.2.2.1.20.1	3510
41						X	Reactor Engineering	1.4.10.1.2.2.1.2.2	(UB122)	EW2010402	2.2.2.1.20.2	3510
42						X	Transporter and Equipment	1.4.10.1.2.2.1.2.3	(UB123)	EW2010402	2.2.2.1.20.3	3510
43						X	105-F/H Basins	1.4.10.1.2.2.1.2.4	(UB124)	EW2010402	2.2.2.1.20.4	3510
44						X	100 Areas Ancillary Facility Remediation	1.4.10.1.2.2.1.2.5	(UB125)	EW2010402	2.2.2.1.20.5	3510
45						X	100 Areas Riverline Remediation	1.4.10.1.2.2.1.2.6	(UB126)	EW2010402	2.2.2.1.20.6	3510
46				X			D&D 100-BC-1	1.4.10.1.2.2.2	(UB2)	EW2010401	2.2.2.2	3510
47					X		Assessment	1.4.10.1.2.2.2.1	(UB21)	EW2010401	2.2.2.2.10	3510
48						X	105-B Reactor Assessment	1.4.10.1.2.2.2.1.1	(UB211)	EW2010401	2.2.2.2.10.1	3510
49						X	185/190-B Ancillary Facilities	1.4.10.1.2.2.2.1.2	(UB212)	EW2010401	2.2.2.2.10.2	3510
50					X		Remediation	1.4.10.1.2.2.2.2	(UB22)	EW2010402	2.2.2.2.20	3510
51						X	105-B Reactor Remediation	1.4.10.1.2.2.2.2.1	(UB221)	EW2010402	2.2.2.2.20.1	3510
52						X	185/190-B Ancillary Facilities	1.4.10.1.2.2.2.2.2	(UB222)	EW2010402	2.2.2.2.20.2	3510
53				X			D&D 100-BC-3	1.4.10.1.2.2.3	(UB3)	EW201040	2.2.2.3	3510
54					X		Assessment	1.4.10.1.2.2.3.1	(UB31)	EW2010401	2.2.2.3.10	3510
55						X	105-C Reactor	1.4.10.1.2.2.3.1.1	(UB311)	EW2010401	2.2.2.3.10.1	3510
56						X	Ancillary Facilites	1.4.10.1.2.2.3.1.2	(UB312)	EW2010401	2.2.2.3.10.2	3510
57					X		Remediation	1.4.10.1.2.2.3.2	(UB32)	EW2010402	2.2.2.3.20	3510
58						X	105-C Reactor	1.4.10.1.2.2.3.2.1	(UB321)	EW2010402	2.2.2.3.20.1	3510
59						X	190-C Ancillary Facilities	1.4.10.1.2.2.3.2.2	(UB322)	EW2010402	2.2.2.3.20.2	3510
60				X			D&D 100-DR-1	1.4.10.1.2.2.4	(UB4)	EW201040	2.2.2.4	3510
61					X		Assessment	1.4.10.1.2.2.4.1	(UB41)	EW2010401	2.2.2.4.10	3510
62						X	105-D/116-D Assessment	1.4.10.1.2.2.4.1.1	(UB411)	EW2010401	2.2.2.4.10.1	3510
63						X	Ancillary Facilities	1.4.10.1.2.2.4.1.2	(UB412)	EW2010401	2.2.2.4.10.2	3510
64					X		Remediation	1.4.10.1.2.2.4.2	(UB42)	EW2010402	2.2.2.4.20	3510
65						X	105-D Reactor	1.4.10.1.2.2.4.2.1	(UB421)	EW2010402	2.2.2.4.20.1	3510
66						X	185/189/190-D/116-D Ancillary	1.4.10.1.2.2.4.2.2	(UB422)	EW2010402	2.2.2.4.20.2	3510
67				X			D&D 100-DR-2	1.4.10.1.2.2.5	(UB5)	EW201040	2.2.2.5	3510
68					X		Assessment	1.4.10.1.2.2.5.1	(UB51)	EW2010401	2.2.2.5.10	3510
69						X	105-DR/116-DR	1.4.10.1.2.2.5.1.1	(UB511)	EW2010401	2.2.2.5.10.1	3510
70						X	Ancillary Facilities	1.4.10.1.2.2.5.1.2	(UB512)	EW2010401	2.2.2.5.10.2	3510

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Table B2-1. WORK BREAKDOWN STRUCTURE DICTIONARY

PART I - INDEX

DOE F1332.10
(11-84)

FORM APPROVED
OMB NO. 1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
71					X		Remediation	1.4.10.1.2.2.6.2	(UB62)	EW2010402	2.2.2.6.20	3510
72						X	105-DR/116-DR	1.4.10.1.2.2.6.2.1	(UB621)	EW2010402	2.2.2.6.20.1	3510
73						X	Ancillary Facilities	1.4.10.1.2.2.6.2.2	(UB622)	EW2010402	2.2.2.6.20.2	3510
74				X			D&D 100-FR-1	1.4.10.1.2.2.6	(UB6)	EW201040	2.2.2.6	3510
75					X		Assessment	1.4.10.1.2.2.6.1	(UB61)	EW2010401	2.2.2.6.10	3510
76						X	105-F Reactor	1.4.10.1.2.2.6.1.1	(UB611)	EW2010401	2.2.2.6.10.1	3510
77						X	Ancillary Facilities	1.4.10.1.2.2.6.1.2	(UB612)	EW2010401	2.2.2.6.10.2	3510
78					X		Remediation	1.4.10.1.2.2.6.2	(UB62)	EW2010402	2.2.2.6.20	3510
79						X	105-F Reactor	1.4.10.1.2.2.6.2.1	(UB621)	EW2010402	2.2.2.6.20.1	3510
80						X	Ancillary Facilites	1.4.10.1.2.2.6.2.2	(UB622)	EW2010402	2.2.2.6.20.2	3510
81				X			D&D 100-HR-1	1.4.10.1.2.2.7	(UB7)	EW201040	2.2.2.7	3510
82					X		Assesment	1.4.10.1.2.2.7.1	(UB71)	EW2010401	2.2.2.7.10	3510
83						X	105-H Reactor	1.4.10.1.2.2.7.1.1	(UB711)	EW2010401	2.2.2.7.10.1	3510
84						X	Ancillary Facilities	1.4.10.1.2.2.7.1.2	(UB712)	EW2010401	2.2.2.7.10.2	3510
85					X		Remediation	1.4.10.1.2.2.7.2	(UB72)	EW2010402	2.2.2.7.20	3510
86						X	105-H Reactor	1.4.10.1.2.2.7.2.1	(UB721)	EW2010402	2.2.2.7.20.1	3510
87						X	Ancillary Facilities	1.4.10.1.2.2.7.2.2	(UB722)	EW2010402	2.2.2.7.20.2	3510
88				X			D&D 100-HR-2	1.4.10.1.2.2.8	(UB9)	EW201040	2.2.2.8	3510
89					X		Assessment	1.4.10.1.2.2.8.1	(UB81)	EW2010401	2.2.2.8.10	3510
90					X		Remediation	1.4.10.1.2.2.8.2	(UB82)	EW2010402	2.2.2.8.20	3510
91				X			D&D 100-KR-2	1.4.10.1.2.2.9	(UB9)	EW201040	2.2.2.9	3510
92					X		Assessment	1.4.10.1.2.2.9.1	(UB91)	EW2010401	2.2.2.9.10	3510
93					X		Remediation	1.4.10.1.2.2.9.2	(UB92)	EW2010402	2.2.2.9.20	3510
94						X	105-KE Reactor	1.4.10.1.2.2.9.2.1	(UB921)	EW2010402	2.2.2.9.20.1	3510
95						X	105-KW Reactor	1.4.10.1.2.2.9.2.2	(UB922)	EW2010402	2.2.2.9.20.2	3510
96				X			D&D 100-KR-3	1.4.10.1.2.2.10	(UBA)	EW201040	2.2.2.10	3510
97					X		Assessment	1.4.10.1.2.2.10.1	(UBA1)	EW2010401	2.2.2.10.10	3510
98					X		Remediation	1.4.10.1.2.2.10.2	(UBA2)	EW2010402	2.2.2.10.20	3510
99			X				200 Areas D&D	1.4.10.1.2.3	(UE)	EW201040	2.2.3	3520
100				X			200 Areas Common Activities	1.4.10.1.2.3.1	(UE1)	EW201040	2.2.3.1	3520
101					X		Assessment	1.4.10.1.2.3.1.1	(UE11)	EW2010401	2.2.3.1.10	3520
102						X	S&M 200 Areas Common Activities	1.4.10.1.2.3.1.1.1	(UE111)	EW2010401	2.2.3.1.10.1	3520
103						X	Process Facility Engineering	1.4.10.1.2.3.1.1.2	(UE112)	EW2010401	2.2.3.1.10.2	3520
104					X		Remediation	1.4.10.1.2.3.1.2	(UE12)	EW2010402	2.2.3.1.20	2520
105				X			D&D 200-PO-1	1.4.10.1.2.3.2	(UE2)	EW201040	2.2.3.2	3520
106					X		Assessment	1.4.10.1.2.3.2.1	(UE21)	EW2010401	2.2.3.2.10	3520
107						X	PUREX Plant Assessment	1.4.10.1.2.3.2.1.1	(UE211)	EW2010401	2.2.3.2.10.1	3520
108						X	Ancillary Facilities	1.4.10.1.2.3.2.1.2	(UE212)	EW2010401	2.2.3.2.10.2	3520
109					X		Remediation	1.4.10.1.2.3.2.2	(UE22)	EW2010402	2.2.3.2.20	3520
110						X	PUREX Plant Assessment	1.4.10.1.2.3.2.2.1	(UE221)	EW2010402	2.2.3.2.20.1	3520
111						X	Ancillary Facilities	1.4.10.1.2.3.2.2.2	(UE222)	EW2010402	2.2.3.2.20.2	3520
112				X			D&D 200-PO-3	1.4.10.1.2.3.3	(UE3)	EW201040	2.2.3.3	3520
113					X		Assessment	1.4.10.1.2.3.3.1	(UE31)	EW2010401	2.2.3.3.10	3520
114						X	N/A	1.4.10.1.2.3.3.1.1	(UE311)	EW2010401	2.2.3.3.10.1	3520
115						X	Ancillary Facilities	1.4.10.1.2.3.3.1.2	(UE312)	EW2010401	2.2.3.3.10.2	3520
116					X		Remediation	1.4.10.1.2.3.3.2	(UE32)	EW2010402	2.2.3.3.20	3520

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Table B2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
117						X	N/A	1.4.10.1.2.3.3.2.1	(UE321)	EW2010402	2.2.3.3.20.1	3520
118						X	Ancillary Facilities	1.4.10.1.2.3.3.2.2	(UE322)	EW2010402	2.2.3.3.20.2	3520
119				X			D&D 200-PO-5	1.4.10.1.2.3.4	(UE4)	EW201040	2.2.3.4	3520
120					X		Assessment	1.4.10.1.2.3.4.1	(UE41)	EW2010401	2.2.3.4.10	3520
121						X	N/A	1.4.10.1.2.3.4.1.1	(UE411)	EW2010401	2.2.3.4.10.1	3520
122						X	Ancillary Facilites	1.4.10.1.2.3.4.1.2	(UE412)	EW2010401	2.2.3.4.10.2	3520
123					X		Remediation	1.4.10.1.2.3.4.2	(UE42)	EW2010402	2.2.3.4.20	3520
124						X	N/A	1.4.10.1.2.3.4.2.1	(UE421)	EW2010402	2.2.3.4.20.1	3520
125						X	Ancillary Facilities	1.4.10.1.2.3.4.2.2	(UE422)	EW2010402	2.2.3.4.20.2	3520
126				X			D&D 200-BP-5	1.4.10.1.2.3.5	(UE5)	EW201040	2.2.3.5	3520
127					X		Assessment	1.4.10.1.2.3.5.1	(UE51)	EW2010401	2.2.3.5.10	3520
128						X	B Plant Assessment	1.4.10.1.2.3.5.1.1	(UE511)	EW2010401	2.2.3.5.10.1	3520
129						X	Ancillary Facilities	1.4.10.1.2.3.5.1.2	(UE512)	EW2010401	2.2.3.5.10.2	3520
130					X		Remediation	1.4.10.1.2.3.5.2	(UE52)	EW2010402	2.2.3.5.20	3520
131						X	B Plant Remediation	1.4.10.1.2.3.5.2.1	(UE521)	EW2010402	2.2.3.5.20.1	3520
132						X	Ancillary Facilities	1.4.10.1.2.3.5.2.2	(UE522)	EW2010402	2.2.3.5.20.2	3520
133				X			D&D 200-BP-6	1.4.10.1.2.3.6	(UE6)	EW201040	2.2.3.6	3520
134					X		Assessment	1.4.10.1.2.3.6.1	(UE61)	EW2010401	2.2.3.6.10	3520
135						X	N/A	1.4.10.1.2.3.6.1.1	(UE611)	EW2010401	2.2.3.6.10.1	3520
136						X	Ancillary Facilities	1.4.10.1.2.3.6.1.2	(UE612)	EW2010401	2.2.3.6.10.2	3520
137					X		Remediation	1.4.10.1.2.3.6.2	(UE62)	EW2010402	2.2.3.6.20	3520
138						X	N/A	1.4.10.1.2.3.6.2.1	(UE621)	EW2010402	2.2.3.6.20.1	3520
139						X	Ancillary Facilities	1.4.10.1.2.3.6.2.2	(UE622)	EW2010402	2.2.3.6.20.2	3520
140				X			D&D 200-SO-1	1.4.10.1.2.3.7	(UE7)	EW201040	2.2.3.7	3520
141					X		Assessment	1.4.10.1.2.3.7.1	(UE71)	EW2010401	2.2.3.7.10	3520
142						X	N/A	1.4.10.1.2.3.7.1.1	(UE711)	EW2010401	2.2.3.7.10.1	3520
143						X	201-C Semiwork	1.4.10.1.2.3.7.1.2	(UE712)	EW2010401	2.2.3.7.10.2	3520
144						X	Ancillary Facilities	1.4.10.1.2.3.7.1.3	(UE713)	EW2010401	2.2.3.7.10.3	3520
145					X		Remediation	1.4.10.1.2.3.7.2	(UE72)	EW2010402	2.2.3.7.20	3520
146						X	N/A	1.4.10.1.2.3.7.2.1	(UE721)	EW2010402	2.2.3.7.20.1	3520
147						X	201-C Semiwork	1.4.10.1.2.3.7.2.2	(UE722)	EW2010402	2.2.3.7.20.2	3520
148						X	Ancillary Facilities	1.4.10.1.2.3.7.2.3	(UE723)	EW2010402	2.2.3.7.20.3	3520
149				X			D&D 200-RO-1	1.4.10.1.2.3.8	(UE8)	EW201040	2.2.3.8	3520
150					X		Assessment	1.4.10.1.2.3.8.1	(UE81)	EW2010401	2.2.3.8.10	3520
151						X	N/A	1.4.10.1.2.3.8.1.1	(UE811)	EW2010401	2.2.3.8.10.1	3520
152						X	Ancillary Facilities	1.4.10.1.2.3.8.1.2	(UE812)	EW2010401	2.2.3.8.10.2	3520
153					X		Remediation	1.4.10.1.2.3.8.2	(UE82)	EW2010402	2.2.3.8.20	3520
154						X	N/A	1.4.10.1.2.3.8.2.1	(UE821)	EW2010402	2.2.3.8.20.1	3520
155						X	Ancillary Facilities	1.4.10.1.2.3.8.2.2	(UE822)	EW2010402	2.2.3.8.20.2	3520
156				X			D&D 200-RO-2	1.4.10.1.2.3.9	(UE9)	EW201040	2.2.3.9	3520
157					X		Assessment	1.4.10.1.2.3.9.1	(UE91)	EW2010401	2.2.3.9.10	3520
158						X	N/A	1.4.10.1.2.3.9.1.1	(UE911)	EW2010401	2.2.3.9.10.1	3520
159						X	Ancillary Facilities	1.4.10.1.2.3.9.1.2	(UE912)	EW2010401	2.2.3.9.10.2	3520
160					X		Remediation	1.4.10.1.2.3.9.2	(UE92)	EW2010402	2.2.3.9.20	3520
161						X	N/A	1.4.10.1.2.3.9.2.1	(UE921)	EW2010402	2.2.3.9.20.1	3520
162						X	Ancillary Facilities	1.4.10.1.2.3.9.2.2	(UE922)	Ew2010402	2.2.3.9.20.2	3520

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Table B2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
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4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
163				X			D&D 200-RO-3	1.4.10.1.2.3.10	(UEA)	EW201040	2.2.3.10	3520
164					X		Assessment	1.4.10.1.2.3.10.1	(UEA1)	EW2010401	2.2.3.10.10	3520
165						X	REDOX (202-S Canyon)	1.4.10.1.2.3.10.1.1	(UEA11)	EW2010401	2.2.3.10.10.1	3520
166						X	233-S PU Concentration Facility	1.4.10.1.2.3.10.1.2	(UEA12)	EW2010401	2.2.3.10.10.2	3520
167						X	Ancillary Facilities	1.4.10.1.2.3.10.1.3	(UEA13)	EW2010401	2.2.3.10.10.3	3520
168					X		Remediation	1.4.10.1.2.3.10.2	(UEA2)	EW2010402	2.2.3.10.20	3520
169						X	REDOX (202-S Canyon)	1.4.10.1.2.3.10.2.1	(UEA21)	EW2010402	2.2.3.10.20.1	3520
170						X	233-S PU Conc. Facility	1.4.10.1.2.3.10.2.2	(UEA22)	EW2010402	2.2.3.10.20.2	3520
171						X	Ancillary Facilities	1.4.10.1.2.3.10.2.3	(UEA23)	EW2010402	2.2.3.10.20.3	3520
172				X			D&D 200-RO-4	1.4.10.1.2.3.11	(UEB)	EW201040	2.2.3.11	3520
173					X		Assessment	1.4.10.1.2.3.11.1	(UEB1)	EW2010401	2.2.3.11.10	3520
174						X	N/A	1.4.10.1.2.3.11.1.1	(UEB11)	EW2010401	2.2.3.11.10.1	3520
175						X	Ancillary Facilities	1.4.10.1.2.3.11.1.1	(UEB12)	EW2010401	2.2.3.11.10.2	3520
176					X		Remediation	1.4.10.1.2.3.11.2	(UEB2)	EW2010402	2.2.3.11.20	3520
177						X	N/A	1.4.10.1.2.3.11.2.1	(UEB21)	EW2010402	2.2.3.11.20.1	3520
178						X	Ancillary Facilities	1.4.10.1.2.3.11.2.2	(UEB22)	EW2010402	2.2.3.11.20.2	3520
179				X			D&D 200-TP-4	1.4.10.1.2.3.12	(UEC)	EW201040	2.2.3.12	3520
180					X		Assessment	1.4.10.1.2.3.12.1	(UEC1)	EW2010401	2.2.3.12.10	3520
181					X		Remediation	1.4.10.1.2.3.12.2	(UEC2)	EW2010402	2.2.3.12.20	3520
182				X			D&D 200-UP-2	1.4.10.1.2.3.13	(UED)	EW201040	2.2.3.13	3520
183					X		Assessment	1.4.10.1.2.3.13.1	(UED1)	EW2010401	2.2.3.13.10	3520
184						X	221-U/271-U Canyon	1.4.10.1.2.3.13.1.2	(UED11)	EW2010401	2.2.3.13.10.1	3520
185					X		Remediation	1.4.10.1.2.3.13.2	(UED2)	EW2010402	2.2.3.13.20	3520
186						X	221-U/271-U Canyon	1.4.10.1.2.3.13.2.2	(UED22)	EW2010402	2.2.3.13.20.2	3520
187				X			D&D 200-UP-3	1.4.10.1.2.3.14	(UEE)	EW201040	2.2.3.14	3520
188					X		Assessment	1.4.10.1.2.3.14.1	(UEE1)	EW2010401	2.2.3.14.10	3520
189					X		Remediation	1.4.10.1.2.3.14.2	(UEE2)	EW2010402	2.2.3.14.20	3520
190				X			D&D 200-ZP-1	1.4.10.1.2.3.15	(UEF)	EW201040	2.2.3.15	3520
191					X		Assessment	1.4.10.1.2.3.15.1	(UEF1)	EW2010401	2.2.3.15.10	3520
192						X	Pu Finishing Plant	1.4.10.1.2.3.15.1.1	(UEF11)	EW2010401	2.2.3.15.10.1	3520
193						X	232-Z Incinerator	1.4.10.1.2.3.15.1.2	(UEF12)	EW2010401	2.2.3.15.10.2	3520
194						X	Ancillary Facilities	1.4.10.1.2.3.15.1.3	(UEF13)	EW2010401	2.2.3.15.10.3	3520
195					X		Remediation	1.4.10.1.2.3.15.2	(UEF2)	EW2010402	2.2.3.15.20	3520
196						X	Pu Finishing Plant	1.4.10.1.2.3.15.2.1	(UEF21)	EW2010402	2.2.3.15.20.1	3520
197						X	232-Z Incinerator	1.4.10.1.2.3.15.2.2	(UEF22)	EW2010402	2.2.3.15.20.2	3520
198						X	Ancillary Facilities	1.4.10.1.2.3.15.2.3	(UEF23)	EW2010402	2.__.3.15.20.3	3520
199			X				300 Area D&D	1.4.10.1.2.4	(UC)	EW201040	2.2.4	3530
200				X			300 Area Common Activities	1.4.10.1.2.4.1	(UC1)	EW201040	2.2.4.1	3530
201						X	Assessment	1.4.10.1.2.4.1.1	(UC11)	EW2010401	2.2.4.1.10	3530
202						X	Remediation	1.4.10.1.2.4.1.2	(UC12)	EW2010402	2.2.4.1.20	3530
203			X				N Reactor	1.4.10.1.2.5	(UN)	EW201040	2.2.5	3600
204				X			Program Management and Integration	1.4.10.1.2.5.1	(UN1)	EW201040	2.2.5.1	3600
205					X		Program Management and Integration	1.4.10.1.2.5.1.1	(UN11)	EW2010401	2.2.5.1.10	3600
206						X	Program Management	1.4.10.1.2.5.1.1.1	(UN111)	EW2010401	2.2.5.1.10.1	3600
207						X	Business Management	1.4.10.1.2.5.1.1.2	(UN112)	EW2010401	2.2.5.1.10.2	3600
208				X			Deactivation Planning & Execution	1.4.10.1.2.5.2	(UN2)	EW201040	2.2.5.2	3600

U. S. DEPARTMENT OF ENERGY

Table B2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
PART I - INDEX

DOE F1332.10
(11-84)

FORM APPROVED
OMB NO. 1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
209					X		Deactivation Execution-BOP	1.4.10.1.2.5.2.1	(UN21)	EW2010401	2.2.5.2.10	3600
210						X	Facility Compliance	1.4.10.1.2.5.2.1.1	(UN211)	EW2010401	2.2.5.2.10.1	3600
211						X	Facility Compliance-CENRTC	1.4.10.1.2.5.2.1.11	6UN211	EW2010401	2.2.5.2.10.1.1	3600
212						X	Waste Handling-BOP	1.4.10.1.2.5.2.1.2	(UN212)	EW2010401	2.2.5.2.10.2	3600
213						X	Waste Disposal-BOP	1.4.10.1.2.5.2.1.3	(UN213)	EW2010401	2.2.5.2.10.3	3600
214						X	Safeguards and Security	1.4.10.1.2.5.2.1.5	(UN215)	EW2010401	2.2.5.2.10.5	3600
215						X	Building/System Deactivation	1.4.10.1.2.5.2.1.6	(UN216)	EW2010401	2.2.5.2.10.6	3600
216						X	HGP Deactivation	1.4.10.1.2.5.2.1.7	(UN217)	EW2010401	2.2.5.2.10.7	3600
217					X		Deactivation Execution - N Basin	1.4.10.1.2.5.2.2	(UN22)	EW2010402	2.2.5.2.20	3600
218						X	N Basin Cleanup	1.4.10.1.2.5.2.2.1	(UN221)	EW2010402	2.2.5.2.20.1	3600
219						X	Liquid Effluent Response	1.4.10.1.2.5.2.2.2	(UN222)	EW2010402	2.2.5.2.20.2	3600
220				X			Regulatory Response	1.4.10.1.2.5.3	(UN3)	EW201040	2.2.5.3	3600
221					X		Regulatory Response Assessment	1.4.10.1.2.5.3.1	(UN31)	EW2010401	2.2.5.3.10	3600
222						X	Regulatory Response Program Management	1.4.10.1.2.5.3.1.1	(UN311)	EW2010401	2.2.5.3.10.1	3600
223						X	N Facility Compliance Modifications	1.4.10.1.2.5.3.1.2	(UN312)	EW2010401	2.2.5.3.10.2	3600
224						X	N Effluent Sampling and Monitoring	1.4.10.1.2.5.3.1.3	(UN313)	EW2010401	2.2.5.3.10.3	3600
225						X	Environmental Permits	1.4.10.1.2.5.3.1.4	(UN314)	EW2010401	2.2.5.3.10.4	3600
226						X	N Area Operations Environmental Monitoring	1.4.10.1.2.5.3.1.5	(UN315)	EW2010401	2.2.5.3.10.5	3600
227						X	NEPA Documentation Action	1.4.10.1.2.5.3.1.6	(UN316)	EW2010401	2.2.5.3.10.6	3600
228						X	N Reactor Environmental Surveillance	1.4.10.1.2.5.3.1.7	(UN317)	EW2010401	2.2.5.3.10.7	3600
229				X			Surveillance and Maintenance	1.4.10.1.2.5.4	(UN4)	EW201040	2.2.5.4	3600
230					X		Assessment	1.4.10.1.2.5.4.1	(UN41)	EW2010401	2.2.5.4.10	3600
231					X		Remediation	1.4.10.1.2.5.4.2	(UN42)	EW2010402	2.2.5.4.20	3600

**	Surveillence and Maintenance (S) is not a part of the FY 1994 work breakdown structure
♦	P3 - 1100-EM Operable Units and UC - 300 Area D&D are non-FDS work breakdown structures.
ALE	-Arid Lands Ecology (Reserve)
BOP	-balance of plant
CENTRC	-capital equipment not related to construction
CRADA	-Cooperative Research and Development Agreement
D&D	-decontamination and decommissioning
EGW	-200 East Area groundwater
ER	-environmental restoration
ERA	-expedited response actions
ERDF	-environmental restoration disposal facility
ERMC	-environmental restoration management contractor
FDS	-financial data system
JCS	-job control system
GIS	-geographic information system
HASM	-Hanford Analytical Services Management
HGP	-Hanford Generating Plant
HEIS	-Hanford Environmental Information System
HRA-EIS	-Hanford remedial actions- environmental impact statement
IMS	-information management system
ISV	-in situ vitrification
IRM	-interim response measure
LIMS	-laboratory information management system
NEPA	*-National Environmental Policy Act of 1969*
NPL	-national priorities list
NRDWL	-nonradioactive dangerous waste landfill
NW	-northwest
OU	-operable unit-(The initials-PO,BP, CP, TP, UP,ZP,RO,IU, and FF are OU designators).
PNL	-Pacific Northwest Laboratory
Pu Conc	-plutonium concentration
PUREX	-Plutonium-Uranium Extraction Plant
QA	-quality assurance
RA	-remedial actions
RARA	-radiation area remedial action
RCRA	*-Resource Conservation and Recovery Act of 1976*
REDOX	-Reduction Oxidation Plant
RI/FS	-remedial investigation/feasibility study
S&M	-surveillance and maintenance
SST	-single-shell tank
TPA	-Tri-party Agreement (*Hanford Federal Facility Agreement and Consent Order)*
UST	-underground storage tank
WIDS	-waste information data system
WHC	-Westinghouse Hanford Company
WGW	-200 West Area groundwater

U.S. DEPARTMENT OF ENERGY

Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT Hanford Environmental Restoration	2. DATE December 22, 1993	3. IDENTIFICATION NUMBER DE-AC06-87RL10930
4. WBS ELEMENT CODE 2.2.1 (UV)	5. WBS ELEMENT TITLE Asbestos Abatement	
6. INDEX LINE NO. 29	7. REVISION NO. AND AUTHORIZATION Not applicable	8. DATE Not applicable
9. APPROVED CHANGES Not applicable		
10. SYSTEM DESIGN DESCRIPTION	11. BUDGET AND REPORTING NUMBER EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The ER Mission is to transition the Hanford Site into a clean, accessible, and healthy environment that is a part of a prospering and diversified community. In support of the ER Mission, this subproject provides funding for sitewide planning, coordination, and integration of all asbestos abatement activities; and initiation of asbestos abatement activities on those facilities that have been identified and classified as high asbestos exposure risk.

A. Cost Content

Cost content includes the following cost types: M&O labor, equipment, materials, engineering and purchased services, subcontracts, other Hanford Site Contractor support, site services, internal charges, information services, and applicable overheads.

B. Technical Content

Facilities scheduled for asbestos abatement are prioritized based on building occupancy, asbestos condition, and asbestos accessibility.

C. Work Statement

This activity will continue to provide funding for management and coordination of the sitewide asbestos abatement program for FY 1994. The Program identifies all (both EM-40 and non EM-40) asbestos abatement needs and prioritizes the work. Special emphasis will be on asbestos removal and abatement in those facilities that pose the greatest risk from ACM exposure and related health hazards.

Using FY 1994 through FY 1995 as a transition period, funding will be authorized on a case-by-case basis to assist those programs, that are outside of EM-40 in initiating crucial, site planned, prioritized, and scheduled ACM abatement activities. Authorization of EM-40 funds for non-EM-40 abatement activities will require prior approval from the DOE-RL Environmental Restoration Division (ERD).

U.S. DEPARTMENT OF ENERGY

Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.2.1.1.20 (UV12)	Remediation - Asbestos Abatement	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
32	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010402	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of the Program is to serve as the model and focal point for sitewide planning, coordination, and integration of all asbestos abatement activities, with special emphasis on those facilities that pose the greatest ACM exposure and health risk to human health and the environment.

A. Cost Content

Cost content includes the following cost types: M&O labor, equipment, materials, engineering and purchased services, subcontracts, other Hanford Site Contractor support, site services, internal charges, information services, and applicable overheads.

B. Technical Content

Facilities scheduled for asbestos abatement are prioritized based on building occupancy, asbestos condition, and asbestos accessibility.

U.S. DEPARTMENT OF ENERGY

Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT Hanford Environmental Restoration	2. DATE December 22, 1993	3. IDENTIFICATION NUMBER DE-AC06-87RL10930
4. WBS ELEMENT CODE 2.2.1.1.20 (Continued) (UV12)	5. WBS ELEMENT TITLE Remediation - Asbestos Abatement	
6. INDEX LINE NO. 32	7. REVISION NO. AND AUTHORIZATION Not Applicable	8. DATE Not Applicable
9. APPROVED CHANGES Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	11. BUDGET AND REPORTING NUMBER EW2010402	

12. ELEMENT TASK DESCRIPTION

C. Work Statement

As a result of the continuing degradation of old facilities with ACM, the resulting increased potential for exposure, and the recognition that a focal point for sitewide planning, coordination, and integration of all asbestos abatement would enhance control and cost-effectiveness, lead to the decision during the past year to establish a centralized Asbestos Abatement Program.

This activity will continue to provide funding for management and coordination of the sitewide Asbestos Abatement Program for FY 1994. The Program identifies all (both EM-40 and non EM-40) asbestos abatement needs and prioritizes the work. Special emphasis will be on asbestos removal and abatement in those facilities that pose the greatest risk from ACM exposure and related health hazards. In addition to funding the sitewide program management activities, this activity will also continue to fund the necessary resources (staff and material) to perform actual field abatement activities required to minimize potential health hazards for facilities assigned to the EM-40 Program.

To ensure safety, it is the intent of the Program to ensure the non-EM-40 high-priority asbestos abatement work is completed as scheduled by working with the responsible organizations to ensure funding is obtained on a case-by-case basis.

Costs for asbestos abatement workscope performed in facilities that specifically are not assigned to the EM-40 Program will be collected and tracked separately from the EM-40 facility abatement costs.

U.S. DEPARTMENT OF ENERGY

Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11 (11-84)

FORM APPROVED OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.2.2 (UB)	100 Area D&D	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
34	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW201040	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The ER Mission is to transition the Hanford Site into a clean, accessible, and healthy environment that is a part of a prospering and diversified community. In support of the ER Mission, this subproject provides funding for on-going, S&M activities in order to ensure surplus facilities located in the 100 Areas are maintained in a minimum safe shutdown condition until final disposition is accomplished through the D&D Program.

A. Cost Content

Cost content includes the following cost types: M&O labor, equipment, materials, engineering and purchased services, subcontracts, other Hanford Site Contractor support, site services, internal charges, information services and applicable overheads.

B. Technical Content

The 100 Area surplus facilities must be maintained in a safe, environmentally secure mode until scheduled for demolition. Primary emphasis will be to focus on S&M facilities that have undergone the greatest deterioration and pose the greatest health risk to human health and the environment.

C. Work Statement

There are approximately 8 surplus production reactors and over 100 ancillary support facilities/structures located in the 100 Area D&D Program. Two of these facilities are large surplus, reprocessing (canyon) facilities (REDOX and U-Plant). Routine S&M activities shall be performed in accordance with DOE Order 5820.2A, Chapter V with primary S&M focus directed towards those facilities which have undergone the greatest deterioration and pose the greatest health risk to the employee, general public and the environment. This subproject establishes funding for continuation of ongoing S&M, radiological surveys, corrective maintenance, and equipment repairs in order to ensure critical systems are operable and meet minimum requirements established by applicable DOE Orders and Federal regulations. Additionally, this subproject establishes funding for engineering studies/project plan and conceptual design for D&D of the 105-C Reactor.

U.S. DEPARTMENT OF ENERGY

Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11 (11-84)

FORM APPROVED OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.2.2.1.10 (UB11)	Assessment - S&M 100 Areas Common Activities	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
36	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010401	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

In support of the ER Mission, this activity provides funding for on-going S&M activities to ensure surplus facilities located in the 100 Areas are maintained in a minimum safe shutdown condition until final disposition is accomplished through the D&D Program.

A. Cost Content

Cost content includes the following cost types: M&O labor, equipment, materials, engineering and purchased services, subcontracts, other Hanford Site Contractors, site services, internal charges, information services, and applicable overheads.

This activity also authorizes funding (to be administered by the cost account manager) for multi-organizational support in meeting activity milestones.

B. Technical Content

100 Area surplus facilities must be maintained in a safe, environmentally secure mode until the facilities are scheduled for demolition. Primary S&M focus will be to target those facilities that have undergone the greatest deterioration and pose the greatest risk to the human health and the environment.

C. Work Statement

Routine S&M activities, corrective maintenance, and equipment repairs will be performed in accordance with DOE Order 5820.2A, Chapter V, at the 100-B, -C, -D, -DR, -F, -H, -KE, and -KW Areas. In addition to routine S&M, funding to support scheduled tours of the 105-B Reactor Building also is provided. Because all of the surplus facilities located in the 100 Areas pose some level of industrial, hygiene, and in some cases radiological hazards, escorted access training will be provided to all personnel before entering a surplus facility to ensure that potential hazards are known and understood before entry, and that safety precautions are maintained while inside the building.

In FY 1993 a special task team was established and funded to identify, evaluate, and document the overall effect of current hazards in the inactive, surplus facilities and to establish a risk-based analysis and prioritization scheme for dealing with repairs and maintenance. Primary focus in FY 1994 will be to initiate corrective actions above and beyond routine S&M required for those surplus facilities that represent the highest risk to human health and the environment. Because of potential hazards associated with the reactor riverlines, an EE/CA will be funded in FY 1994 under this activity to ascertain whether it is preferred to remove and/or insitu stabilize the reactor riverlines.

U.S. DEPARTMENT OF ENERGY

Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.2.2.1.20 (UB12)	Remediation - 100 Area Common Activities	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
39	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010402	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

In support of the ER Mission, this activity provides funding for continuation of EBASCO Services Incorporated (EBASCO) in FY 1994 under Order No. MLW-SVV-037106 to provide conceptual engineering design services in support of the SPRD-EIS preferred alternative for reactor disposal.

A. Cost Content

Cost content includes the following cost types: M&O labor, equipment, materials, engineering and purchased services, subcontracts, other Hanford Site Contractors, site services, internal charges, information services and applicable overheads.

B. Technical Content

The decommissioning alternative selected by the EIS-ROD for D&D of eight surplus production reactors (105-B, 105-C, 105-D, 105-DR, 105-F, 105-H, 105-KE, and 105-KW) involves transporting each reactor block, intact, on a transport vehicle, from its present location in the 100-Areas to an area in the 200 Areas for disposal. Fundamental technical criteria and detailed design will address performance capabilities and margins, diversity, reliability, and safety in accordance with DOE regulations, industrial codes and standards, and applicable federal/state/local regulations.

C. Work Statement

Conceptual engineering documentation will be prepared in accordance with DOE Order 4700.1a for safe, one-piece, reactor core removal and transport from the 100 Areas to the 200 Areas Plateau for disposal. Conceptual engineering will address structural analysis, reactor block packaging, and haul route requirements. Funding for oversight also is included.

U.S. DEPARTMENT OF ENERGY

Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.2.2.2.20 (UB22)	100-BC-1 Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
50	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010402	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

In support of the ER Mission, this activity provides funding for final demolition (Phases II and III) of the 185-/190-B facilities and issuance of the final project closeout report to the U.S. Department of Energy, Richland Operations Office compliant to the AIP.

A. Cost Content

Cost content includes the following cost types: M&O labor, equipment, materials, engineering and purchased services, subcontracts, other Hanford Site Contractors, site services, internal charges, information services and applicable overheads.

B. Technical Content

This activity supports the accelerated D&D schedule strategy (target schedule) compliant to the AIP, dated March 31, 1993. It has been determined that the 185/190-B Complex (structures and equipment) has no future long-term use under the current ER Mission and, as such, has been identified for accelerated D&D under the AIP.

C. Work Statement

Funding has been identified in FY 1994 for completing the demolition of the 190-B/185-B Pump House Project. The 190-B/185-B Project has been set up in two phases. During Phase II, the high bay structural steel will be leveled by a subcontractor using explosives. Phase II will be followed by Phase III wherein plant work forces will process the rubble by reducing it into useable sizes, sorting, and stockpiling the rubble for salvage and/or future use. Every effort will be made to recycle noncontaminated scrap material.

U.S. DEPARTMENT OF ENERGY

Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.2.2.4.20 (UB42)	100-DR-1 Remediation	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
64	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010402	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

In support of the ER Mission, this activity provides funding for D&D of the 185/189/190-D Complex.

A. Cost Content

Cost content includes the following cost types: M&O labor, equipment, materials, engineering and purchased services, subcontracts, other Hanford Site Contractors, site services, internal charges, information services, and applicable overheads.

B. Technical Content

This activity supports the accelerated D&D schedule strategy (target schedule) compliant to the AIP, dated March 31, 1993. It has been determined that the 185/189/190-D Complex (structures and equipment), D-Island vent lines, and the reactor riverlines have no future long-term use under the current ER Mission and, as such, have been identified for accelerated D&D under the AIP.

C. Work Statement

Using similar strategy established for the 185-/190-B Complex demolition effort, phased-approach will be implemented for safe, efficient, cost effective demolition of the 185/189/190-D Complex. Lessons-learned will be applied, where practical. Every effort will be made to recycle noncontaminated scrap material.

Funding has been identified for vent pipe removal, surface decontamination and radiological survey of D-Island.

U.S. DEPARTMENT OF ENERGY

Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.2.3 (UE)	200 Areas D&D	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
99	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW201040	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The ER Mission is to transition the Hanford Site into a clean, accessible, and healthy environment that is a part of a prospering and diversified community. In support of the ER Mission, this subproject provides funding for on-going, S&M activities to ensure surplus facilities located in the 200 Areas are maintained in a minimum safe shutdown condition until final disposition is accomplished through the D&D Program.

A. Cost Content

Cost content includes the following cost types: M&O labor, equipment, materials, engineering and purchased services, subcontracts, other Hanford Site Contractor support, site services, internal charges, information services and applicable overheads. No funding has been identified in FY 1994 for either the water or the steam assessment.

B. Technical Content

The 200 Areas surplus facilities must be maintained in a safe, environmentally secure mode until scheduled for demolition. Primary emphasis will be to focus on S&M facilities that have undergone the greatest deterioration and pose the greatest risk to human health and the environment.

U.S. DEPARTMENT OF ENERGY

Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.2.3 (Continued) (UE)	200 Areas D&D	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
99	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW201040	

12. ELEMENT TASK DESCRIPTION

C. Work Statement

There are approximately 23 surplus facilities located in the 200 Area D&D Program. Routine S&M activities will be performed in accordance with DOE Order 5820.2A, Chapter V with primary S&M focus directed towards those facilities that have undergone the greatest deterioration and pose the greatest risk to human health and the environment. This subproject establishes funding for continuation of ongoing S&M, radiological surveys, corrective maintenance, and equipment repairs to ensure critical systems are operable and meet minimum requirements established by applicable DOE Orders and federal regulations.

In addition to routine S&M, funding has been identified for initiation and completion of NEPA issues, definitive design requirements, and actual equipment cleanout of the 233-S Facility. Along with 233-S Facility, funding also has been identified for development and implementation of new PFP procedures, plans, and personnel training required to support on-going S&M of the 232-Z Waste Incineration Facility.

Because all of the surplus facilities located in the 200 Areas pose some level of industrial, hygiene, and radiological hazards, escorted access training will be provided to all personnel before entering the facility to ensure that potential hazards associated with the inactive facility are known and understood before entry, and that safety precautions are maintained while inside the building.

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Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
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FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.2.3.1.10 (UE11)	Assessment - 200 Areas Common Activities	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
101	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010401	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

In support of the ER Mission, this activity provides funding for on-going, S&M activities to ensure surplus facilities located in the 200 Areas are maintained in a minimum safe shutdown condition until final disposition is accomplished through the D&D Program.

A. Cost Content

Cost content includes the following cost types: M&O labor, equipment, materials, engineering and purchased services, subcontracts, other Hanford Site Contractor support, site services, internal charges, information services and applicable overheads. No funding has been identified in FY 1994 for water or steam assessments.

This activity also authorizes funding (to be administered by the cost account manager) for multi-organizational support, in meeting the designated activity milestones.

B. Technical Content

The 200 Areas surplus facilities must be maintained in a safe, environmentally secure mode until scheduled for demolition. Primary emphasis will be to focus on those S&M facilities that have undergone the greatest deterioration and pose the greatest risk to human health and the environment.

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Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.2.3.1.10 (Continued) (UE11)	Assessment - 200 Areas Common Activities	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
101	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010401	

12. ELEMENT TASK DESCRIPTION

C. Work Statement

There are a total of 23 surplus facilities located in the 200 Areas D&D Program. Two of these facilities are large reprocessing, canyon facilities (REDOX and U Plant). Funding has been identified for on-going S&M in accordance with DOE Order 5820.2A, Chapter V with primary S&M focus directed towards those facilities that have undergone the greatest deterioration and pose the greatest risk to human health and the environment. Additionally, this activity establishes funding for continuation of radiological surveys, corrective maintenance, and equipment repairs to ensure critical systems are operable and meet minimum requirements established by applicable DOE Orders and federal regulations.

Because all of the surplus facilities located in the 200 Areas pose some level of industrial, hygiene, and radiological hazards, escorted access training will be provided to all personnel before entering the facility to ensure that potential hazards associated with the inactive facility are known and understood before entry, and that safety precautions are maintained while inside the building.

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Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.2.3.10.10 (UEA1)	Assessment - 233-S Plutonium Concentration Facility	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
164	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010401	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

In support of the ER Mission, this activity provides funding for engineering, NEPA documentation, in preparation of safe decommissioning the 233-S Plutonium Concentration Facility.

A. Cost Content

Cost content includes the following cost types: M&O labor, equipment, materials, engineering and purchased services, subcontracts, other Hanford Site Contractor support, site services, internal charges, information services, and applicable overheads.

B. Technical Content

Past engineering studies assumed that a confinement building constructed over the entire 233-S Plutonium Concentration Facility would be required during the actual decommissioning. Recent safety analyses, however, have shown that such a confinement structure would not significantly reduce the risks to human health and the environment.

No funding has been identified under this activity for either the development or demonstration of new technologies. Workscope funded under this cost account is constrained to using only conventional, demonstrated, proven technologies. However, newly developed technologies may be considered for demonstration (on a case-by-case basis) during the course of this project provided there have been approved through formal change control, do not adversely impact the costs and schedule, and are approved by both D&D Engineering and Safety before initiation of the actual demonstration.

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Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
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FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.2.3.10.10 (Continued) (UEA1)	Assessment - 233-S Plutonium Concentration Facility	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
164	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010401	

12. ELEMENT TASK DESCRIPTION

C. Work Statement

Funding has been identified in FY 1994 to support a two-phased approach for D&D of the 233-S Facility. Phase I will address equipment and plutonium inventory removal, reducing hazards to the D&D worker by removing significant quantities of fissile contamination and by stabilizing residual contamination. Phase II will assess residual plutonium and final structure disposition and demolition.

Additionally, funding also is included for initiating D&D of the 233-SA Filter Building, the 296-S-7 Exhaust Stacks, the pipe trench connecting the 233-S Plutonium Concentration Facility with the 202-S REDOX Building, and the abandon underground filter housing located between the 233-S and the 202-S facilities.

On-going S&M is funded under a separate cost account and will continue until such time as the 233-S Plutonium Concentration Facility is scheduled for final disposition through the D&D Program. Primary focus of the S&M program will be to ensure that surplus facilities like the 233-S (extreme aging, deterioration, and high-health risk), are maintained in a minimum, safe shutdown condition until final disposition is achieved.

Because all of the surplus facilities located in the 200 Areas pose some level of industrial, hygiene, and radiological hazards, escorted access training will be provided to all personnel before entering the facility to ensure that potential hazards associated with the inactive facility are known and understood before entry, and that safety precautions are maintained while inside the building.

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Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11 (11-84)

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.2.3.15.10 (UEF1)	Assessment - 232-Z Waste Incineration Facility	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
191	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010401	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

In support of the ER Mission, this activity provides funding for completion of NEPA documentation and initiation of conceptual engineering for decommissioning the 232-Z Waste Incineration Facility.

A. Cost Content

Cost content includes the following cost types: M&O labor, equipment, materials, engineering and purchased services, subcontracts, other Hanford Site Contractor support, site services, internal charges, information services and applicable overheads.

B. Technical Content

Like the 233-S Plutonium Concentration Facility, no funding has been identified under this activity for either the development or demonstration of new technologies except for those that have been identified during the course of the project and have been approved by D&D Engineering and Safety.

C. Work Statement

Using similar strategy established for the 233-S Plutonium Concentration Facility D&D effort, a phased-approach will be implemented for safe, efficient, cost effective demolition of the 232-Z Waste Incineration Facility. Lessons learned will be applied where practical.

Because all of the surplus facilities located in the 200 Areas pose some level of industrial, hygiene, and radiological hazards, escorted access training will be provided to all personnel before entering the facility before to ensure that potential hazards associated with the inactive facility are known and understood before entry, and that safety precautions are maintained while inside the building.

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Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
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FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.2.5 (UN)	N REACTOR	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
203	N/A	N/A
9. APPROVED CHANGES		
N/A		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW201040 , EW201020	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this effort is to maintain compliance at N Reactor Facilities awaiting funding to pursue ER RAs in preparation for D&D.

A. Cost Content

Cost content includes some or all of the following cost types: M&O labor, overhead, G&A/CSP, materials, equipment, utilities, engineering services, and subcontractor support (KEH, PNL, HEHF).

B. Technical Content

The N Reactor (UN) subproject includes the following workscope: program management, deactivation planning and execution, and regulatory response requirements.

C. Work Statement

The following actions will be performed:

- Provide program management including program management and budget, cost, and schedule control
- Provide required maintenance and operations activities to ensure environmental and personnel safety and/or compliance with federal state laws and regulations
- Characterize, package, and implement the removal of hazardous, radiological, and mixed waste from N Reactor facilities
- Dispose of N Reactor wastes
- Coordinate, document, and implement an orderly disposition of N Reactor excess equipment inventories and facilities
- Provide detailed technical planning, craft support, scheduling, and engineering for N Reactor deactivation execution efforts
- Plan and prepare for implementation of N Basin cleanup activities; including hardware removal, draining of basin water, cleaning and stabilizing basin surfaces, and disposing of contaminated sediment materials from within the N basin and associated systems
- Respond to regulatory requirements including specific environmental regulatory drivers and permits
- Characterize and decontaminate required generating plant facilities as directed by the DOE-RL.

U.S. DEPARTMENT OF ENERGY

Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
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FORM APPROVED
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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.2.5.1.10 (UN11)	PROGRAM MANAGEMENT AND INTEGRATION	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
205		
9. APPROVED CHANGES		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010401	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

To provide program management to the N Reactor program, including deactivation/compliance program management, budget, cost, and schedule control.

A. Cost Content:

Cost content includes some or all of the following cost types: M&O labor, overhead, G&A/CSP, materials, equipment, utilities, engineering services, and subcontractor support (PNL, KEH, HEHF).

B. Technical Content:

The N Reactor Program Management and Integration includes the following workscope: program planning and management and business management.

C. Work Statement:

The N Reactor Program Management and Integration activities include budget and cost/schedule control support, program planning, funds control, and program reporting. Also included is preparation of the FYWP, the multi-year work plan, other site management system reports, and activity data sheets for the 5-year plan.

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Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.2.5.2.10 (UN21)	DEACTIVATION EXECUTION - BALANCE OF PLANT	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
209	N/A	N/A
9. APPROVED CHANGES		
N/A		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010401	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

To provide the required support for deactivation of N Reactor facilities, other than the fuel storage basin, as described in the N Reactor Deactivation Plan (Rev. 4). This work includes facilities at 100N, 100C, 100D, and 100DR, as well as cleanup of contamination at HGP. Also required is the support to maintain the facilities in an environmental and radiological safe state until such time that the facilities can be place on the schedule for final decommissicning.

A. Cost Content:

Cost content includes some or all of the following cost types: M&O labor, overhead, G&A/CSP, materials, equipment, utilities, engineering services, and subcontractor support (PNL, KEH, HEHF).

B. Technical Content:

Deactivation Execution - BOP includes the following workscope: facility compliance, waste handling and disposal, patrol assessments, safeguards and security, building/system deactivation, and HGP deactivation.

C. Work Statement:

The N Reactor Deactivation Plan (Rev. 4) defines the scope, schedule, and budgetary requirements to deactivate the facilities, cleanup hazardous and radioactive wastes, dispose of government assets, and otherwise place the facilities in an environmentally safe state such that the facilities can be placed on the schedule for final decommissioning. An emphasis also will be placed on maintaining the facilities in an environmentally safe state in accordance with applicable regulations. This activity provides for required engineering, maintenance, and operations personnel to maintain safety or support systems in accordance with technical specifications and operating standards. Also included are required utility charges including electrical charges, electrical system maintenance, and fire system maintenance. Cleanup activities at HGP will be completed as continued evaluations dictate and funding permits.

U.S. DEPARTMENT OF ENERGY

Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.2.5.2.20 (UN22)	DEACTIVATION EXECUTION - N BASIN	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
217	N/A	N/A
9. APPROVED CHANGES		
N/A		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010402	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

To provide the required support for planning and implementation of the cleanup of the N Basin and related facilities as described in the N Reactor Deactivation Program Plan (Rev. 4).

A. Cost Content:

Cost content includes some or all of the following cost types: M&O labor, overhead, G&A/CSP, materials, equipment, utilities, engineering services, and subcontractor support (PNL, KEH, HEHF).

B. Technical Content:

The N Basin Deactivation Execution includes the following workscope: N Basin cleanup and effluent response actions.

C. Work Statement:

The N Basin Deactivation Execution activities include continued planning and initiation of the cleanup of the N Basin and supporting systems. Also included is effluent response actions that entail the restoration and maintenance of the N Basin water clarity, along with initiating the methodology for treatment and ultimate disposal of N Basin effluents.

U.S. DEPARTMENT OF ENERGY

Table B2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.2.5.3.10 (UN31)	REGULATORY RESPONSE - ASSESSMENT ACTIVITIES	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
221	N/A	N/A
9. APPROVED CHANGES		
N/A		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010401	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

To perform those activities required to comply with state and federal environmental regulations.

A. Cost Content

Cost content includes some or all of the following cost types: M&O labor, overhead, G&A/CSP, materials, equipment, utilities, engineering services, and subcontractor support (PNL, KEH, HEHF).

B. Technical Content:

Regulatory response activities include the following workscope: Program management, facility compliance modifications, effluent sampling and monitoring, environmental permitting, N operations environmental monitoring, NEPA documentation, and N Area environmental surveillance.

C. Work Statement:

Regulatory Response provides for the performance of those activities required to comply with federal and state environmental regulations. These activities include required environmental monitoring and surveillance, obtaining air and water effluent permits from Ecology, performing facility effluent monitoring, sampling and analysis, facility compliance modification upgrades to the air and water monitoring systems as described in the Facility Effluent Monitoring Plan and completing the environmental assessment for the shoreline dose reduction.

Table B2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 FISCAL YEAR WORK PLAN RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE							
PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
DECONTAMINATION AND DECOMMISSIONING 2.2 [1U]							
2.2.1 UV				ASBESTOS ABATEMENT	MIX, PD	DRCP	HARRIS. AC
	2.2.1.1 UV1			ASBESTOS ABATEMENT COMMON ACTIVITIES	MIX, PD	DRCP	HARRIS, AC
		2.2.1.1.20 UV12		REMEDIATION	MIX, PD	DRCP	HARRIS, AC
			2.2.1.1.20.1 UV121	ASBESTOS ABATEMENT	MORTON, MR	DS	HARRIS, AC
2.2.2 UB				100 AREAS D&D	MIX. PD	DRCP	HARRIS, AC
	2.2.2.1 UB1			100 AREAS COMMON ACTIVITIES	MIX, PD	DRCP	HARRIS, AC
		2.2.2.1.10 UB11		ASSESSMENT	MIX, PD	DRCP	HARRIS, AC
			2.2.2.1.10.1 UB111	S&M 100 AREAS COMMON ACTIVITIES	HUGHES, MC	IFSM	HARRIS, AC
			2.2.2.1.10.2 UB112	100/200 AREAS RISK ASSESSMENT UPGRADES	MORTON, MR	DS	HARRIS, AC
		2.2.2.1.20 UB12		REMEDIATION	MIX, PD	DRCP	HARRIS, AC
			2.2.2.1.20.2 UB122	REACTOR ENGINEERING	MIHALIC, MA	DE	HARRIS, AC
	2.2.2.2 UB2			D&D 100-BC-1	MIX, PD	DRCP	HARRIS, AC
		2.2.2.2.20 UB22		REMEDIATION	MIX, PD	DRCP	HARRIS, AC
			2.2.2.2.20.2 UB222	185/190-B ANCILLARY FACILITIES	KACHELE, DG	HFO	HARRIS, AC
	2.2.2.4 UB4			D&D 100-DR-1	MIX, PD	DRCP	HARRIS, AC
		2.2.2.4.20 UB42		REMEDIATION	MIX, PD	DRCP	HARRIS, AC
			2.2.2.4.20.2 UB422	185/189/190-D ANCILLARY FACILITIES	KACHELE, DG	HFO	HARRIS, AC
2.2.3 UE				200 AREAS D&D	MIX, PD	DRCP	HARRIS, AC

Table B2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 FISCAL YEAR WORK PLAN
RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE

PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
	2.2.3.1 UE1			200 AREAS COMMON ACTIVITIES	MIX, PD	DRCP	HARRIS, AC
		2.2.3.1.10 UE11		ASSESSMENT	MIX, PD	DRCP	HARRIS, AC
			2.2.3.1.10.1 UE111	S&M 200 AREAS COMMON ACTIVITIES	HUGHES, MC	IFSM	HARRIS, AC
	2.2.3.10 UEA			D&D 200-RO-3	MIX, PD	DRCP	HARRIS, AC
		2.2.3.10.10 UEA1		ASSESSMENT	MIX, PD	DRCP	HARRIS, AC
			2.2.3.10.10.2 UEA12	233-S PU CONCENTRAION FACILITY	MIHALIC, MA	DE	HARRIS, AC
	2.2.3.15 UEF			D&D 200-ZP-1	MIX, PD	DRCP	HARRIS, AC
		2.2.3.15.10 UEF1		ASSESSMENT	MIX, PD	DRCP	HARIS, AC
			2.2.3.15.10.2 UEF12	232-Z INCINERATOR	MIHALIC, MA	DE	HARRIS, AC
2.2.5 UN				N REACTOR	GIMERA, RJ	NR	TRUMBLE, HR
	2.2.5.1 UN1			PROGRAM MANAGEMENT AND INTEGRATION	KRAEMER, KJ	NR	TRUMBLE, HR
		2.2.5.1.10 UN11		PROGRAM MANAGEMENT AND INTEGRATION	KRAEMER, KJ	NR	TRUMBLE, HR
			2.2.5.1.10.1 UN111	PROGRAM MANAGEMENT	WALSH, JL	NR	TRUMBLE, HR
			2.2.5.1.10.2 UN112	BUSINESS MANAGEMENT	KRAMER, KJ	NR	TRUMBLE, HR
	2.2.5.2 UN2			DEACTIVATION PLANNING AND EXECUTION	EIDE, DW	NR	TRUMBLE, HR
		2.2.5.2.10 UN21		DEACTIVATION PLANNING - BALANCE OF PLANT	EIDE, DW	NR	TRUMBLE, HR
			2.2.5.2.10.1 UN211	FACILITY COMPLIANCE	EIDE, DW	NR	TRUMBLE, HR
			2.2.5.2.10.2 UN212	WASTE HANDLING - BALANCE OF PLANT	LUCAS, CD	NR	TRUMBLE, HR
			2.2.5.2.10.3 UN213	WASTE DISPOSAL - BALANCE OF PLANT	LUCAS, CD	NR	TRUMBLE, HR

Table B2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 FISCAL YEAR WORK PLAN
RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE

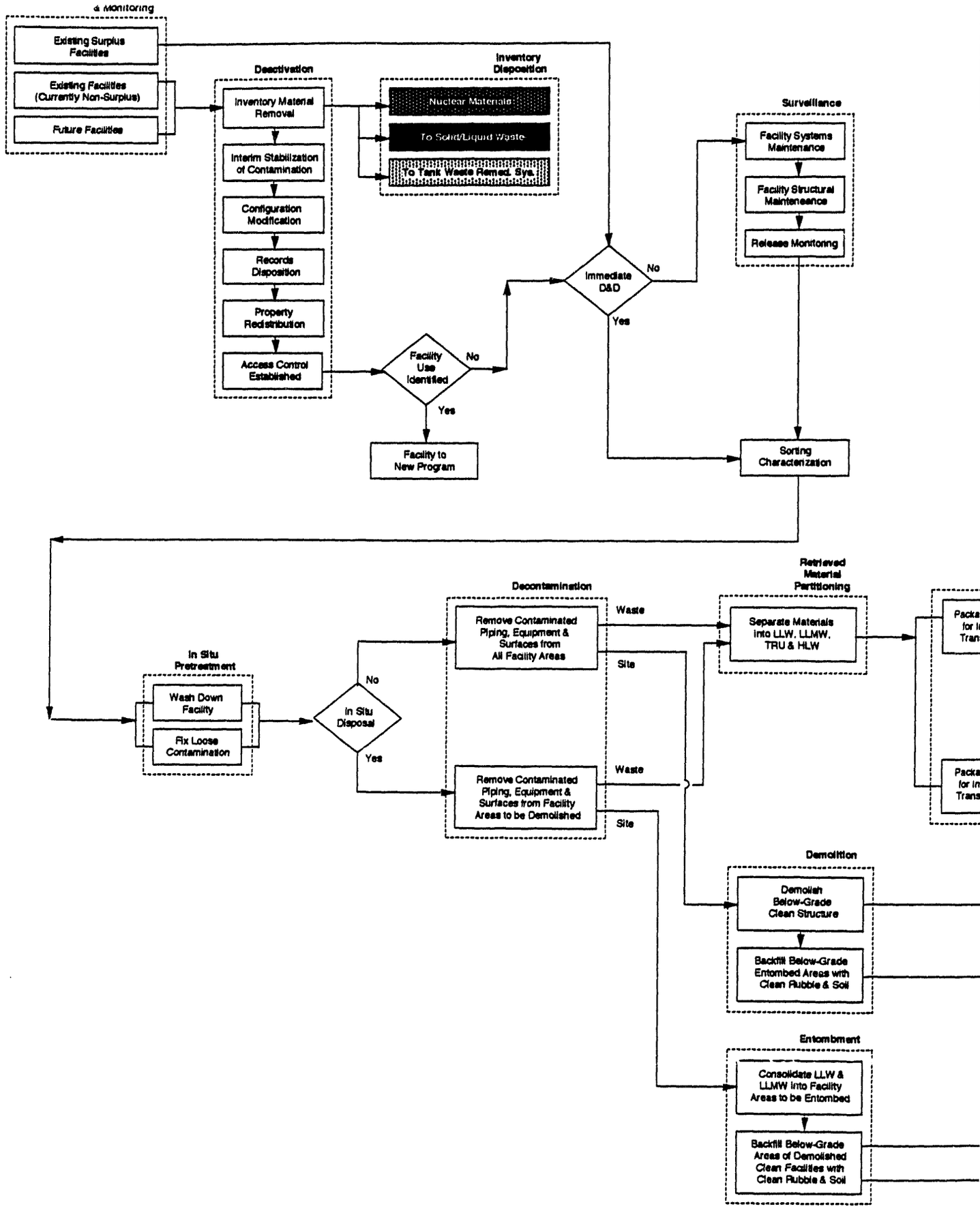
PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
			2.2.5.2.10.5 UN215	SAFEGUARDS AND SECURITY	STRANKMAN, FO	SAS	TRUMBLE, HR
			2.2.5.2.10.6 UN216	BUILDING/SYSTEM DEACTIVATION	EIDE, DW	NR	TRUMBLE, HR
			2.2.5.2.10.7 UN217	HGP DEACTVATION	EIDE, DW	NR	TRUMBLE, HR
		2.2.5.2.20 UN22		DEACTIVATION EXECUTION - N BASIN	SCHILPEROORT, DL	OMI	TRUMBLE, HR
			2.2.5.2.20.1 UN221	N BASIN CLEANUP	SCHILPEROORT, DL	OMI	TRUMBLE, HR
			2.2.5.20.2 UN222	LIQUID EFFLUENT RESPONSE	MORTON, MR	RR	TRUMBLE, HR
	2.2.5.3 UN3			REGULATORY RESPONSE	MORTON, MR	RR	TRUMBLE, HR
		2.2.5.3.10 UN31		REGULATORY RESPONSE ASSESSMENT	MORTON, MR	RR	TRUMBLE, HR
			2.2.5.3.10.1 UN311	REGULATORY RESPONSE PROGRAM MANAGEMENT	MORTON, MR	RR	TRUMBLE, HR
			2.2.5.3.10.2 UN312	N FACILITY COMPLIANCE MODIFICATIONS	WATSON, DJ	NR	TRUMBLE, HR
			2.2.5.3.10.3 UN313	N EFFLUENT SAMPLING AND MONITORING	LUCAS, CD	NR	TRUMBLE, HR
			2.2.5.3.10.4 UN314	ENVIRONMENTAL PERMITS	CONENBERG, ET	NR	TRUMBLE, HR
			2.2.5.3.10.5 UN315	N AREA OPERATIONS ENVIRONMENTAL MONITORING	DORIAN, JJ	SAS	TRUMBLE, HR
			2.2.5.3.10.6 UN316	NEPA DOCUMENTATION ACTION	ENGLEMANN, RH	RR	TRUMBLE, HR
			2.2.5.3.10.7 UN317	N REACTOR ENVIRONMENTAL SURVEILLANCE	GANO, KA	RR	TRUMBLE, HR

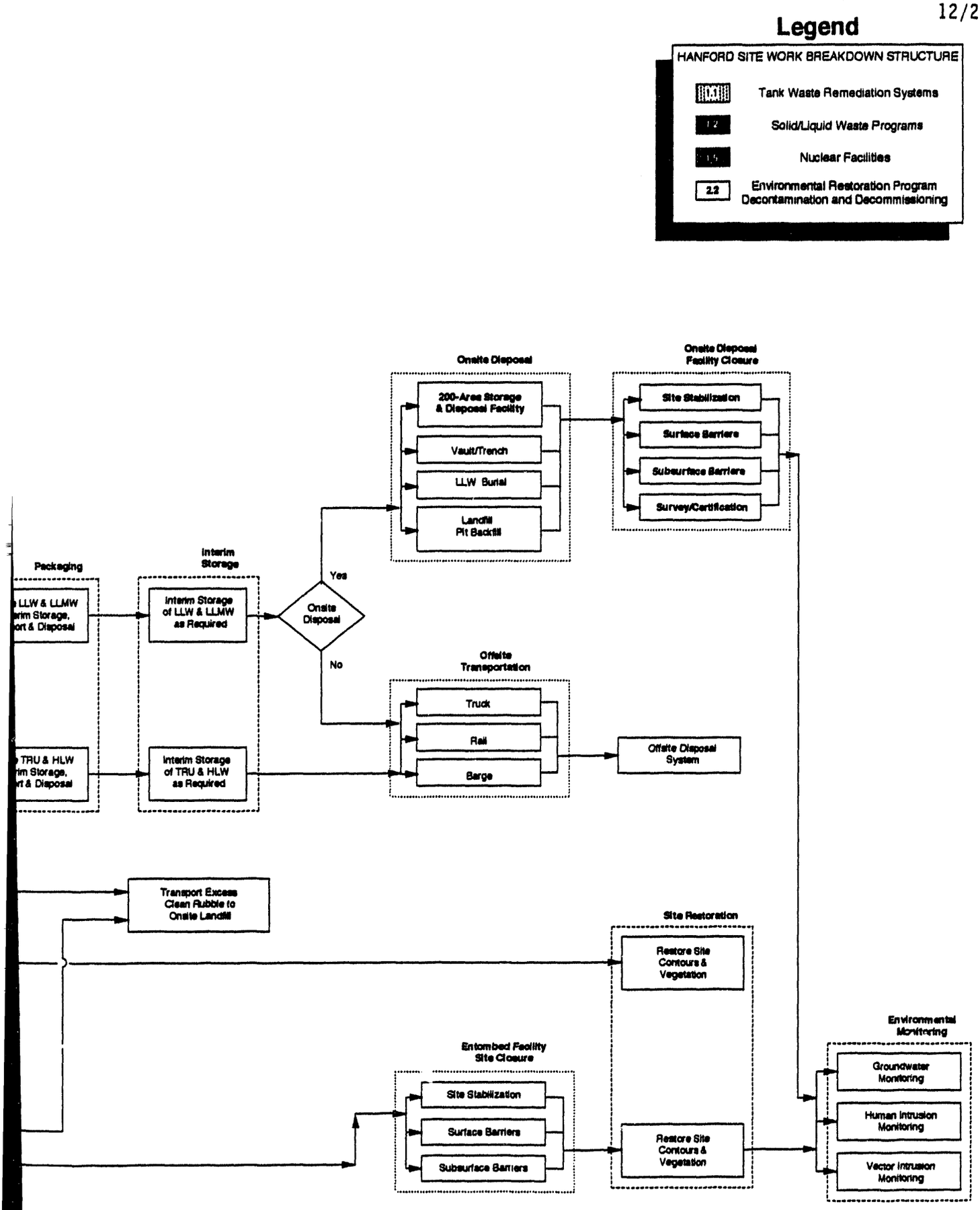
WESTINGHOUSE HANFORD RESPONSIBLE ORGANIZATION

DRCP DECOMMISSIONING AND RCRA CLOSURE PROGRAM
IPSM INAVTIVE FACILITIES SURVEILLANCE/MAINTENANCE
PNL PACIFIC NORTHWEST LABORATORY
NR N REACTOR OPERATIONS

ABBREVIATIONS

BOP BALANCE OF PLANT
D&D DECONTAMINATION & DECOMMISSIONUNG
HGP HANFORD GENERATING PLANT
CENRTC CAPITAL EQUIPMENT NOT RELATD TO CONSTRUCTION
NEPA NATIONAL ENVIRONMENTAL POLICY ACT OF 1969
S&M SURVEILLANCE & MAINTENANCE


& Monitoring
Existing Surplus Facilities
Existing Facilities (Currently Non-Surplus)
Future Facilities
Deactivation
Inventory Material Removal
Interim Stabilization of Contamination
Configuration Modification
Records Disposition
Property Redistribution
Access Control Established
Inventory Disposition
Nuclear Materials
To Solid/Liquid Waste
To Tank Waste Remed. Sys.
Facility Use Identified
No
Yes
Facility to New Program
Immediate D&D
No
Yes
Surveillance
Facility Systems Maintenance
Facility Structural Maintenance
Release Monitoring
Sorting Characterization
In Situ Pretreatment
Wash Down Facility
Fix Loose Contamination
In Situ Disposal
No
Yes
Decontamination
Remove Contaminated Piping, Equipment & Surfaces from All Facility Areas
Remove Contaminated Piping, Equipment & Surfaces from Facility Areas to be Demolished
Waste
Site
Waste
Site
Retrieved Material Partitioning
Separate Materials into LLW, LLMW, TRU & HLW
Demolition
Demolish Below-Grade Clean Structure
Backfill Below-Grade Entombed Areas with Clean Rubble & Soil
Entombment
Consolidate LLW & LLMW into Facility Areas to be Entombed
Backfill Below-Grade Areas of Demolished Clean Facilities with Clean Rubble & Soil



Logic Diagram B2-1. Surplus Facilities Disposition Logic Diagram.

B3.0 PROGRAM SCHEDULE BASELINE

The D&D Program element schedule is depicted in Figure B3-1. The schedule depicts key activities supporting DOE-HQ, DOE-RL, and Tri-Party Agreement milestones.

B3.1 MILESTONE CONTROL LOG

Table B3-1 (APP B, Section B3.2) is the MCL. The MCL lists the D&D specific DOE-HQ, DOE-RL, and Tri-Party Agreement milestones for FY 1994.

B3.2 MILESTONE DESCRIPTION SHEETS

The MDSs are included in Table B3-2 (APP B, Section B3.3).

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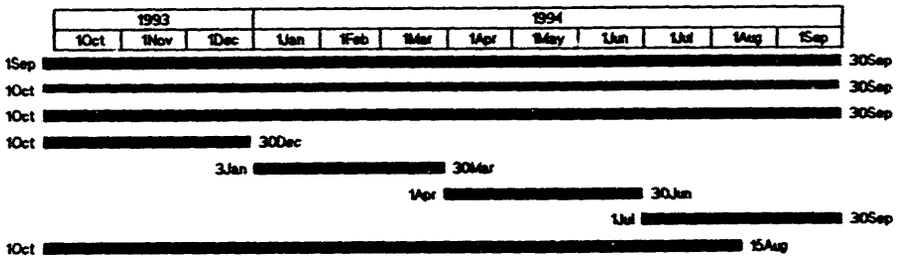
ASBESTOS ABATEMENT

1UV121	ASBESTOS ABATEMENT		
1UV121E1.001	PERFORM ASB. ABATEMENT WORK IN ACCORDANCE AAP	*R	1Sep – 30Sep
1UV121E1.010	REPORT ASBESTOS CONDITIONS WITHIN EACH FACILITY	*R	1Oct – 30Sep
1UV121E1.020.01	PROVIDE WORK PERFORMANCE REPORT AGAINST AAP	*K	1Oct – 30Sep
1UV121E1.020.02	PROVIDE WORK PERFORMANCE REPORT AGAINST AAP	*K	1Oct – 30Dec
1UV121E1.020.03	PROVIDE WORK PERFORMANCE REPORT AGAINST AAP	*K	3Jan – 30Mar
1UV121E1.020.04	PROVIDE WORK PERFORMANCE REPORT AGAINST AAP	*K	1Apr – 30Jun
1UV121E1.030	UPDATE THE AAP FOR FY95 AND SUBMIT TO RL	*K	1Jul – 30Sep
			1Oct – 15Aug



LEGEND:

- TRI-PARTY AGREEMENT MILESTONE -T
- DOE-RL MAJOR MILESTONE - K
- DOE-HQ MAJOR MILESTONE - H
- KEY MILESTONE - R

Project: ASBESTOS ABATEMENT	Date: 6Dec93 9:21
ASBESTOS ABATEMENT	
Page: 1	Scheduled by ER Program Control - Scheduling

Figure B3-1. Decontamination and Decommissioning Schedule. (sheet 1 of 3)

100 AREA D&D

1UB111	**100 AREA SURVEILLANCE AND MAINTENANCE**		
1UB111A1.001	ISSUE FINAL 100 AREA S&M REPORT FOR FY93	*M	19Aug – 30Sep
1UB111A1.010	ISSUE DRAFT S&M REPORT FOR FY94	*R	10Oct – 30Dec
1UB111A1.020.10	PERFORM SEMI-ANNUAL SURVEILLANCES OF THE 105'S	*R	10Oct – 30Sep
1UB111A1.020.11	PERFORM SEMI-ANNUAL SURVEILLANCES OF THE 105'S	*R	10Oct – 29Oct
1UB112	**100/200 AREAS RISK ASSESSMENT**		1Apr – 30Apr
1UB112A2.001	ISSUE PLAN TO IMPLEMENT PRIORITIZED CORR. ACTION	*K	16Jul – 31Oct
1UB112A2.010	COMPLETE FY94 CORRECTIVE ACTION PLAN	*R	10Oct – 30Dec
1UB112A2.010.01	105-DR ELECTRICAL UPGRADE	*R	10Oct – 30Sep
1UB112A2.010.30	COMPLETE 105-F TRANSFER BAY ROOF		14Sep – 28Feb
1UB112A2.010.40	COMPLETE 105-F BASIN ROOF		21Sep – 30Dec
1UB112A2.010.50	COMPLETE 105-D ELECTRICAL UPGRADE		1Nov – 31 May
1UB112A2.010.60	COMPLETE 105-H FRONT FACE ROOF REPAIR		3May – 30Dec
1UB112B2	200 AREA RISK ASSESSMENT		23Aug – 1Dec
1UB112B2.001	ISSUE A PLAN TO PRIORITIZE CORRECTIVE ACTIONS	*K	10Oct – 30Sep
1UB112B2.010	COMPLETE FY94 CORRECTIVE ACTION PLAN	*R	10Oct – 30Dec
			10Oct – 30Sep
1UB112B2.010.10	271-U BREAKER UPGRADE		1Nov – 30Dec
1UB112B2.010.20	202-S GROUT FLOOR DRAINS		1Dec – 30Dec
1UB112B2.010.30	ROOF REPAIR 202-S, 221-U (KEH)		1Nov – 30Dec
1UB115	**EFFLUENT PIPELINE EXPEDITED RESPONSE ACTION**		10Oct – 30Sep
1UB115A1.001	INITIATE ENG. EVAL./COST ANALYSIS PIPE REMOVAL	*K	10Oct – 3Jan
1UB115A1.010	M-16-80, SUBMIT ENG. EVALUATION/COST ANALYSIS	*T	10Oct – 30Sep
1UB122	**REACTOR ENGINEERING**		10Oct – 31Oct
1UB122A3.001	COMPLETE BLOCK STRUCTURAL ANALYSIS PRECONCEPTUAL	*R	10Oct – 31Jan
1UB122A3.010	COMPLETE BLOCK PACKAGING STUDY (PRECONCEPTUAL)	*R	10Oct – 31Mar
1UB122A3.020	COMPLETE HAUL ROUTE DESIGN (PRECONCEPTUAL)	*R	10Oct – 31Mar
1UB122A3.030	SUBMIT CONSOL. SCHED. COST EST. (PRECONCEPTUAL)	*R	10Oct – 30Sep
1UB122A3.040	INITIATE CONCEPTUAL DESIGN (C REATOR)	*K	◆ 31Jan
1UB122A3.050	COMPLETE CONCEPTUAL DESIGN (C REACTOR)	*K	31Jan – 30Sep
1UB122A3.060	COMPLETE SAFETY DOCUMENTATION PROGRAM PLAN	*K	3Jan – 30Sep
1UB222	**185/190-B ANCILLARY FACILITIES**		1Jun – 30Sep
1UB222D1.001	COMPLETE DEMOLITION 185/190-B FACILITY	*M	14Sep – 28Jan
1UB222D1.010	ISSUE FINAL PROJECT CLOSEOUT REPORT TO RL	*K	1Jul – 30Sep
1UB222D1.020	PREPARE AND ISSUE A COST/BENEFIT ANALYSIS	*R	1Jul – 30Aug
1UB222D1.030	COMPLETE MATERIAL PROCESSING	*M	1Mar – 30Jun
1UB422	**185/189/190-D ANCILLARY**		10Oct – 30Sep
1UB422D1.001.00	PREPARE & ISSUE WORK PLAN FOR 185/189/190-D/190-DA & 195-D	*R	10Oct – 30Nov
1UB422D1.010	COMPLETE DEMOLITION OF OF THE 185/189/190-D/190-DA/195-D	*M	1Feb – 30Sep
1UB422D1.020	M-16-80 100-D PIPE REMOVAL, SURFACE DECON, & RAD	*T	10Oct – 30Dec
1UB422D1.020.01	COMPLETE 100-D VENT PIPE REMOVAL	*K	10Oct – 30Dec

LEGEND:

- TRI-PARTY AGREEMENT MILESTONE -T
- DOE-RL MAJOR MILESTONE - K
- DOE-HQ MAJOR MILESTONE - M
- KEY MILESTONE - B

Project: 100 AREA D&D	Date: 8Dec93 9:21
100 AREA D&D	
Page: 1	Scheduled by ER Program Control - Scheduling

Figure B3-1. Decontamination and Decommissioning Schedule. (sheet 2 of 3)

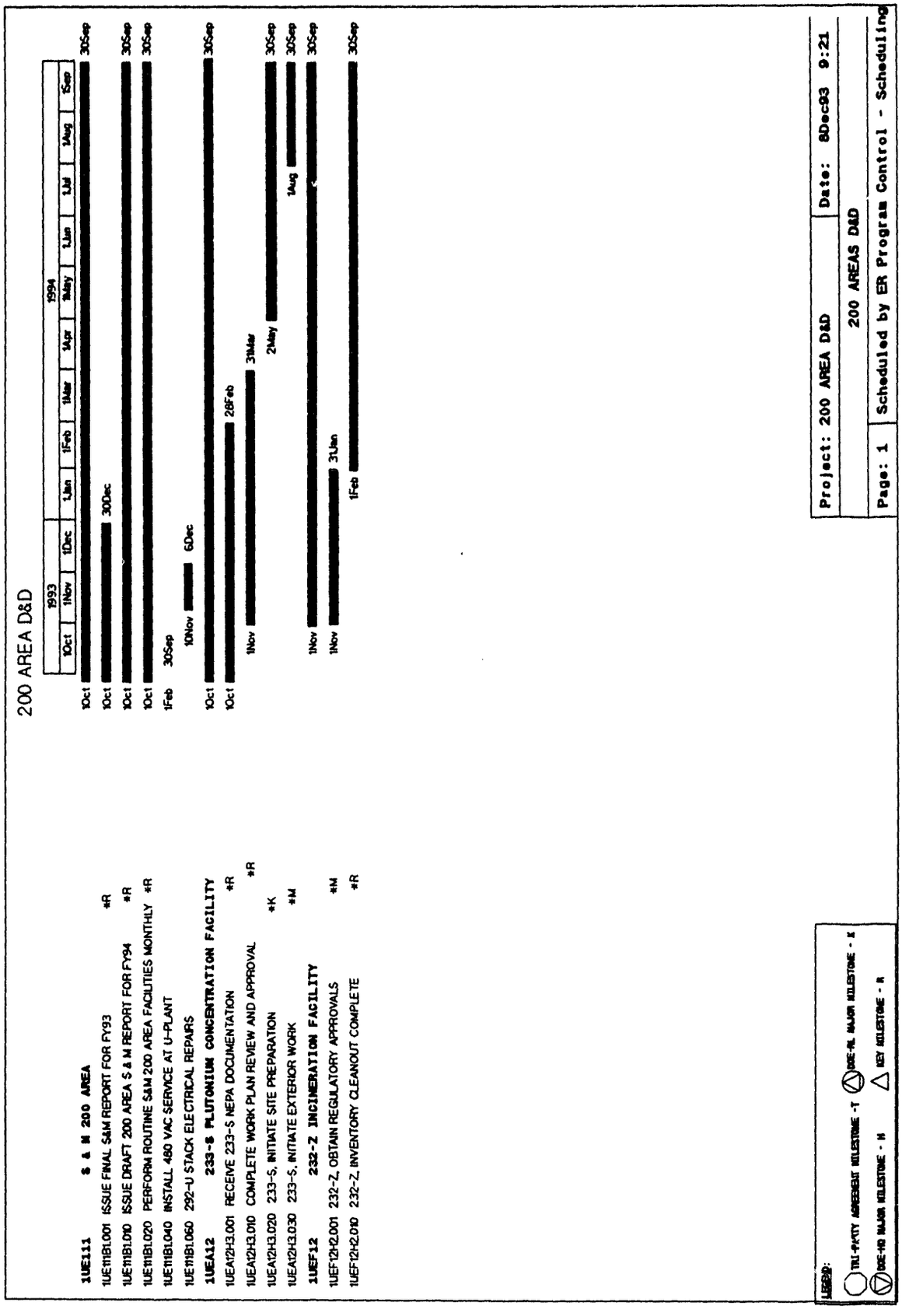


Figure B3-1. Decontamination and Decommissioning Schedule. (sheet 3 of 3)

Table B3-1. Hanford Environmental Restoration Milestone Control Log.

Hanford Environmental Restoration Program Decontamination and Decommissioning

TYPE	Milestone ID	RL WBS	WHC WBS	Milestone description	Original baseline due date	CIN change authority	Baseline revision date
RL	1UV-94-001	2.2.1.1.20.1	1UV121	PROVIDE WORK PERFORMANCE REPORT AGAINST THE AAP (QUARTERLY)	QUARTERLY 09/30/94		
RL	1UV-94-002	2.2.1.1.20.1	1UV121	UPDATE THE AAP FOR FY 1995 AND SUBMIT TO RL FOR APPROVAL	08/15/94		
HQ	1UB-94-001	2.2.2.1.10.1	1UB111	ISSUE FINAL SURVEILLANCE AND MAINTENANCE REPORT FOR FY 1993	12/31/93		
RL	1UB-94-002	2.2.2.1.10.2	1UB112	ISSUE A PLAN TO IMPLEMENT PRIORITIZED CORRECTIVE ACTIONS	12/31/93		
TPA	1UB-94-003	2.2.2.1.10.5	1UB115	M-16-80 SUBMIT ENGINEERING EVALUATION/COST ANALYSIS FOR 100-AREA REACTOR EFFLUENT PIPELINE REMOVAL	09/30/94		
RL	1UB-94-004	2.2.2.1.20.2	1UB122	COMPLETE SAFETY DOCUMENTATION PROGRAM PLAN (C-REACTOR)	09/30/94		
RL	1UB-94-005	2.2.2.1.20.2	1UB122	INITIATE CONCEPTUAL DESIGN (C-REACTOR)	01/31/94		
RL	1UB-94-006	2.2.2.1.20.2	1UB122	COMPLETE CONCEPTUAL DESIGN (C-REACTOR)	09/30/94		
HQ	1UB-94-007	2.2.2.2.20.2	1UB222	COMPLETE DEMOLITION OF THE 185-B/190-B COMPLEX	01/28/94		
HQ	1UB-94-008	2.2.2.2.20.2	1UB222	COMPLETE MATERIAL PROCESSING	06/30/94		
RL	1UB-94-009	2.2.2.2.20.2	1UB222	ISSUE FINAL PROJECT CLOSEOUT REPORT TO RL	09/30/94		
HQ	1UB-94-010	2.2.2.4.20.2	1UB422	COMPLETE DEMOLITION OF THE 185-D, 189-D, 190-D AND 190-DA, 195-D COMPLEX	09/30/94		
TPA	1UB-94-011	2.2.2.4.20.2	1UB422	M-16-80 COMPLETE 100-D VENT PIPE REMOVAL, SURFACE DECONTAMINATION, AND RADIOLOGICAL SURVEY OF D-ISLAND	12/31/93		
RL	1UE-94-001	2.2.3.10.10.2	1UEA12	INITIATE 233-S SITE PREPARATION	04/30/94		
HQ	1UE-94-002	2.2.3.10.10.2	1UEA12	INITIATE 233-S EXTERIOR WORK	07/31/94		
HQ	1UE-94-003	2.2.3.15.10.2	1UEF12	OBTAIN REGULATORY APPROVAL	01/31/94		
RL	1UN-94-001	2.2.5.3.10.6	1UN316	TRANSMIT N-REACTOR SHORELINE DOSE REDUCTION ENVIRONMENTAL ASSESSMENT TO RL	07/31/94		

Table B3-2. Milestone Description Sheets.

TITLE:	PROVIDE A WORK PERFORMANCE REPORT AGAINST THE AAP (QUARTERLY)
MILESTONE ID #:	1UV-94-001 **TYPE:** RL
DUE DATE:	09/30/94 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER DECONTAMINATION AND DECOMMISSIONING
RL WBS:	2.2.1.1.20.1 **FY94 WHC WBS:** 1UV121
DELIVERABLE:	ISSUANCE OF A WORK PERFORMANCE REPORT AGAINST THE AAP QUARTERLY TO RL CONSTITUTES COMPLETION OF THIS RL MILESTONE.
ACTIVITY ENGINEER:	P.D. MIX. **COST ACCOUNT MGR:** M.R. MORTON
DOE MONITOR:	A.C. HARRIS

TITLE:	UPDATE THE AAP FOR FY 1995 AND SUBMIT TO RL FOR APPROVAL
MILESTONE ID #:	1UV-94-002 **TYPE:** RL
DUE DATE:	09/30/94 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER DECONTAMINATION AND DECOMMISSIONING
RL WBS:	2.2.1.1.20.1 **FY94 WHC WBS:** 1UV121
DELIVERABLE:	SUBMITTAL OF THE UPDATED AAP FC TO RL CONSTITUTES COMPLETION OF THIS RL MILESTONE.
ACTIVITY ENGINEER:	P.D. MIX. **COST ACCOUN[illegible]K:** M.R. MORTON
DOE MONITOR:	A.C. HARRIS

TITLE:	ISSUE FINAL SURVEILLANCE AND MAINTENANCE REPORT FOR FY 1993
MILESTONE ID #:	1UB-94-001 **TYPE:** HQ
DUE DATE:	12/31/93 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER DECONTAMINATION AND DECOMMISSIONING
RL WBS:	2.2.2.1.10.1 **FY94 WHC WBS:** 1UB111
DELIVERABLE:	SUBMISSION OF THE FINAL ANNUAL SURVEILLANCE & MAINTENANCE STATUS REPORT TO RL CONSTITUTES COMPLETION OF THIS HQ MILESTONE.
ACTIVITY ENGINEER:	P.D. MIX **COST ACCOUNT MGR:** M.C. HUGHES
DOE MONITOR:	A.C. HARRIS

Table B3-2. Milestone Description Sheets.

TITLE:	ISSUE A PLAN TO IMPLEMENT PRIORITIZED CORRECTIVE ACTIONS
MILESTONE ID #:	1UB-94-002 **TYPE:** RL
DUE DATE:	12/31/93 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER DECONTAMINATION AND DECOMMISSIONING
RL WBS:	2.2.2.1.10.2 **FY94 WHC WBS:** 1UB112
DELIVERABLE:	SUBMISSION OF THE PLAN TO IMPLEMENT PRIORITIZED CORRECTIVE ACTIONS TO WHC/RL CONSTITUTES COMPLETION OF THIS RL MILESTONE.
ACTIVITY ENGINEER:	P.D. MIX **COST ACCOUNT MGR:** M.R. MORTON
DOE MONITOR:	A.C. HARRIS

TITLE:	M-16-80 SUBMIT ENGINEERING EVALUATION/COST ANALYSIS FOR 100 AREA REACTOR EFFLUENT PIPELINE REMOVAL
MILESTONE ID #:	1UB-94-003 **TYPE:** TPA
DUE DATE:	09/30/94 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER DECONTAMINATION AND DECOMMISSIONING
RL WBS:	2.2.2.1.10.5 **FY94 WHC WBS:** 1UB115
DELIVERABLE:	SUBMISSION OF THE ENGINEERING EVALUATION/COST ANALYSIS REPORT TO EPA/ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.
ACTIVITY ENGINEER:	P.D. MIX **COST ACCOUNT MGR:** M.R. MORTON
DOE MONITOR:	A.C. HARRIS

TITLE:	COMPLETE SAFETY DOCUMENTATION (C-REACTOR)
MILESTONE ID #:	1UB-94-004 **TYPE:** RL
DUE DATE:	09/30/94 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER DECONTAMINATION AND DECOMMISSIONING
RL WBS:	2.2.2.1.20.2 **FY94 WHC WBS:** 1UB122
DELIVERABLE:	MILESTONE IS COMPLETED WHEN THE DOCUMENT HAS BEEN REVIEWED AND APPROVED WITHIN WHC
ACTIVITY ENGINEER:	P.D. MIX **COST ACCOUNT MGR:** M.A. MIHALIC
DOE MONITOR:	A.C. HARRIS

Table B3-2. Milestone Description Sheets.

TITLE:	INITIATE CONCEPTUAL DESIGN (C-REACTOR)				
MILESTONE ID #:	1UB-94-005	**TYPE:**	RL		
DUE DATE:	01/31/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER DECONTAMINATION AND DECOMMISSIONING				
RL WBS:	2.2.2.1.20.2	**FY94 WHC WBS:**	1UB122		
DELIVERABLE:	MILESTONE IS SATISFIED WHEN THE LETTER-OF-INSTRUCTION HAS BEEN SUBMITTED TO THE A/E TO INITIATE CONCEPTUAL DESIGN.				
ACTIVITY ENGINEER:	P.D. MIX	**COST ACCOUNT MGR:**	M.A. MIHALIC		
DOE MONITOR:	A.C. HARRIS				

TITLE:	COMPLETE CONCEPTUAL DESIGN (C-REACTOR)				
MILESTONE ID #:	1UB-94-006	**TYPE:**	RL		
DUE DATE:	09/30/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER DECONTAMINATION AND DECOMMISSIONING				
RL WBS:	2.2.2.1.20.2	**FY94 WHC WBS:**	1UB122		
DELIVERABLE:	MILESTONE IS COMPLETE WHEN THE CDR HAS BEEN SUBMITTED TO WHC FOR FINAL REVIEW/APPROVAL.				
ACTIVITY ENGINEER:	P.D. MIX	**COST ACCOUNT MGR:**	M.A. MIHALIC		
DOE MONITOR:	A.C. HARRIS				

TITLE:	COMPLETE DEMOLITION OF THE 185-B/190-B COMPLEX				
MILESTONE ID #:	1UB-94-007	**TYPE:**	HQ		
DUE DATE:	01/28/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER DECONTAMINATION AND DECOMMISSIONING				
RL WBS:	2.2.2.2.20.2	**FY94 WHC WBS:**	1UB222		
DELIVERABLE:	REMOVAL OF THE BUILDINGS MATERIAL FROM THE BUILDINGS SITE CONSTITUTES COMPLETION OF THIS HQ MILESTONE.				
ACTIVITY ENGINEER:	P.D. MIX	**COST ACCOUNT MGR:**	D.G. KACHELE		
DOE MONITOR:	A.C. HARRIS				

Table B3-2. Milestone Description Sheets.

TITLE:	COMPLETE MATERIAL PROCESSING
MILESTONE ID #:	1UB-94-008 **TYPE:** HQ
DUE DATE:	06/30/94 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER DECONTAMINATION AND DECOMMISSIONING
RL WBS:	2.2.2.2.20.2 **FY94 WHC WBS:** 1UB222
DELIVERABLE:	MATERIAL, CRUSHED, REMOVED, SENT TO RECYCLING CONSTITUTES COMPLETION OF THIS HQ MILESTONE.
ACTIVITY ENGINEER:	P.D. MIX **COST ACCOUNT MGR:** D.G. KACHELE
DOE MONITOR:	A.C. HARRIS

TITLE:	ISSUE FINAL PROJECT CLOSEOUT REPORT TO RL
MILESTONE ID #:	1UB-94-009 **TYPE:** RL
DUE DATE:	09/30/94 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER DECONTAMINATION AND DECOMMISSIONING
RL WBS:	2.2.2.2.20.2 **FY94 WHC WBS:** 1UB222
DELIVERABLE:	ISSUANCE OF THE FINAL PROJECT CLOSEOUT REPORT TO RL CONSTITUTES COMPLETION OF THIS RL MILESTONE.
ACTIVITY ENGINEER:	P.D. MIX **COST ACCOUNT MGR:** D.G. KACHELE
DOE MONITOR:	A.C. HARRIS

TITLE:	COMPLETE DEMOLITION OF THE 185-D, 189-D, 190-D, 190-DA AND 195-D COMPLEX
MILESTONE ID #:	1UB-94-010 **TYPE:** HQ
DUE DATE:	09/30/94 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER DECONTAMINATION AND DECOMMISSIONING
RL WBS:	2.2.2.4.20.2 **FY94 WHC WBS:** 1UB422
DELIVERABLE:	ISSUANCE OF THE FINAL PROJECT CLOSEOUT REPORT TO RL CONSTITUTES COMPLETION OF THIS HQ MILESTONE.
ACTIVITY ENGINEER:	P.D. MIX **COST ACCOUNT MGR:** D.G. KACHELE
DOE MONITOR:	A.C. HARRIS

Table B3-2. Milestone Description Sheets.

TITLE:	M-16-80 COMPLETE 100-D VENT PIPE REMOVAL, SURFACE DECONTAMINATION, AND RADIOLOGICAL SURVEY OF D-ISLAND
MILESTONE ID #:	1UB-94-011 **TYPE:** TPA
DUE DATE:	12/31/93 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER DECONTAMINATION AND DECOMMISSIONING
RL WBS:	2.2.2.4.20.2 **FY94 WHC WBS:** 1UB422
DELIVERABLE:	SUBMISSION OF THE VENT PIPE REMOVAL AND RADIOLOGICAL SURVEY REPORTS TO EPA/ECOLOGY CONSTITUTES COMPLETION OF THIS TPA MILESTONE.
ACTIVITY ENGINEER:	P.D. MIX **COST ACCOUNT MGR:** D.G. KACHELE
DOE MONITOR:	A.C. HARRIS

TITLE:	INITIATE 233-S SITE PREPARATION
MILESTONE ID #:	1UE-94-001 **TYPE:** RL
DUE DATE:	04/30/94 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER DECONTAMINATION AND DECOMMISSIONING
RL WBS:	2.2.3.10.10.2 **FY94 WHC WBS:** 1UEA12
DELIVERABLE:	INITIATION OF THE SITE PREPARATION WORK AT 233-S CONSTITUTES COMPLETION OF THIS RL MILESTONE.
ACTIVITY ENGINEER:	P.D. MIX **COST ACCOUNT MGR:** M.A. MIHALIC
DOE MONITOR:	A.C. HARRIS

TITLE:	INITIATE 233-S EXTERIOR WORK
MILESTONE ID #:	1UE-94-002 **TYPE:** HQ
DUE DATE:	07/31/94 **REVISION DATE:** **CIN:**
ASSIGNEE:	HANFORD ER DECONTAMINATION AND DECOMMISSIONING
RL WBS:	2.2.3.10.10.2 **FY94 WHC WBS:** 1UEA12
DELIVERABLE:	INITIATION OF THE EXTERIOR DECONTAMINATION WORK AT 233-S CONSTITUTES COMPLETION OF THIS HQ MILESTONE.
ACTIVITY ENGINEER:	P.D. MIX **COST ACCOUNT MGR:** M.A. MIHALIC
DOE MONITOR:	A.C. HARRIS

Table B3-2. Milestone Description Sheets.

TITLE:	OBTAIN REGULATORY APPROVAL				
MILESTONE ID #:	1UE-94-003	**TYPE:**	HQ		
DUE DATE:	01/31/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER DECONTAMINATION AND DECOMMISSIONING				
RL WBS:	2.2.3.15.10.2	**FY94 WHC WBS:**	1UEF12		
DELIVERABLE:	RECEIVE AIR PERMITTING APPROVAL FROM ECOLOGY CONSTITUTES COMPLETION OF THIS HQ MILESTONE.				
ACTIVITY ENGINEER:	P.D. MIX	**COST ACCOUNT MGR:**	M.A. MIHALIC		
DOE MONITOR:	A.C. HARRIS				

TITLE:	TRANSMIT N-REACTOR SHORELINE DOSE REDUCTION ENVIRONMENTAL ASSESSMENT TO RL				
MILESTONE ID #:	1UN-94-001	**TYPE:**	RL		
DUE DATE:	07/31/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ENVIRONMENTAL RESTORATION				
RL WBS:	2.2.5.3.10.6	**FY94 WHC WBS:**	1UN316		
DELIVERABLE:	TRANSMITTING N-REACTOR SHORELINE DOSE REDUCTION ASSESSMENT TO RL CONSTITUTES COMPLETION OF THIS RL MILESTONE.				
ACTIVITY ENGINEER:	M.R. MORTON	**COST ACCOUNT MGR:**	R.H. ENGELMANN		
DOE MONITOR:	H.R. TRUMBLE				

B4.0 PROGRAM COST BASELINE

Table B4-1 presents the D&D Program funding deviations between the FYWP funding and the baseline. Section B1.5 contains the specific narrative for these deviations.

The total ER Program funding deviations between the FYWP and the baseline are summarized in Table 4-3 of the Mission Section of this document.

Indentation in Title Column displays the "roll-up" function within the program and provides line item identification.

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Table B4-1. Hanford Site Decontamination and Decommissioning Program Fiscal Year 1994 Work Plan Versus Baseline Funding ($000).

			FY 1994 ($000)		
ADS #	WBS	Title	FWYP	Baseline	Change
3500	UV	Asbestos Abatement	$2,08	$2,611	($526)
3510	UB	100 Area D&D	$12,090	$7,792	$4,298
3520	UE	200 Area D&D	$6,793	$8,145	($1,352)
3600	UN	N Reactor	$20,963	$21,600	($637)
	U	D&D Facilities	$41,931	$40,148	$1,783

ADS# = activity data sheet number
D&D = decontamination and decommissioning
FY = fiscal year
FYWP = fiscal year work plan
WBS = work breakdown structure

B5.0 PROGRAM FUNDING BASELINE

The D&D Program funding is displayed in Table B5-1 at the activity level and summarized to the total D&D Program funding by major participant. The summarized ER program funding requirements are included in the Mission Section of this document.

Indentation in Title Column displays the "roll-up" function within the program and provides line item identification.

The questions marks (?) in the 3rd level of the WBS column indicate a summary of assessment (XX?1) or remediation (XX?2) dollars within an operable unit.

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Table B5-1. Decontamination and Decommissioning Program Fiscal Year 1994 Funding Baseline Summary ($000).

			FYWP 1994 ($000)			
ADS #	WBS	Title	WHC	USACE	RL	Total
3500	UV12	Asbestos Abatement Common - Remediation	$2,085	$0	$0	$2,085
3500	UV?2	Asbestos Abatement - Remediation	$2,085	$0	$0	$2,085
3500	UV	Asbestos Abatement	$2,085	$0	$0	$2,085
3510	UB11	100 Area Common Activities Assessment	$6,928	$0	$0	$6,928
3510	UB12	100 Area Common Activities Remediation	$2,048	$0	$0	$2,048
3510	UB1	100 Area Common Activities	$8,976	$0	$0	$8,976
3510	UB22	D&D 100-BC-1 Remediation	$808	$0	$0	$808
3510	UB42	D&D 100-DR-1 Remediation	$2,306	$0	$0	$2,306
3510	UB62	D&D 100-FR-1 Remediation	$0	$0	$0	$0
3510	UB?1	100 Area D&D - Assessment	$6,928	$0	$0	$6,928
3510	UB?2	100 Area D&D - Remediation	$5,162	$0	$0	$5,162
3510	UB	100 Area D&D	$12,090	$0	$0	$12,090
3520	UE11	200 Area D&D Common Activities Assessment	$3,746	$0	$0	$3,746
3520	UEA1	D&D 200-RO-3 Assessment	$1,659	$0	$0	$1,659
3520	UEF1	D&D 200-ZP-1 Assessment	$1,388	$0	$0	$1,388
3520	UE?1	200 Area D&D - Assessment	$6,793	$0	$0	$6,793
3520	UE	200 Area D&D	$6,793	$0	$0	$6,793
3600	UN11	NR Program Management and Integration	$989	$0	$0	$989
3600	UN21	NR Deactivation Execution - Balance of Plant	$14,681	$0	$0	$14,681
3600	UN22	NR Deactivation Execution - N Basin	$2,530	$0	$0	$2,530
3600	UN2	NR Deactivation Planning and Execution	$17,211	$0	$0	$17,211
3600	UN31	NR Regulatory Response - Assessment	$2,763	$0	$0	$2,763
3600	UN?1	N Reactor - Assessment	$18,433	$0	$0	$18,433
3600	UN?2	N Reactor - Remediation	$2,530	$0	$0	$2,530
3600	UN	N Reactor	$20,963	$0	$0	$20,963
	U??1	D&D Facilities - Assessment	$32,154	$0	$0	$32,154
	U??2	D&D Facilities - Remediation	$9,777	$0	$0	$9,777
	U	D&D Facilities	$41,931	$0	$0	$41,931

ADS# = activity data sheet number
D&D = decontamination and decommissioning
FYWP = fiscal year work plan
NR = N Reactor
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

B6.0 PROGRAM STAFFING BASELINE

The D&D Program staffing baseline FTEs are presented in Table B6-1. The FTEs are displayed by activity level and summarized to the total D&D Program FTE requirement. The summarized ER Program FTE requirements are included in the Mission Section of this document.

Indentation in Title Column displays the "roll-up" function within the program and provides line item identification.

The question marks (?) in the 3rd level of the WBS column indicate a summary of assessment (XX?1) or remediation (XX?2) FTEs within an operable unit.

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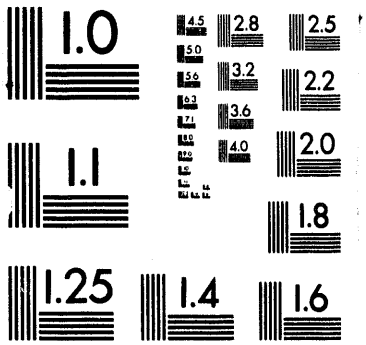
1.0
4.5
2.8
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2.2
5.6
6.3
3.6
7.1
4.0
2.0
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1.8
1.25
1.4
1.6

5 of 6

Table B6-1. Decontamination and Decommissioning Program Fiscal Year 1994 Work Force Full-Time Equivalent Mission Summary.

			FYWP 1994 FTEs			
ADS #	WBS	Title	WHC	USACE	RL	Total
3500	UV12	Asbestos Abatement Common - Remediation	9.6	0.0	0.0	9.6
3500	UV?2	Asbestos Abatement - Remediation	9.6	0.0	0.0	9.6
3500	UV	Asbestos Abatement	9.6	0.0	0.0	9.6
3510	UB11	100 Area Common Activities Assessment	32.4	0.0	0.0	32.4
3510	UB12	100 Area Common Activities Remediation	2.5	0.0	0.0	2.5
3510	UB1	100 Area Common Activities	34.9	0.0	0.0	34.9
3510	UB22	D&D 100-BC-1 Remediation	5.9	0.0	0.0	5.9
3510	UB42	D&D 100-DR-1 Remediation	18.2	0.0	0.0	18.2
3510	UB62	D&D 100-FR-1 Remediation	0.9	0.0	0.0	0.9
3510	UB?1	100 Area D&D - Assessment	32.4	0.0	0.0	32.4
3510	UB?2	100 Area D&D - Remediation	27.5	0.0	0.0	27.5
3510	UB	100 Area D&D	59.9	0.0	0.0	59.9
3520	UE11	200 Area D&D Common Activities Assessment	33.7	0.0	0.0	33.7
3520	UEA1	D&D 200-RO-3 Assessment	4.3	0.0	0.0	4.3
3520	UEF1	D&D 200-ZP-1 Assessment	9.5	0.0	0.0	9.5
3520	UE?1	200 Area D&D - Assessment	47.5	0.0	0.0	47.5
3520	UE	200 Area D&D	47.5	0.0	0.0	47.5
3600	UN11	NR Program Management and Integration	9.8	0.0	0.0	9.8
3600	UN21	NR Deactivation Execution - Balance of Plant	101.9	0.0	0.0	101.9
3600	UN22	NR Deactivation Execution - N Basin	27.0	0.0	0.0	27.0
3600	UN2	NR Deactivation Planning and Execution	128.9	0.0	0.0	128.9
3600	UN31	NR Regulatory Response - Assessment	12.6	0.0	0.0	12.6
3600	UN?1	N Reactor - Assessment	124.3	0.0	0.0	124.3
3600	UN?2	N Reactor - Remediation	27.0	0.0	0.0	27.0
3600	UN	N Reactor	151.3	0.0	0.0	151.3
	U??1	D&D Facilities - Assessment	204.2	0.0	0.0	204.2
	U??2	D&D Facilities - Remediation	64.1	0.0	0.0	64.1
	U	D&D Facilities	268.3	0.0	0.0	268.3

ADS# = activity data sheet number
D&D = decontamination and decommissioning
FTE = full-time equivalent
FYWP = fiscal year work plan
NR = N Reactor
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

B7.0 PROGRAM WORKSCOPE CARRYOVER

Carryover information will be provided on approval of the Class I change request documenting carryover workscope, milestones, and funds.

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B8.0 REFERENCES

Agreement in Principle dated March 31, 1993, "Evaluation of Hanford Tank Waste Remediation Alternatives", Washington State Department of Ecology, U.S. Environmental Protection Agency, U.S. Department of Energy, Richland Operations Office.

DOE Order 4700.1, *Project Management System*.

National Environmental Policy Act of 1969, 42 USC 4321 et seq.

Record of Decision, Final Surplus Production Reactor Decommissioning Environmental Impact Statement, DOE/EIS-0119F, dated September 14, 1993.

Resource Conservation and Recovery Act of 1976, 42 USC 6901 et seq.

WHC, 1992, *N Reactor Shutdown Program Plan*, WHC-SP-0615, Rev. 3, Vol. 1, Westinghouse Hanford Company, Richland, Washington.

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APPENDIX C

PROGRAM MANAGEMENT AND SUPPORT PROGRAM

APPENDIX C

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GLOSSARY

AAMS	aggregate area management study
AAP	affirmative action plan
ACM	asbestos containing material
Admin	Administration
ADS	activity data sheet
AIP	agreement in principal
AIU	agreement in understanding
ALE	Arid Lands Ecology (Reserve)
ARAR	applicable or relevant and appropriate requirements
ASI	Advanced Sciences, Incorporated
ATSDR	Agency for Toxic Substances and Disease Registry
BAM	baseline analysis matrix
BDAT	best demonstrated available technology
BOP	balance of plant
CAMU	corrective action management unit
CDR	conceptual design report
CERCLA	*Comprehensive Environmental Response, Compensation, and Liability Act of 1980*
CFR	Code of Federal Regulations
CLP	contract laboratory program
CMP	configuration management plan
CRADA	Cooperative Research and Development Agreement
CY	calendar year
D&D	decontamination and decommissioning
DCP	document control plan
DF	disposal facilities
DOE	U.S. Department of Energy
DOE-HQ	U.S. Department of Energy, Headquarters
DOE-RL	U.S. Department of Energy, Richland Operations Office
DOW	description of work
Ecology	Washington State Department of Ecology
EE/CA	engineering evaluation/cost analysis
EGW	200 East Area groundwater
EII	environmental investigation instruction
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
equip	equipment
ER	environmental restoration
ERA	expedited response action
ERB	engineering review board
ERDF	Environmental Restoration Disposal Facility
ERMC	environmental restoration management contractor
ERO	environmental restoration operations
ERPO	environmental restoration program office
ERSDF	environmental restoration storage and disposal facility

GLOSSARY (cont)

FDB	functional design basis
FDC	functional design criteria
FDS	financial data system
FEMP	facility effluent monitoring plan(s)
FFS	focused feasibility study
FS	feasibility study
FSPRD	Final Surplus Production Reactor Decommissioning
FTE	full-time equivalent
FY	fiscal year
FYP	fiscal year plan
FYWP	fiscal year work plan
G&A	general and administrative
GAO	General Accounting Office
GIS	geographic information system
govt	government
HASM	Hanford Analytical Services Management
HEIS	Hanford Environmental Information System
HGP	Hanford Generating Plant
HEHF	Hanford Environmental Health Facility
HLAN	Hanford Local Area Network
HRA	Hanford remedial action
HSAAP	Hanford Site Asbestos Abatement Program
IMS	information management system
IMSP	information management system plan
IROD	interim record of decision
IRM	interim response measure
ISV	in-situ vitrification
JCS	job control system
KEH	Kaiser Engineers Hanford Company
lab	laboratory
LDR	land disposal restrictions
LFI	limited field investigation
LIMS	laboratory information management system
LRPP	long-range planning program
M&O	maintenance and operations
MCL	milestone control log
MDS	milestone description sheets
mgmt	management

GLOSSARY (cont)

MOU	memorandum of understanding
MSA	major system acquisition
MYPP	multi-year program plan
NEPA	*National Environmental Policy Act of 1969*
NOD	notice of deficiency
NPC	notice of project closeout
NPL	National Priorities List
NRDA	National Resource Damage Assessment
NRDWL	nonradioactive dangerous waste landfill
NW	northwest
OMB	Office of Management and Budget
OU	operable unit
PAS	preliminary assessment screening
PFP	plutonium finishing plant
PM&S	program management and support
PNL	Pacific Northwest Laboratory
Pu Conc	plutonium concentration
PUREX	plutonium-uranium extraction
QA	quality assurance
QASR	quality assurance system requirements
QTR	quality training requirement
RA	remedial action
RAM	responsibility assignment matrix
RARA	radiation area remedial action
RCRA	*Resource Conservation and Recovery Act of 1976*
REDOX	reduction oxidation
RFI-CMS	RCRA facility investigation/corrective measure studies
RFP	request for proposal
RI	remedial investigation
RIDS	record inventory disposition schedule
RI/FS	remedial investigation/feasibility study
RL	U.S. Department of Energy, Richland Operations Office
RLID	Richland implementation document
RLP	Richland procurement instruction
RMP	records management plan
RMWDF	radioactive mixed waste disposal facility
ROD	record of decision
S&M	surveillance and maintenance
SEMP	systems engineering management plan
SMS	site management system
SPRD	Surplus Production Reactor Decommissioning
SST	single-shell tank

GLOSSARY (cont)

SWEC	Stone & Webster Engineering Corporation
Sys. Eng	systems engineering
TPA	Tri-Party Agreement
TRU	transuranic
Tri-Party Agreement	*Hanford Federal Facility Agreement and Consent Order*
TSD	treatment, storage, and/or disposal
USACE	U.S. Army Corps of Engineers
USACE/PM	U.S. Army Corps of Engineers/Program Manager
USGS	U.S. Geological Survey
UST	underground storage tank
WAC	Washington Administrative Code
WBS	work breakdown structure
Westinghouse Hanford	Westinghouse Hanford Company
WGW	200 West Area groundwater
WHC	Westinghouse Hanford Company
WIDS	waste information data system

C1.0 PROGRAM MANAGEMENT AND SUPPORT PROGRAM DESCRIPTION

The PM&S Program encompasses both RA management and D&D management workscopes. This appendix contains the following: (1) program statements, (2) program objectives, (3) assumptions and constraints, (4) WBS, (5) schedule, and (6) fiscal information.

C1.1 PROGRAM MANAGEMENT AND SUPPORT MISSION STATEMENT

The PM&S is developed for the RA functions and the D&D functions.

C1.1.1 Program Management and Support--Remedial Action

The PM&S RA subproject encompasses the following six end functions: (1) program management; (2) quality assurance support; (3) DOE-RL/State; (4) technology adaptations; (5) laboratory support; and (6) facilities, systems, and equipment support.

Within the program management end function, support is provided for the following: (1) overall program management, (2) management systems development and implementation, (3) program baseline development and control, (4) information systems development and operation, and (5) public involvement.

Overall program management includes the staff necessary to maintain quality, cost, and schedule control in accordance with DOE policy and regulations. The staff comprises professional and clerical support in the following areas: (1) project management, (2) program control, (3) scheduling, and (4) cost estimating.

Efforts falling within management systems and program baseline development and control include the creation of numerous management systems documents. Examples of these documents are as follows: (1) ER Baseline Summary, (2) multiyear project plan, (3) FYWP, (4) DOE-HQ project plan, (5) systems engineering/configuration management plans, (6) document control and records management plans, (7) an IMS plan, and (8) Surplus Facilities Program Plan and environmental safety and health documentation. The development, implementation, and control of these plans are critical to the program's effective management.

Information systems development and operation encompasses the development and operation of an environmental information storage and retrieval system in support of the program. Coordination of public involvement efforts supports past-practice activities that include, but are not limited to, the activities outlined in the Tri-Party Agreement community relations plan.

Technology Adaptations provides for the field transfer and testing of available technologies through RA field demonstrations. The technologies covered are applicable where site-specific technologies are contained in the OU activity. The technologies used are (or are near) developed technologies

that have the possibility of improving RA efforts over the current baseline technologies in a faster, better, less costly, or safer criteria. Technology Adaptations also establishes a baseline for the ER Program technology needs, and evaluates innovative technology development proposals. To be considered for future funding through the ER Program Technology Adaptations, new technologies must clearly demonstrate a significant improvement over baseline technologies and meet technical transfer criteria and schedule constraints. The management of the HRA-EIS also is included within the scope of the Technology Adaptations, as well as ER support for the Northwest (NW) Citizen Forum and other related public outreach activities.

Funding for technical, management, and administrative services to DOE-RL is included in this end function. The ER Program support is provided in the areas of engineering, safety, quality assurance, security, management systems, operations, maintenance and startup, construction, tribal governments, and environmental management technical support as outlined in the General Support Services Contract, Request for Proposal No. DE-RP06-92RL12434.

Laboratory support for upgrades in support of CERCLA activities will continue to fund upgrade activities at the PNL 325 Analytical Chemistry Laboratory. These upgrades support the laboratory's ability to perform CERCLA Contract Laboratory Program protocol analysis. Also funded is the Program Administration oversight of these laboratory upgrades and the commercial laboratories in support of ER sample requirements, and the ER portion of the maintenance assessment to maintain ready-to-serve status of the 222-S Laboratory Complex.

The facilities, systems, and equipment support activity provides general support for RI/FS activities that are not directly funded by an OU but are crucial to the ER Program. Examples of scope funded within this activity are sitewide background investigations, characterization of soils in the vicinity of the McGee Ranch, infrastructure support providing baseline documents and procedures, and procurement of expense funded CENRTC.

C1.1.2 Program Management and Support--Decontamination and Decommissioning

Efforts falling within the PM&S D&D Advanced Engineering include engineering support for maintenance and yearly update of D&D documents. Examples are the Surplus Facilities Program Plan, and ADS preparation in support of D&D projects.

C1.2 PROGRAM MANAGEMENT AND SUPPORT PROGRAM OBJECTIVES

The PM&S objectives for FY 1994 are as follows:

- Ensure the safety of operations
- Comply with the laws and regulations intended to protect human health and the environment

- Develop and implement management support systems and capabilities necessary for the program and mission success
- Expedite actual cleanup actions whenever possible
- Complete crucial laboratory upgrades to ensure adequate laboratory capability and capacity is in place to support forecast RI/FS and ERA sample requirements
- Ensure adequate RI/FS infrastructure (i.e., drilling equipment) is in place to support the ER cleanup mission.

C1.3 PROGRAM MANAGEMENT AND SUPPORT PROGRAM PRIORITIES

The PM&S Program priorities for FY 1994 are addressed in the Mission portion of this plan.

C1.4 PROGRAM MANAGEMENT AND SUPPORT PROGRAM ASSUMPTIONS AND CONSTRAINTS

The following are the assumptions and constraints for the PM&S Program.

- Establishment of an ERMC will not significantly change the program management and support requirements, except in the FY 1994 costs when the ERMC transition costs have been assumed.
- An ERMC will be awarded. Westinghouse Hanford will assist in the transition.
- The DOE-HQ and DOE-RL documentation and review requirements will not increase significantly.
- The HRA-EIS, which will be completed in 1996, will provide formal documented resolution of issues concerning the potential future use of the Hanford Site.
- Commercial laboratory capacity will expand to meet ER needs.
- Facilities and equipment upgrades should consider the infrastructure required to support the current and recently negotiated workscopes.
- No supplemental funding will be available in FY 1994 to expedite laboratory upgrade activities.
- Reviews will occur that cannot be anticipated or planned. The support of these reviews may impact ongoing work.
- Funding will be available to support the SPRD EIS ROD for one-piece, reactor core removal.

- Surplus facilities will be maintained in a safe condition via S&M until they are decommissioned.
- Current inventory of surplus facilities will be decommissioned by the year 2018.
- Decommissioning will be integrated with Hanford Site RCRA and CERCLA work.
- The D&D Program Management is required per DOE Order 5820.2A, "Radioactive Waste Management".

C1.5 MAJOR CHANGES FROM THE BASELINE

Major deviations between the FYWP and the baseline, as identified in Section C4.0, Table C4-1, are detailed as follows ($000):

ADS 3400 (Program Management and Support)
FYWP $70,394 Baseline $69,160 Change +$1,234

Within the Program Management Systems there has been a $1,234 increase from the original baseline submitted in March 1992. Program Management Systems initiated FY 1994 planning by taking an across-the-board reduction of 15 percent per cost account. The reduction was in response to an ER Program productivity challenge and the funds were to be used for the unfunded priority workscope.

This increase represents repricing changes for reductions in G&A and continuity of service rates, as well as additional workscope added through the direction of the RL letter 94-EPB-001, "Guidance for Fiscal Year (FY) 1994 Environmental Restoration (ER) Program Unfunded Activities".

ER program management staff support for D&D has been reassigned to ADS 3400 Program Management from ADS 3410.

In addition, the Technical Adaptations end function received new workscope through the AIP for the PNL Columbia River Study.

A transfer of capital money was made from OUs to EA to fund required CENRTC material.

The Participant WBS Element Code and the Site WBS Number have been revised from previous years. This revision corrects the FYWP and the workscope will continue to show the new coding in future years. The workscope affected was the Hanford Mission Plan, ERMC Transition Activity, Tri-Party Agreement Support, and JCS Assessment.

ADS 3410 (Program Management and Support- D&D)
FYWP $1,125 Baseline $2,179 Change -$1,054

Decreased funding is due to reduction in D&D program office staff and consolidation of D&D programmatic workscope from ADS 3410 into ADS 3400.

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C2.0 PROGRAM TECHNICAL BASELINE

This section contains the WBS and RAM for the PM&S Program.

C2.1 WORK BREAKDOWN STRUCTURE

The WBS charts for this program have been excluded per a waiver from the DOE-RL Office of Planning and Integration. The WBS is displayed by line number in Table C2-1 of this appendix.

C2.2 WORK BREAKDOWN STRUCTURE DICTIONARY

The WBS Dictionary is developed to the cost account level in the Part 1 - Index, Table C2-1. The complete PM&S WBS structure, including outyear activities, is displayed in an effort to portray the range of effort that these activities cover. The activities that are not part of the FY 1994 workscope are shaded to differentiate the FY efforts from the total workscope. Applicable pages of the Part I-Index are extracted for this appendix.

Table C2-2 contains the WBS Dictionary, Part II-Element Definition work sheets. Work sheets are included for PM&S activities at the MSA subproject and MSA activity WBS levels for Westinghouse Hanford and USACE directed workscope. In addition, work sheets to the cost account level are included for selected PM&S activities under the direction of the USACE and DOE-RL in lieu of cost account authorizations. While the WBS Part II-Element Definition worksheets at the subproject level may depict workscope beyond FY 1994, the worksheets included at the activity level address only FY 1994 workscope.

C2.3 RESPONSIBILITY ASSIGNMENT MATRIX

The PM&S Program RAM is shown in Table C2-3. The title, SMS and FDS WBS to the cost account level, as well as the responsible manager and DOE-RL contact, are identified.

C2.4 PROGRAM MANAGEMENT AND SUPPORT LOGIC DIAGRAM

The PM&S logic diagram, Logic Diagram C2-1, provides the logic flow for the support and program management requirements for preparation of EISs, RODs, studies and designs, and technology adaptations as these evolve.

The logic diagram, to the cost account level, depicts the various program activities, including; RA Program Management (EA11), Quality Assurance (EA21), RL/State/Tribal Government (EA31), Technology Adaptation (EA41), Laboratory Support (EA51), General Support (EA61), Drilling Updates (EA63), and D&D Program Management (EB11), and their relationships of management and support to the individual ER programs are displayed with the solid lines. The broken

lines display a path from the individual programs back to the various activities in a reiterative process improvement cycle.

Within the PM&S Program logic diagram, the fundamental elements building the paths are the previously listed activities and associated cost account activities.

The WBS charts for this program have been excluded per a waiver from the DOE-RL Office of Planning and Integration. The WBS is displayed by line number in Table C2-1 of this appendix.

Figure C2-1. Work Breakdown Structure Charts.

U. S. DEPARTMENT OF ENERGY

Table C2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
PART I - INDEX

DOE F1332.10
(11-84)

FORM APPROVED
OMB NO. 1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
720		X					Program Management and Support	1.4.10.1.3	(E)		2.3	
721			X				Program Management and Support - Remedial Actions	1.4.10.1.3.1	(EA)	EW201030	2.3.1	3400
722				X			Program Management	1.4.10.1.3.1.1	(EA1)	EW201030	2.3.1.1	3400
723					X		Program Management	1.4.10.1.3.1.1.1	(EA11)	EW2010301	2.3.1.1.01	3400
724						X	RA Program Management	1.4.10.1.3.1.1.1.1	(EA111)	EW2010301	2.3.1.1.01.1	3400
725						X	Program Control	1.4.10.1.3.1.1.1.2	(EA112)	EW2010301	2.3.1.1.01.2	3400
726						X	ER Baseline Planning and Development	1.4.10.1.3.1.1.1.3	(EA113)	EW2010301	2.3.1.1.01.3	3400
727						X	Records/Document Control	1.4.10.1.3.1.1.1.4	(EA114)	EW2010301	2.3.1.1.01.4	3400
728						X	HEIS/WIDS/GIS/IMS	1.4.10.1.3.1.1.1.6	(EA116)	EW2010301	2.3.1.1.01.6	3400
729						X	Systems Engineering Analysis/ Configuration Management Plan	1.4.10.1.3.1.1.1.7	(EA117)	EW2010301	2.3.1.1.01.7	3400
730						X	TPA/ER Public Involvement	1.4.10.1.3.1.1.1.9	(EA119)	EW2010301	2.3.1.1.01.9	3400
731						X	ERMC Transition Activity	1.4.10.1.3.1.1.1.10	(EA11A)	EW2010301	2.3.1.1.01.10	3400
732						X	TPA Support	1.4.10.1.3.1.1.1.11	(EA11B)	EW2010301	2.3.1.1.01.11	3400
733						X	JCS Assessment	1.4.10.1.3.1.1.1.12	(EA11C)	EW2010301	2.3.1.1.01.12	3400
734						X	Controller Commitment	1.4.10.1.3.1.1.1.13	(EA11D)	EW2010301	2.3.1.1.01.13	3400
734a						X	USACE/GIS Support	1.4.10.1.3.1.1.1.15	(EA11F)	EW2010301	2.3.1.1.01.15	3400
735						X	Hanford Mission Plan	1.4.10.1.3.1.1.1.17	(EA11H)	EW2010301	2.3.1.1.01.17	3400
735a						X	USACE Program Management	1.4.10.1.3.1.1.1.18	(EA11J)	EW2010301	2.3.1.1.01.18	3400
736				X			ER Program Self-Assessment and Development	1.4.10.1.3.1.2	(EA2)	EW201030	2.3.1.2	3400
737					X		Safety Analysis Support	1.4.10.1.3.1.2.1	(EA21)	EW2010301	2.3.1.2.01	3400
738						X	QA Self-Assessment Program Development	1.4.10.1.3.1.2.1.1	(EA211)	EW2010301	2.3.1.2.01.1	3400
739						X	ER Safety and Health	1.4.10.1.3.1.2.1.2	(EA212)	EW2010301	2.3.1.2.01.2	3400
740				X			RL/State/Tribal Governments	1.4.10.1.3.1.3	(EA3)	EW2010301	2.3.1.3	3400
741					X		RL/State/Tribal Governments	1.4.10.1.3.1.3.1	(EA31)	EW2010301	2.3.1.3.01	3400
742						X	State/Tribal Government Grants	1.4.10.1.3.1.3.1.1	(EA311)	EW2010301	2.3.1.3.01.1	3400
743						X	RL Contracts	1.4.10.1.3.1.3.1.2	(EA312)	EW2010301	2.3.1.3.01.2	3400
744						X	Direct Support - USACE	1.4.10.1.3.1.3.1.3	(EA313)	EW2010301	2.3.1.3.01.3	3400
745				X			Technology Adaptation	1.4.10.1.3.1.4	(EA4)	EW201030	2.3.1.4	3400
746					X		Technology Adaptation	1.4.10.1.3.1.4.1	(EA41)	EW2010301	2.3.1.4.01	3400
747						X	Baseline Technical Planning	1.4.10.1.3.1.4.1.1	(EA411)	EW2010301	2.3.1.4.01.1	3400
748						X	HRA-EIS	1.4.10.1.3.1.4.1.2	(EA412)	EW2010301	2.3.1.4.01.2	3400
749						X	In-situ Chemical Treatment	1.4.10.1.3.1.4.1.4	(EA414)	EW2010301	2.3.1.4.01.4	3400
750						X	Barrier Development	1.4.10.1.3.1.4.1.5	(EA415)	EW2010301	2.3.1.4.01.5	3400
751						X	ISV Demo - Spot Melt	1.4.10.1.3.1.4.1.7	(EA417)	EW2010301	2.3.1.4.01.7	3400
752						X	Industrial Technology Transfer	1.4.10.1.3.1.4.1.8	(EA418)	EW2010301	2.3.1.4.01.8	3400
753						X	USACE Well Head Surveying	1.4.10.1.3.1.4.1.9	(EA419)	EW2010301	2.3.1.4.01.9	3400
754						X	Technology Adaptation	1.4.10.1.3.1.4.1.10	(EA41A)	EW2010301	2.3.1.4.01.10	3400
755						X	Public Involvement/NW Citizens Forum	1.4.10.1.3.1.4.1.11	(EA41B)	EW2010301	2.3.1.4.01.11	3400
755a						X	Chem Dept. WSU Tri-Cities	1.4.10.1.3.1.4.1.13	(EA41D)	EW2010301	2.3.1.4.01.13	3400
755b						X	Supported Liquid Membrane	1.4.10.1.3.1.4.1.14	(EA41E)	EW2010301	2.3.1.4.01.14	3400
755c						X	Geophysical Logging CRADA	1.4.10.1.3.1.4.1.15	(EA41F)	EW2010301	2.3.1.4.01.15	3400

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Table C2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
PART I - INDEX

DOE F1332.10
(11-84)

FORM APPROVED
OMB NO. 1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE	7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
755d						X	PNL Columbia River Study	1.4.10.1.3.1.4.1.16 (EA41G)	EW2010301	2.3.1.4.01.16	3400
756				X			Laboratory Support	1.4.10.1.3.1.5 (EA5)	EW201030	2.3.1.5	3400
757					X		Laboratory Support	1.4.10.1.3.1.5.1 (EA51)	EW2010301	2.3.1.5.01	3400
758						X	HASM Planning/Administration	1.4.10.1.3.1.5.1.2 (EA512)	EW2010301	2.3.1.5.01.2	3400
759						X	325 Laboratory Facility Upgrades	1.4.10.1.3.1.5.1.5 (EA515)	EW2010301	2.3.1.5.01.5	3400
760						X	222-S Assessment	1.4.10.1.3.1.5.1.7 (EA517)	EW2010301	2.3.1.5.01.7	3400
761				X			Facilities, Systems, and Equipment Support	1.4.10.1.3.1.6 (EA6)	EW201030	2.3.1.6	3400
762					X		General Support	1.4.10.1.3.1.6.1 (EA61)	EW2010301	2.3.1.6.01	3400
763						X	ER General Support	1.4.10.1.3.1.6.1.1 (EA611)	EW2010301	2.3.1.6.01.1	3400
764						X	Training and Course Development	1.4.10.1.3.1.6.1.2 (EA612)	EW2010301	2.3.1.6.01.2	3400
765						X	Baseline Documentation and Procedures	1.4.10.1.3.1.6.1.3 (EA613)	EW2010301	2.3.1.6.01.3	3400
766						X	Common Facility Studies	1.4.10.1.3.1.6.1.4 (EA614)	EW2010301	2.3.1.6.01.4	3400
767						X	Suspect Waste Sites	1.4.10.1.3.1.6.1.5 (EA615)	EW2010301	2.3.1.6.01.5	3400
768						X	Sitewide Background Investigations	1.4.10.1.3.1.6.1.6 (EA616)	EW2010301	2.3.1.6.01.6	3400
769						X	Expedited Response Actions	1.4.10.1.3.1.6.1.7 (EA617)	EW2010301	2.3.1.6.01.7	3400
770					X		Site Characterization	1.4.10.1.3.1.6.2 (EA62)	EW2010301	2.3.1.6.02	3400
771						X	Field Screening Applications	1.4.10.1.3.1.6.2.1 (EA621)	EW2010301	2.3.1.6.02.1	3400
772					X		ER Drilling Support	1.4.10.1.3.1.6.3 (EA63)	EW2010301	2.3.1.6.03	3400
773						X	Drilling Equipment Support	1.4.10.1.3.1.6.3.1 (EA631)	EW2010301	2.3.1.6.03.1	3400
774						X	Purgewater Assessment	1.4.10.1.3.1.6.3.2 (EA632)	EW2010301	2.3.1.6.03.2	3400
775						X	Environmental Analytical Laboratory	1.4.10.1.3.1.6.3.3 (EA633)	EW2010301	2.3.1.6.03.3	3400
776						X	RI/FS Equipment - CENTRC	1.4.10.1.3.1.6.3.5 6EA635	EW2010301	2.3.1.6.03.5	3400
777						X	Program Management - CENTRC (HEIS)	1.4.10.1.3.1.6.3.7 6EA637	EW2010301	2.3.1.6.03.7	3400
778			X				Program Management and Support - Decontamination and Decommissioning	1.4.10.1.3.2 (EB)	EW201040	2.3.2	3410
779				X			Program Management	1.4.10.1.3.2.1 (EB1)	EW201040	2.3.2.1	3410
780					X		Program Management	1.4.10.1.3.2.1.1 (EB11)	EW2010401	2.3.2.1.01	3410
781						X	D&D Program Management	1.4.10.1.3.2.1.1.1 (EB111)	EW2010401	2.3.2.1.01.1	3410
782						X	Advanced Engineering	1.4.10.1.3.2.1.1.4 (EB114)	EW2010401	2.3.2.1.01.4	3410

**	Surveillence and Maintenance (S) is not a part of the FY 1994 work breakdown structure
◆	P3 - 1100-EM Operable Units and UC - 300 Area D&D are non-FDS work breakdown structures.
ALE	-Arid Lands Ecology (Reserve)
BOP	-balance of plant
CENTRC	-capital equipment not related to construction
CRADA	-Cooperative Research and Development Agreement
D&D	-decontamination and decommissioning
EGW	-200 East Area groundwater
ER	-environmental restoration
ERA	-expedited response actions
ERDF	-environmental restoration disposal facility
ERMC	-environmental restoration management contractor
FDS	-financial data system
JCS	-job control system
GIS	-geographic information system
HASM	-Hanford Analytical Services Management
HGP	-Hanford Generating Plant
HEIS	-Hanford Environmental Information System
HRA-EIS	-Hanford remedial actions- environmental impact statement
IMS	-information management system
ISV	-in situ vitrification
IRM	-interim response measure
LIMS	-laboratory information management system
NEPA	*-National Environmental Policy Act of 1969*
NPL	-national priorities list
NRDWL	-nonradioactive dangerous waste landfill
NW	-northwest
OU	-operable unit-(The initials-PO,BP, CP, TP, UP,ZP,RO,IU, and FF are OU designators).
PNL	-Pacific Northwest Laboratory
Pu Conc	-plutonium concentration
PUREX	-Plutonium-Uranium Extraction Plant
QA	-quality assurance
RA	-remedial actions
RARA	-radiation area remedial action
RCRA	*-Resource Conservation and Recovery Act of 1976*
REDOX	-Reduction Oxidation Plant
RI/FS	-remedial investigation/feasibility study
S&M	-surveillance and maintenance
SST	-single-shell tank
TPA	-Tri-party Agreement (*Hanford Federal Facility Agreement and Consent Order)*
UST	-underground storage tank
WIDS	-waste information data system
WHC	-Westinghouse Hanford Company
WGW	-200 West Area groundwater

U.S. DEPARTMENT OF ENERGY

Table C2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11 (11-84)

FORM APPROVED OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1 (EA)	Program Management and Support	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
721	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
Hanford Environmental Restoration Project Plan (DOE-RL 1992); *Hanford Environmental Restoration Remedial Action Quality Assurance Systems Requirements; Hanford Environmental Restoration Remedial Action Program Records Management Plan* (WHC 1991a); *Document Control Plan*	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to provide the ER RA program management, control, and support work scope consistent with ER Project plans and project management plans.

Additionally, in support of the Hanford Site ER Mission, this subproject provides funding for cost-effective program management, oversight, direction and control for safe D&D operations in accordance with applicable regulatory guides, national standards, and DOE Orders.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering and purchase services, subcontracts, site services, internal charges, information services, and other Hanford contractor support.

B. Technical Content

The PMS subproject (EA) includes the following work scope:

- Program management
- Management systems
- Quality assurance
- DOE-RL, State, and Tribal governments
- General technical support
- Laboratory upgrades
- HRA-EIS
- Facilities, systems, and equipment upgrades
- Tri-Party Agreement Support
- ERMC transition (Westinghouse Hanford portion)
- Surplus Facilities Program Plan.

U.S. DEPARTMENT OF ENERGY

Table C2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11 (11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1 (Continued) (EA)	Program Management and Support	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
721	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
Hanford Environmental Restoration Project Plan (DOE-RL 1992); *Hanford Environmental Restoration Remedial Action Quality Assurance Systems Requirements; Hanford Environmental Restoration Remedial Action Program Records Management Plan* (WHC 1991a); *Document Control Plan*	EW201030	

12. ELEMENT TASK DESCRIPTION

C. Work Statement

The following actions will be taken:

- Provide program management, planning, estimating, budgeting, and reviewing support
- Operate the records management, document control, data management, (including environmental, safety and health documentation, quality assurance, and program control systems, and produce the associated documentation
- Provide DOE-RL, State, and Tribal governments guidance and/or review support
- Complete all reference case general technology design, adaptation, and testing
- Produce the HRA EIS and all associated documentation
- Upgrade laboratory and other facilities, systems, and equipment necessary to achieve baseline milestones for the ER MSA
- Prepare and issue the Surplus Facility Program Plan
- Prepare bi-weekly highlight reports for D&D and RCRA projects
- Co-Chair regular EM-40 Interface meetings with the DOE-RL staff to review issues and accomplishments. Brief key DOE-HQ personnel on baseline changes.

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Table C2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.1.01 (EA11)	Program Management	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
723	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete the Program management, control, and support work scope consistent with the ER Project Plan and project management plans.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering and purchased services, subcontracts, site services, internal charges, and information services.

B. Technical Content

The PMS Program technical content includes the following:

- Program management including USACE/PM
- Management systems development and implementation
- Program baseline development and control
- Public involvement
- Information systems development and implementation (HEIS/WIDS/GIS and USACE/GIS Support)
- Tri-Party Agreement support
- ERMC transition
- Surplus Facilities Program Plan.

U.S. DEPARTMENT OF ENERGY

Table C2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.1.01 (Continued) (EA11)	Program Management	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
723	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

C. Work Statement

The following actions will be taken:

- Provide overall program management and direction
- Develop and implement standardized cost estimating system and related baseline development
- Publish key management plan documents (SEMP, CMP, IMSP, RMP, DCP)
- Coordinate public involvement efforts in support of past-practice activities
- Develop and implement information management system for the ER Program (HEIS, WIDS/GIS, and USACE GIS support)
- Prepare and issue the Surplus Facility Program Plan along with development of out year budget profiles for surplus facilities
- Prepare bi-weekly highlight reports for D&D and RCRA projects and submit to DOE-RL and DOE-HQ for information
- Co-Chair regular EM-40 Interface meetings with the DOE-RL staff to review issues, accomplishments and other related topics. Brief key DOE-HQ personnel on workscope, milestone and schedule changes.

U.S. DEPARTMENT OF ENERGY

Table C2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-93RL1210_
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.1.01.15 (EA11F)	USACE GIS Support	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
734a	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Provide USACE mapping and GIS support to the ER Program. The GIS development will meet requirements in the Tri-Party Agreement as GIS will be accessed by the regulators to facilitate graphical interpretation and presentation of data necessary to support site investigation, remediation, closure, and other activities pursuant to the Tri-Party Agreement. The GIS graphical nature of easy access to all HEIS data is a powerful tool needed by the observational approach for cleanup. Mapping is necessary to develop a GIS system, because all existing mapping is not compatible with GIS, Tri-Party Agreement, WAC 173-303-806, and current horizontal and vertical datums. The mapping also is necessary to support ER Program activities for assessment and remedial actions, such as the conceptual design/detailed design of the ERDF, large-scale remediation of the 100BC Area, and various ERA's. The draft DOE Order 1360.X will require development of GIS for the entire Hanford Site. The USACE is completing initial mapping/GIS development in the 1100/300 Areas.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Mapping and GIS development will conform with requirements of Tri-Party Agreement, National Map Accuracy Standards, Spacial Data Transfer Standards, Content Standards for Spacial Metadata, draft DOE Order 1360.X, and policies/procedures of the DOE-RL Spacial Data Coordination Council.

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Table C2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-93RL1210_
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.1.01.15 (Continued) (EA11F)	USACE GIS Support	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
734a	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

C. Work Statement

The following actions will be performed:

- Provide technical assistance to DOE-RL and DOE-RL contractors
- Perform topographic and geographic surveys of the Hanford Site to develop base mapping and other information requirements of GIS
- Perform project management and technical management for the mapping and GIS development
- Provide technical support for procurement, safety, and quality assurance
- Obtain M&O for USACE and USACE contractors.

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Table C2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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DOE F1332.11 (11-84)

FORM APPROVED OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-90RL12101 DE-AT06-92RL12106
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.1.01.18 (EA11J)	USACE Program Management	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
731	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
ER Project Plan and FYWP	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Provide USACE program management and program support services to the ER Program.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Provide program management and program support services per the Interagency Agreement and Tri-Party Agreement to support the ER Program.

C. Work Statement

The following actions will be performed:

- Program Management
  - General program management
  - Monthly performance reports
  - Program management plan
  - Program quality assurance plan
  - Program safety and health management plan.

- Program Support Services
  - General project management
  - Scoping activities
  - General reviews and studies
  - Program IH oversight
  - Program HP oversight
  - Quality assessment office
  - Training, Hanford Site specific
  - Cost estimating support
  - M&O.

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.2.01 (EA21)	Safety Analysis Support	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
737	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to develop quality assurance and self-assessment programs that will support achieving an effective, integrated ER Program that satisfies all applicable regulatory and DOE performance objectives. Design, develop, and maintain quality assurance and self-assessment systems that integrate the systems approach to manage ER activities.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The quality assurance technical content includes the following:

- Managing systems including the ER quality assurance system requirements, ER quality assurance management plan, ER self-assessment management plan, and computer managed database (BAM)
- Implementing procedures, training, and qualification
- Analyzing regulatory requirements, as well as environmental, safety, and health requirements
- Conducting internal self-assessments for the ER Program office.

C. Work Statement

The statement of work is the development, implementation, maintenance, and management of the technical content elements listed in B.

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Table C2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ RL	December 22, 1993	DE-AI06-90RL12074 DE-AT06-93RL1210_
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.3.01 (EA31)	RL/State/Tribal Government	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
741	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301/EW2010700	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete DOE-RL initiated activities for the ER Program.

A. Cost Content

Cost content includes the following types: Grants, interagency agreements, support services, and subcontracts.

B. Technical Content

Technical content consists of oversight by state and tribal governments, support services for program management and technical review of program activities, staff support to DOE-RL, sitewide planning, independent cost estimates, special projects, and interagency agreements for health assessment and geohydrology.

C. Work Statement

This task contains a wide variety of tasks to accomplish ER Program objectives, sitewide initiatives, and DOE-RL initiatives.

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ RL	December 22, 1993	DE-AI06-90RL12074 DE-AT06-93RL1210_
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.3.01.1 (EA311)	State/Tribal Government Grants	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
742	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to provide the State and Tribal governments with resources to complete oversight of the ER Program.

A. Cost Content

Cost content includes the following types: Grants and request for services (site contractors).

B. Technical Content

The State/Tribal government oversight technical content includes the following State and Tribal government agencies:

- Washington State Department of Ecology: Oversight of CERCLA activities including staff, access to HEIS, WIDS, HLAN, and health physics
- Nez Perce, Yakima, and Confederated Tribes of the Umatilla governments: Review of DOE 5-Year Plan and other ER Program activities.
- Oregon State: General oversight of Hanford Site activities.

C. Work Statement

Grants under this task will be negotiated. Connection of the Ecology office in Kennewick to HEIS, WIDS, and HLAN will be completed. The DOE-RL will provide health physics support to Ecology as needed.

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ RL	December 22, 1993	DE-AI06-90RL12074 DE-AT06-93RL1210_
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.3.01.2 (EA312)	RL Contracts	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
743	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task is to complete DOE-RL initiatives in support of the ER Program and sitewide planning.

A. Cost Content

Cost content includes the following types: support services, interagency agreements, subcontracts.

B. Technical Content

The technical content of this function contains the following:

- Oversight of contractor deliverables
- Management systems development and implementation
- Correspondence control
- Independent cost estimate review
- Special studies
- Health assessments
- Geohydrology report
- ERMC transition.

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ RL	December 22, 1993	DE-AI06-90RL12074 DE-AT06-93RL1210_
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.3.01.2 (Continued) (EA312)	RL Contracts	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
743	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

C. Work Statement

The following actions will be taken:

- General Support Service Contract will provide review and comment on contractor deliverables
- ERD PMP development and implementation
- Develop and implement integrated correspondence control center
- Perform an independent cost estimate review
- Continue development and implementation of the optimized baseline project
- Continue support of the Agency for Toxic Substances and Disease Registry in performing health assessments of CERCLA activities
- Continue support of the USGS study to determine geohydrologic recharge on the Hanford Site
- Develop hydrology training course in conjunction with the USGS.

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-92RL12106
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.3.01.3 (EA313)	Direct Support - USACE	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
744	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
ER Project Plan and FYWP	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Provide USACE direct support staff to the DOE-RL ERD.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Provide direct support staff to ERD to perform DOE-RL government functions in support of the ER Program. Program support services will be provided in accordance with the Interagency Agreement.

C. Work Statement

The following actions will be performed:

Program Support Services

- The USACE will provide ERD with 12 support staff for FY 1994:

  - Environmental Programs Branch (EPB)
  - Geotechnical Support Branch (GSB)
  - Environmental Remediation Branch (ERB)
  - Facility Decommissioning Branch (FDB).

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.4.01 (EA41)	Technology Adaption	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
746	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The objective of this task in FY 1994 is to focus on the continuation of the HRA-EIS activities. These efforts include tracking status on subsequent meetings and other efforts of the Hanford Site Future Use Working Group; the management of the HRA-EIS Public Involvement Plan; Westinghouse Hanford management of the HRA-EIS in the form of NEPA support; the continuation of the Technical Support Document for the HRA-EIS through initiation of technical studies and dose assessment scenarios; and, providing for NEPA integrated support to an ERMC transition team as required. Additional efforts for FY 1994 include the continuation of ER Technical Baseline Planning (i.e., EM 30/40/50 interface) Baseline Technology Plan, and the testing of the prototype permanent isolation surface barrier near the 200 West Area.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

The purpose of the RA Program is to achieve remediation of inactive dangerous, low-level, and high-level radioactive, transuranic, and mixed waste sites according to provisions agreed upon in the Tri-Party Agreement. The HRA-EIS is being prepared to evaluate alternatives for conducting this remedial action program. It is the intent of the HRA-EIS to bound the cumulative impacts associated with site-by-site remediation decisions made through the process defined in the Tri-Party Agreement.

C. Work Statement

General activity management, scoping activities, schedule preparation, and technical assessments will result in the following actions:

- Supporting development of public scoping meetings
- Supporting DOE-RL issuance of an implementation plan
- Worker dose assessments
- Archaeological and risk assessment data dictionaries
- Contaminated soil volume and waste projections
- Testing of the permanent isolation barrier prototype
- Support for NW Citizens Forum and, as required, Hanford Future Site Users Working Group.

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-92RL12105
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.4.01.9 (EA419)	USACE Well Head Surveying	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
753	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Perform USACE well head surveying of approximately 2,536 wells and boreholes on the Hanford Site to establish accurate water elevation contour maps for hydrogeological investigations. Establish new horizontal and vertical control networks. There were 500 wells surveyed in FY 1993 and approximately 1,320 wells will be surveyed in FY 1994.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Provide USACE project management and technical management of well head surveying. Perform well head surveying to new horizontal and vertical datums.

C. Work Statement

The following actions will be performed:

- Project management and technical management of well head surveying
- Provide technical support for procurement, safety, and quality assurance
- Prepare work plan for well head surveying
- Perform well head surveying and establish new horizontal and vertical control networks
- Obtain M&O for USACE and USACE contractors.

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.5.01 (EA51)	Laboratory Support	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
757	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
Laboratory Support	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

To provide administration and oversight for laboratory upgrade activities (e.g., facilities, systems, and equipment upgrades) planned for the 325 Laboratory Facility in support of RI/FS site characterization. Included in this element description is funding for HASM to conduct assessments of the commercial laboratories performing low-level sample analysis and to track and maintain the sample database. Also included is funding for 222-S Laboratory Complex maintenance, which is liquidated back to the ER program in the form of an assessment.

A. Cost Content

The cost content includes the following cost types: M&O labor, overhead, materials, equipment, purchased services, onsite contractors, internal charges, and G&A/CSP.

B. Technical Content

The technical content for laboratory support includes:

- Onsite laboratory upgrade activities required to support rigorous sample schedules supporting RI/FS site characterization efforts
- Onsite analytical laboratory facility and equipment upgrades crucial to the success of the RI/FS site characterization mission.

The 325 Laboratory Facility will be used to analyze environmental samples that are more than 10mRem but less than 100mRem. Cost accounts represented in the Laboratory Support category include the following:

- HASM planning and administration
- 325 Laboratory upgrades
- 222-S Laboratory Complex maintenance assessment.

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.5.01 (Continued) (EA51)	Laboratory Support	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
757	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
Laboratory Support	EW2010301	

12. ELEMENT TASK DESCRIPTION

C. Work Statement

The following actions will be taken:

- Continue operation of HASM
- Provide activity management support for onsite laboratory upgrade enhancements (capacity/capability) planned in the 325 Laboratory facility operated by PNL
- Prepare laboratory upgrade schedules and status of progress at the monthly laboratory team meetings
- Prepare SOW for all laboratory and equipment upgrade activities in accordance with approved schedules and procedures
- Proceed with planned (funded) analytical equipment upgrades and laboratory renovations in the 325 Laboratory Facility
- Continue to fund the 222-S Laboratory Complex maintenance assessment in FY 1994.

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.6.01 (EA61)	General Support	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
762	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
Facilities, Systems and Equipment General Support (Infrastructure)	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

To provide infrastructure (labor, materials, and contracts) to support the RI/FS characterization and remediation activities.

A. Cost Content

The cost content includes the following cost types: M&O Labor, overhead, G&A, materials, equipment, sample analysis, onsite contractors, reproduction and duplicating, and subcontracts.

B. Technical Content

The end function provides ER funding for general program support, baseline activities, and RI/FS studies that are common to the Hanford Site. Funded activities include ER personnel training and documentation, course work and lesson planning, radiation protection procedure preparation, internal surveillance, DOE audit responses, field equipment calibration, sample transportation and packaging, investigation of future suspect waste sites and data entry into WIDS; development of integrated sitewide background cleanup and performance standards for vadose and groundwater characterization and remediation, characterization of the fine soils at McGee Ranch for use in constructing multilayer closure covers (CERCLA), and advanced planning and preparation of preplanning proposals for future ERAs. Cost accounts represented in the General Support category include the following:

- General support
- Training and course development
- Baseline documents and procedures
- Common facility studies
- Suspect waste sites
- Site background investigation
- ERA projects

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.6.01 (Continued) (EA61)	General Support	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
762	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
Facilities, Systems and Equipment General Support (Infrastructure)	EW2010301	

12. ELEMENT TASK DESCRIPTION

C. Work Statement

The following actions will be taken:

- Prepare lesson plans and conduct training in accordance with approved Environmental Investigation Instructions (EIIs) for Division staff, vendors, and support organizations
- Schedule hazardous worker training
- Maintain employee field training records and exposure files
- Provide field equipment calibration and maintenance, sample transportation and packaging, DOE audit responses, radiation protection field procedure preparation, and task order administration
- Conduct internal surveillances
- Provide management and oversight support for site preparation and characterization of fine-textured soils located in the vicinity of the McGee Ranch for use in constructing multilayer closure covers (CERCLA)
- Investigate suspect waste sites
- Ensure sites are properly entered into WIDS
- Develop plans for construction and installation of five additional groundwater wells required in support of ongoing sitewide background studies
- Issue reports
- Assist DOE-RL in selecting ERA projects for submittal to Ecology and EPA
- Initiate advanced planning and preparation of preplanning proposals for future ERAs in accordance with AIP #4, dated October 18, 1990.

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.6.02 (EA62)	Characterization Upgrades	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
770	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
Facilities, Systems and Equipment General Support (Infrastructure)	EW2010301	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

To provide infrastructure (labor materials, and contracts), to support RI/FS characterization and remediation activities.

A. Cost Content

The cost content includes the following cost types: M&O labor, overhead, G&A, materials, and equipment.

B. Technical Content

This end function provides ER funding for development and field application of field screening techniques on the Hanford Site. Cost account(s) represented in the Site Characterization category include field screening.

C. Work Statement

The following actions will be taken:

- Provide ER funding for field engineering support for ongoing development of existing methods for more production-oriented tasks
- Evaluate new field screening technologies for better environmental and employee safety and protection
- Prepare an annual report on field screening developments and applications
- Provide ongoing Environmental Health and Pesticide Services.

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1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.6.03 (EA63)	ER Drilling Support	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
772	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
Facilities, Systems and Equipment Drilling Support	EW2010301/2	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

To provide support for CERCLA well drilling, well remediation, equipment, procurement acquisition, and maintenance activities in support of RI/FS characterization.

A. Cost Content

The cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, subcontracts, and onsite contractors.

B. Technical Content

This activity provides funding to support CERCLA well drilling and equipment maintenance, development and demonstration of potentially applicable drilling techniques, and coordination and planning support for the procurement and acquisition of equipment/materials and expense-funded CENRTC in support of RI/FS site characterization. Also included is the maintenance of the Westinghouse Hanford Company equipment pipeyard and ensuring WHC controlled property is properly inventoried and ready to use in CERCLA-related field investigations. In addition, program management HEIS/GIS computer upgrades and ERs share of the cost to dispose of water generated from development and sampling of groundwater wells also is included. Cost accounts represented in the Drilling Support category include the following:

- Drilling equipment support
- Purgewater treatment systems
- RI/FS equipment
- Program management/HEIS computer equipment.

U.S. DEPARTMENT OF ENERGY

Table C2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.1.6.03 (Continued) (EA63)	ER Drilling Support	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
772	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
Facilities, Systems and Equipment Drilling Support	EW2010301/2	

12. ELEMENT TASK DESCRIPTION

C. Work Statement

The following actions will be taken:

- Support well drilling and remediation
- Provide staff and maintenance support for the WHC equipment pipeyard operations
- Provide staff for coordination and planning support for CENRTC and drilling onsumables
- Provide funding for the purgewater assessment and HEIS/GIS computer upgrades
- Prepare procurement documentation for acquisition of expense-funded CENRTC in accordance with WHC-CM-8-7
- Proceed with procurement (and maintenance) of expense-funded CENRTC in support of RI/FS drilling activities.

U.S. DEPARTMENT OF ENERGY

Table C2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.2 (EB)	Program Management and Support D&D	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
778	Not applicable	Not applicable
9. APPROVED CHANGES		
Not applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW201040	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

The Hanford Site ER Mission is to transition the Hanford Site into a clean, accessible, and healthy environment which is a part of a prospering and diversified community. In support of the Hanford Site ER Mission, this subproject provides engineering support funding for safe D&D operations in accordance with applicable regulatory guides, national standards, and DOE Orders.

A. Cost Content

Cost content includes the following cost types: M&O labor, equipment, materials, engineering and purchased services, subcontracts, other Hanford Contractor support, site services, internal charges, information services, and applicable overheads.

B. Technical Content

Program management tasks include engineering support and oversight of all designated surplus facilities located on the Hanford Site in accordance with DOE Order 5820.2A. Additionally, this subproject provides funding for integration and coordination of all expense and expense-funded capital workscope required to support the accelerated D&D schedule strategy compliant to the AIP, dated March 31, 1993.

C. Work Statement

This subproject provides funding for advanced engineering oversight/support to the D&D Program. By providing trained, professional staff and management to develop fair and reasonable cost estimates and monitor costs against established budgets, workscope and negotiated milestones; this Program can achieve its primary goal to accelerate safe D&D workscope activities in support of the Hanford Site ER Mission and the AIP.

U.S. DEPARTMENT OF ENERGY

Table C2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.3.2.1.01 (EB11)	Program Management and Support D&D	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
780	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
	EW2010401	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

In support of the Hanford Site ER Mission, this activity provides funding for engineering support for safe D&D operations in accordance with applicable regulatory guides, national standards, and DOE Orders.

A. Cost Content

Cost content includes the following cost types: M&O labor, equipment, materials, engineering and purchased services, subcontracts, other Hanford Contractor support, site services, internal charges, information services and applicable overheads.

B. Technical Content

Program management tasks include engineering support and advanced engineering oversight of all designated surplus facilities located on the Hanford Site in accordance with DOE Order 5820.2A.

C. Work Statement

This activity provides funding for engineering support and advanced engineering support to the D&D program. Provide engineering support input to the SMS monthly reports, Hanford Environmental Restoration Project Plan, Annual S&M report for Retired Facilities, Hanford Site Surface Soil Radioactive Contamination Control Plan, and other documentation, as required.

Table C2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 WORK PLAN
RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE

PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
PROGRAM MANAGEMENT AND SUPPORT 2.3 [1E]							
2.3.1 EA				PROGRAM MANAGEMENT AND SUPPORT REMEDIAL ACTION	CHAMBERLAIN-DOW, C	PMS	FREEBERG, R
	2.3.1.1 EA1			PROGRAM MANAGEMENT	CHAMBERLAIN-DOW, C	PMS	FREEBERG, R
		2.3.1.1.01 EA11		PROGRAM MANAGEMENT	CHAMBERLAIN-DOW, C	PMS	WERDEL, NA
			2.3.1.1.01.1 EA111	RA PROGRAM MANAGEMENT	BLACK, JL	PMS	WERDEL, NA
			2.3.1.1.01.2 EA112	PROGRAM CONTROL	DIEDIKER, JA	EPC	WERDEL, NA
			2.3.1.1.01.3 EA113	ER BASELINE PLANNING AND DEVELOPMENT	LEWIS, PE	EPB	WERDEL, NA
			2.3.1.1.01.4 EA114	RECORDS/DOCUMENT CONTROL	RICHARDSON, RN	O/PAL	BLANCO, MP
			2.3.1.1.01.6 EA116	HEIS/WIDS/GIS/IMS	FOX, RD	EDM	BLANCO, MP
			2.3.1.1.10.7 EA117	SYS ENGIN ANALYSIS CONFIGURATION MGMT PLAN	LAUTERBACH, MJ	EES	WERDEL, NA
			2.3.1.1.01.9 EA119	TPA/ER PUBLIC INVOLVEMENT	CARLSON, AC	C/PI	WERDEL, NA
			2.3.1.1.01.10 EA11A	ERMC TRANSITION ACTIVITY	BROWN, LC	RR	WERDEL, NA
			2.3.1.1.01.11 EA11B	TPA SUPPORT	AUSTIN, BA	TPA	WERDEL, NA
			2.3.1.1.01.12 EA11C	JCS ASSESSMENT	BLACK, JL	PMS	WERDEL, NA
			2.3.1.1.01.13 EA11D	CONTROLLER COMMITMENT	DIEDIKER	EPC	WERDEL, NA
			2.3.1.1.01.15 EA11F	USACE/GIS SUPPORT	PORTER, RL	RL	WERDEL, NA
			2.3.1.1.01.17 EA11H	HANFORD MISSION PLAN	O'TOOLE, S	IP	WERDEL, NA
			2.3.1.1.01.18 EA11J	USACE PROGRAM MANAGEMENT	PORTER, RL	USACE	WERDEL, NA

Table C2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 WORK PLAN
RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE

PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
	2.3.1.2 EA2			ER PROGRAM SELF ASSESSMENT & DEVELOPMENT	COTE, RF	PSD	CHAPMAN, HL
		2.3.1.2.01 EA21		SAFETY ANALYSIS SUPPORT	BENTLEY, GE	PSD	CHAPMAN, HL
			2.3.1.2.01.1 EA211	QA SELF-ASSESSMENT PROGRAM DEVELOPMENT	BENTLEY, GE	PSD	CHAPMAN, HL
			2.3.1.2.01.1 EA212	ER SAFETY AND HEALTH	LEHRSHALL, RR	PSD	CHAPMAN, HL
	2.3.1.3 EA3			RL/STATE/ TRIBAL GOVERNMENT	WERDEL, NA	RL	WERDEL, NA
		2.3.1.3.01 EA31		RL/STATE TRIBAL GOVERNMENT	WERDEL, NA	RL	WERDEL, NA
			2.3.1.3.01.1 EA311	STATE/TRIBAL GOVERNMENT GRANTS	OATES, KJ	RL	STEWART, RK
			2.3.1.3.01.2 EA312	RL CONTRACTS	WERDEL, NA	RL	WERDEL, NA
			2.3.1.3.01.3 EA313	DIRECT SUPPORT - USACE	PORTER, RL	USACE	WERDEL, NA
	2.3.1.4 EA4			TECHNOLOGY ADAPTATION	CHAMBERLAIN-DOW, C	PMS	WERDEL, NA
		2.3.1.4.01 EA41		TECHNONLOGY ADAPTATION	CHAMBERLAIN-DOW, C	PMS	STEWART, RK
			2.3.1.4.01.1 EA411	BASELINE TECHNICAL PLANNING	KINDLE, CH	EES	STEWART, RK
			2.3.1.4.01.2 EA412	HRA-EIS	ENGELMANN, RH	ER/NP	WEISSBERG, DM
			2.3.1.4.01.4 EA414	IN-SITU CHEMICAL TREATMENT	JACKSON, RL	EES	STEWART RK
			2.3.1.4.01.5 EA415	BARRIER DEVELOPMENT	WING, RN	EES	STEWART RK
			2.3.1.4.01.7 EA417	ISV DEMO-SPOT MELT	WOOLARD, JG	EES	STEWART RK
			2.3.1.4.01.8 EA418	INDUSTRIAL TECHNOLOGY TRANSFER	KINDLE, CH	EES	STEWART RK
			2.3.1.4.01.9 EA419	USACE WELL HEAD SURVEYING	STREET, JL	USACE	WERDEL, NA
			2.3.1.4.01.10 EA41A	TECHNOLOGY ADAPTATION	KINDLE, CH	EES	STEWART, RK

Table C2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 WORK PLAN
RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE

PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
			2.3.1.4.01.11 EA41B	PUBLIC INVOLVEMENT/ NW CITIZENS FORUM	DIXON, WT	SP	WEISSBERG, DM
			2.3.1.4.01.13 EA41D	CHEM DEPARTMENT WSU TRI-CITIES	METCALF, SG	OC	STEWART, RK
			2.3.1.4.01.14 EA41E	SUPPORTED LIQUID MEMBRANE	KOEGLER, KJ	200A/REM	STEWART, RK
			2.3.1.4.01.15 EA41F	GEOPHYSICAL LOGGING CRADA	FASSETT, JW	GP	STEWART, RK
			2.3.1.4.01.16 EA41G	PNL COLUMBIA RIVER STUDY	STEWART, RK	RL	STEWART, RK
	2.3.1.5 EA5			LABORATORY SUPPORT	CHAMBERLAIN-DOW, C	RP	STEWART, RK
		2.3.1.5.01 EA51		LABORATORY SUPPORT	CHAMBERLAIN-DOW, C	RP	STEWART, RK
			2.3.1.5.01.2 EA512	HASM PLANNING/ADMINISTRATION	JOYCE, SM	O/PAL	DAY, JW
			2.3.1.5.01.5 EA515	325 LABORATORY FACILITY UPGRADES	JOYCE, SM	O/PAL	DAY, JW
			2.3.1.5.01.7 EA517	222-S ASSESSMENT	KIER, JM	O/PAL	DAY, JW
	2.3.1.6 EA6			FACILITY, SYSTEM, AND EQUIPMENT SUPPORT	CHAMBERLAIN-DOW C	RP	STEWART, RK
		2.3.1.6.01 EA61		GENERAL SUPPORT	CHAMBERLAIN-DOW, C	RP	STEWART, RK
			2.3.1.6.01.1 EA611	ER GENERAL SUPPORT	CHAMBERLAIN-DOW, C	RP	GUNION, CH
			2.3.1.6.01.2 EA612	TRAINING AND COURSE DEVELOPMENT	WOOLARD, JG	EES	CARSON, K
			2.3.1.6.01.3 EA613	BASELINE DOCUMENTATION AND PROCEDURES	ROOS, R	EERA	OATES, KJ
			2.3.1.6.01.4 EA614	COMMON FACILITY STUDIES	WOOLARD, JG	EES	???
			2.3.1.6.01.5 EA615	SUSPECT WASTE SITES	ROOS, RC	EERA	OATES, KJ
			2.3.1.6.01.6 EA616	SITEWIDE BACKGROUND INVESTIGATIONS	RUCK, FA	RCA	FOOTE, A
			2.3.1.6.01.7 EA617	EXPEDITED RESPONSE ACTIONS	JOHNSON, WL	EERA	OATES, KJ

Table C2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 WORK PLAN
RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE

PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
		2.3.1.6.02 EA62		SITE CHARACTERIZATION	CHAMBERLAIN-DOW, C	RP	STEWART, RK
			2.3.1.6.02.1 EA621	FIELD SCREENING APPLICATIONS	ROOS, RC	EERA	DAY, JW
		2.3.1.6.03 EA63		ER DRILLING SUPPORT	CHAMBERLAIN-DOW, C	RP	STEWART, RK
			2.3.1.6.03.1 EA631	DRILLING EQUIPMENT SUPPORT	MOAK, DJ	EFS	GUNION, CH
			2.3.1.6.03.2 EA632	PURGEWATER ASSESSMENT	ADAMS, MR	EE	GUNION, CH
			2.3.1.6.03.3 EA633	ENVIRONMENTAL ANALYTICAL LABORATORY	ROOS, RC	EERA	DAY, JW
2.3.1 6EA				PROGRAM MANAGEMENT AND SUPPORT REMEDIAL ACTION - CENRTC	CHAMBERLAIN-DOW, C	PMS	STEWART, RK
	2.3.1.6 6EA6			FACILITY, SYSTEM EQUIPMENT SUPPPORT - CENRTC	CHAMBERLAIN-DOW, C	PMS	STEWART, RK
		2.3.1.6.03 6EA63		ER DRILLING SUPPORT - CENRTC	CHAMBERLAIN-DOW, C	PMS	STEWART, RK
			2.3.1.6.03.5 6EA635	RI/FS EQUIPMENT - CENRTC	CHAMBERLAIN-DOW, C	PMS	GUNION, CH
			2.3.1.6.03.7 6EA637	PROGRAM MANAGEMENT CENRTC (HEIS)	CHAMBERLAIN-DOW, C	PMS	BLANCO, MP
2.3.2 EB				PROGRAM MANAGEMENT AND SUPPORT D&D	MIX, PD	DRCP	STEWART, RK
	2.3.2.1 EB1			PROGRAM MANAGEMENT	MIX, PD	DRCP	STEWART, RK
		2.3.2.1.01 EB11		PROGRAM MANAGEMENT	MIX, PD	DRCP	STEWART, RK
			2.3.2.1.01.1 EB111	D&D PROGRAM MANAGEMENT	MCCOY, SF	EPC	HARRIS, AC
			2.3.2.1.01.4 EB114	ADVANCED ENGINEERING	MORTON, MR	DS	HARRIS, AC

Table C2-3. Responsibility Assignment Matrix.

WESTINGHOUSE HANFORD RESPONSIBLE ORGANIZATION

200A/REM	200 AREA REMEDIATIONS
C/PI	COMMUNICATIONS/PUBLIC INFORMATION
DE	DECOMMISSIONING ENGINEERING
DRCP	DECOMMISSIONING AND RCRA CLOSURE PROGRAM
DS	DECOMMISSIONING SUPPORT
EA/EE	ENVIRONMENTAL ACTIONS/ENVIRONMENTAL ENGINEERING
EA/TD	ENVIRONMENTAL ACTIONS/TECHNOLOGY DEVELOPMENT
EDM	ENVIRONMENTAL DATA MANAGEMENT
EE	ENVIRONMENTAL ENGINEERING
EERA	ENVIRONMENTAL ENGINEERING REMEDIAL ACTION
EES	ENVIRONMENTAL ENGINEERING SUPPORT
EFS	ENVIRONMENTAL FIELD SERVICES
EHPS	ENVIRONMENTAL/HEALTH/PESTICIDE SERVICES
EPB	ENVIRONMENTAL PROGRAM BASELINE
EPC	ENVIRONMENTAL PROGRAM CONTROL
ER/NP	ENVIRONMENTAL RESTORATION-NEPA DOCUMENTATION
GP	GEOPHYSICS
HFO	HANFORD FIELD OPERATIONS
IF S&M	INACTIVE FACILITIES SURVEILLANCE & MAINTENANCE
IP	INTEGRATED PLANNING
O/PAL	OPERATIONS/PROCESS ANALYTICAL LABORATORIES
OC	ORGANIC CHEMICALS
PMS	PROGRAM MANAGEMENT SYSTEM
PSD	PROGRAM SELF-ASSESSMENT AND DEVELOPMENT
RCA	RCRA CLOSURE ACTIVITIES
RI/FS	REMEDIAL INVESTIGATION/FEASIBILITY STUDY
RP	REMEDIATION PROJECTS
RR	RESTORATION AND REMEDIATION
SP	SPECIAL PROJECTS
TPA	TRI-PARTY AGREEMENT

ABBREVIATIONS

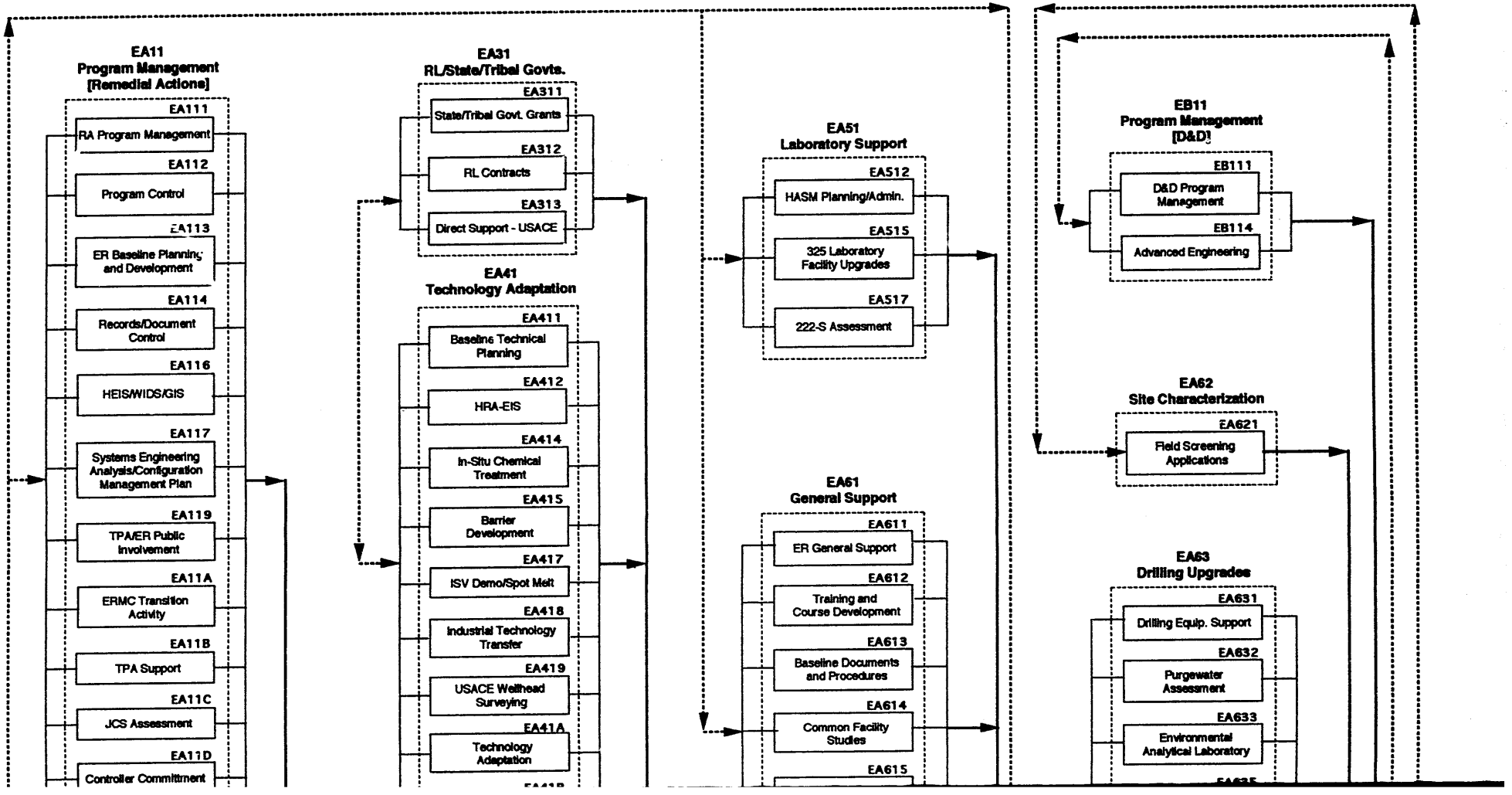
CENRTC	CAPITAL EQUIPMENT NOT RELATED TO CONSTRUCTION
D&D	DECONTAMINATION AND DECOMMISSIONING
ERMC	ENVIRONMENTAL RESTORATION MANAGEMENT CONTRACT
GIS	GEOGRAPHICAL INFORMATION SYSTEM
HEIS	HANFORD ENVIRONMENTAL INFORMATION SYSTEM
IMS	INFORMATION MANAGEMENT SYSTEM
WIDS	WASTE INFORMATION DATA SYSTEM

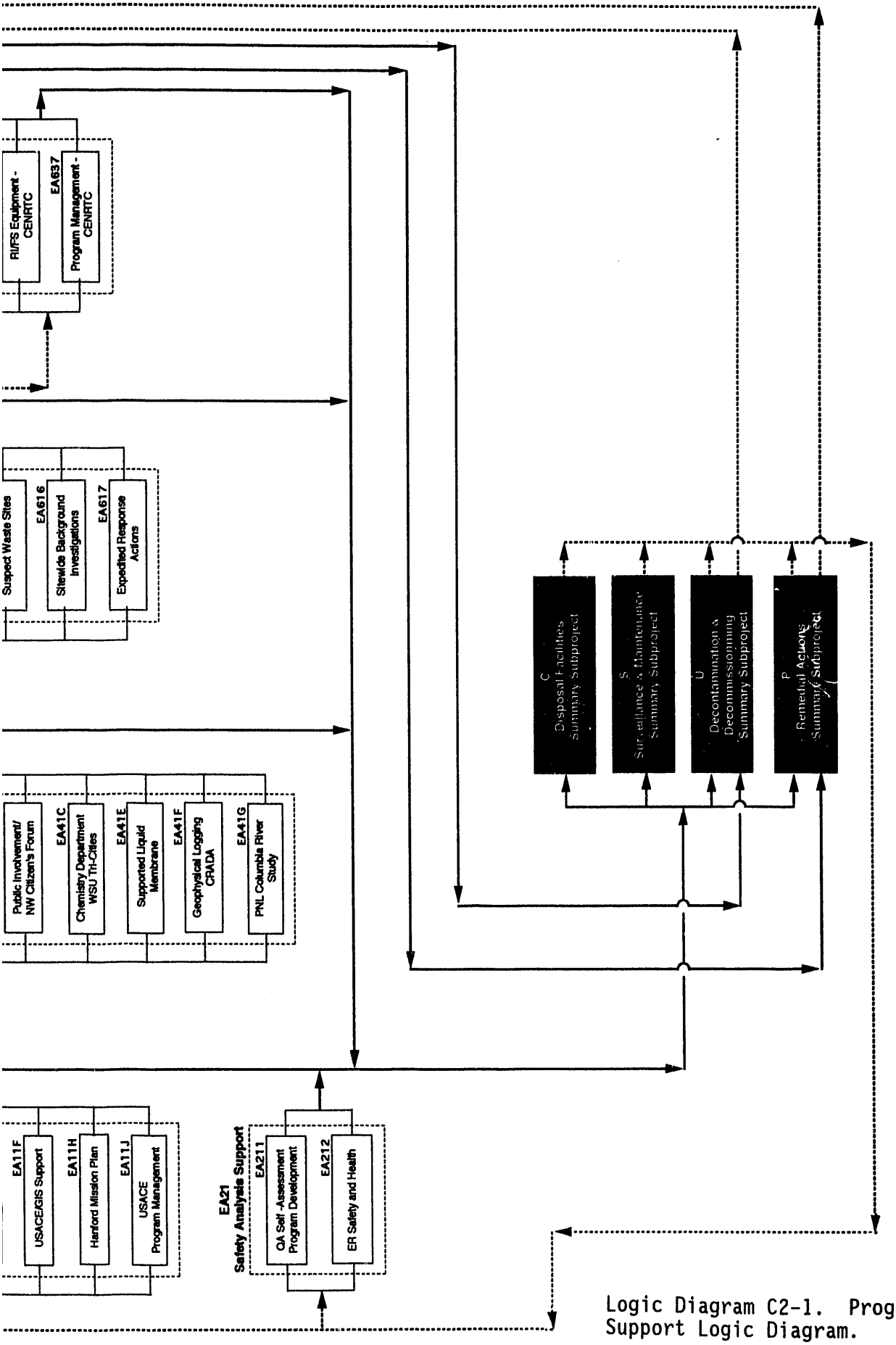
Legend

HANFORD SITE WORK BREAKDOWN STRUCTURE

2.3 Program Management & Support (E)

Other ER Program Summary Subprojects





Logic Diagram C2-1. Program Management Support Logic Diagram.

C3.0 PROGRAM SCHEDULE BASELINE

The PM&S Program schedule is depicted in Figure C3-1. The schedule depicts key activities supporting DOE-HQ, DOE-RL, and Tri-Party Agreement milestones.

3.1 MILESTONE CONTROL LOG

Table C3-1 is the MCL. The MCL lists the PM&S-specific DOE-HQ, DOE-RL, and Tri-Party Agreement milestones for FY 1994.

3.2 MILESTONE DESCRIPTION SHEETS

The MDSs are depicted in Table C3-2.

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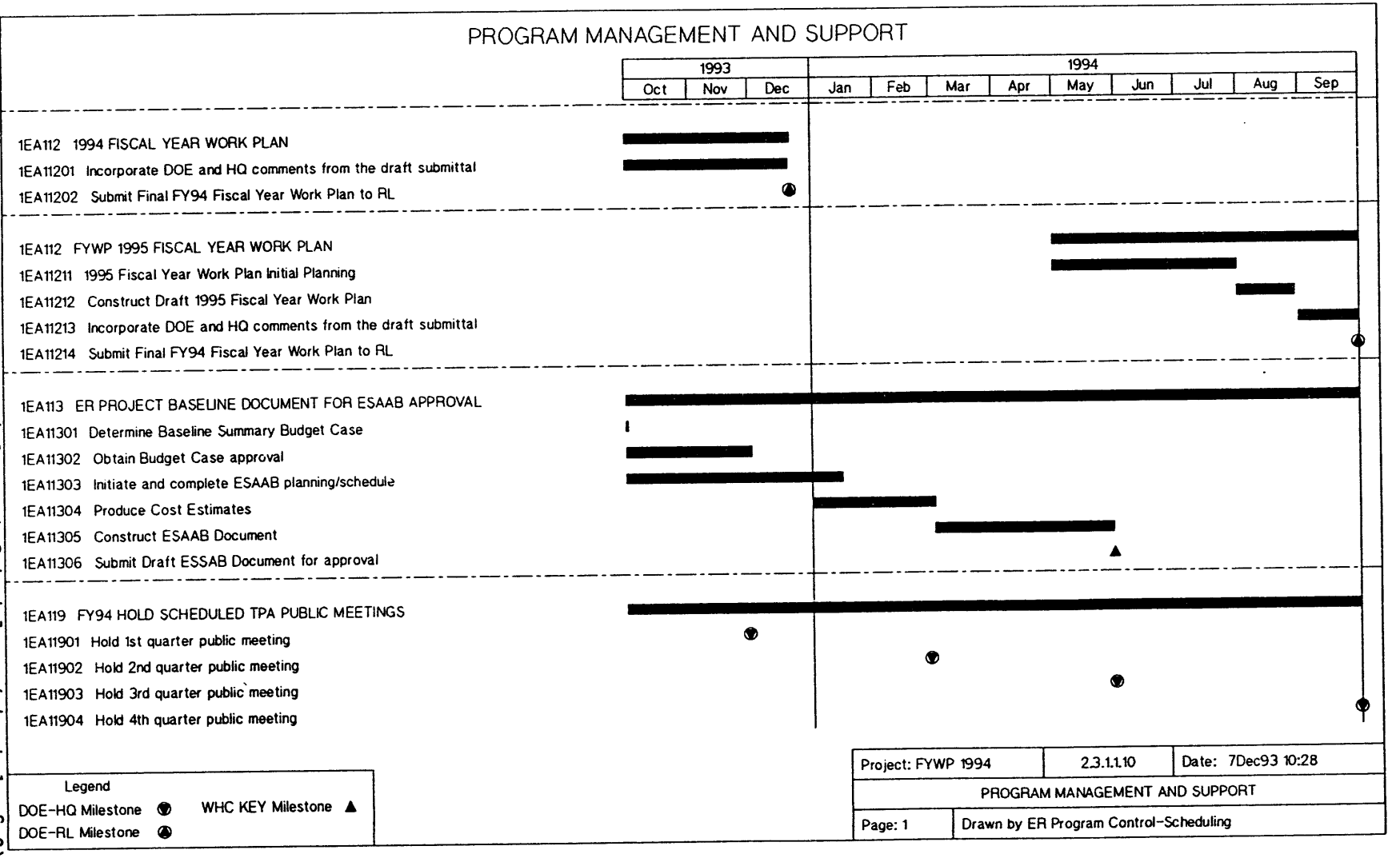

Figure C3-1. Program Management and Support Schedule. (sheet 1 of 2)

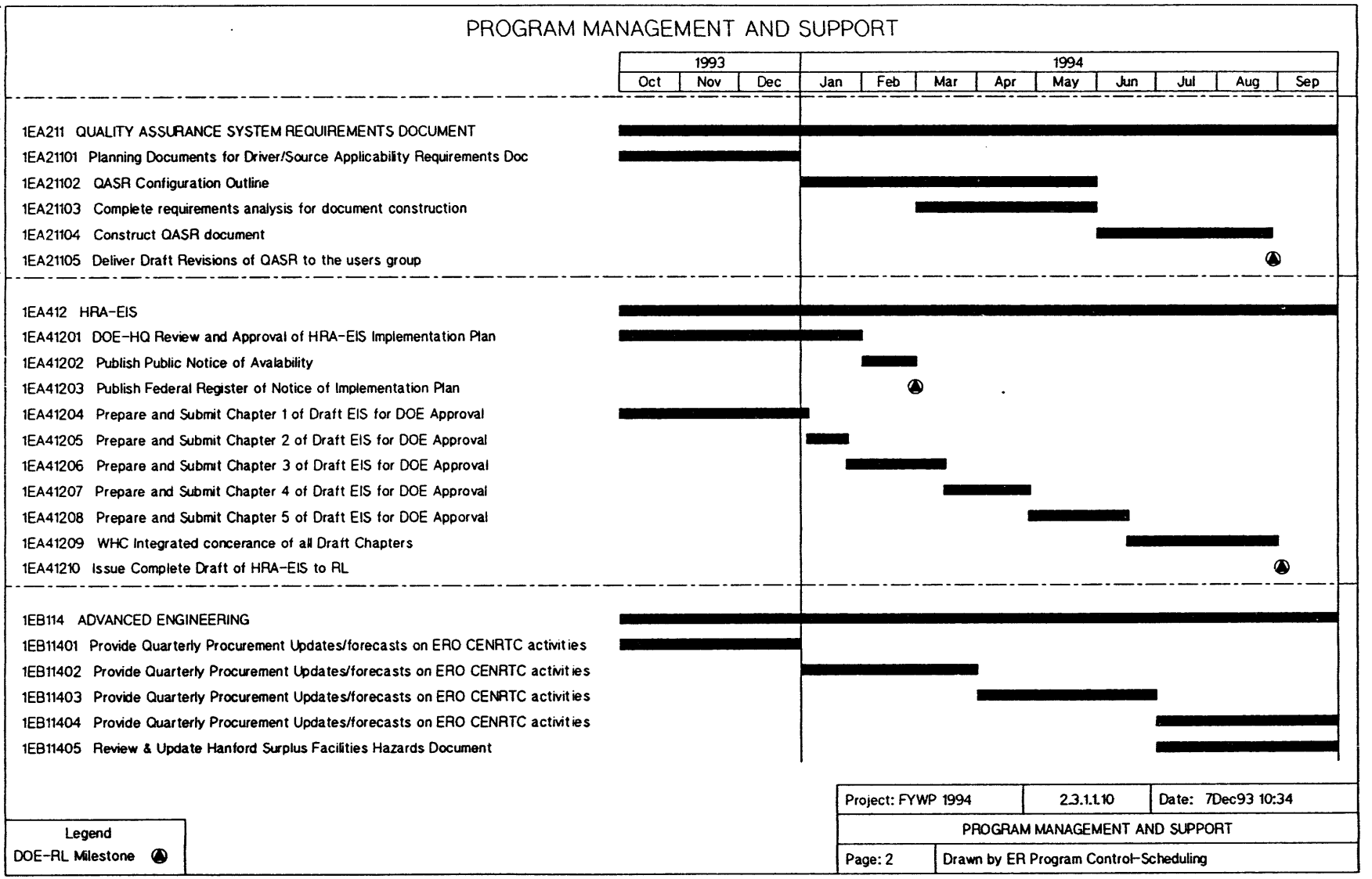

Figure C3-1. Program Management and Support Schedule. (sheet 2 of 2)

Table C3-1. Hanford Environmental Restoration Milestone Control Log.

Hanford Environmental Restoration Program Management Support

TYPE	Milestone ID	RL WBS	WHC WBS	Milestone description	Original baseline due date	CIN change authority	Baseline revision date
RL	1EA-94-001	2.3.1.1.01.1	1EA111	COMPLETE ANNUAL (FY94) UPDATE TO THE SURPLUS FACILITIES PROGRAM PLAN	30SEP94		
RL	1EA-94-002	2.3.1.1.01.2	1EA112	ISSUE FINAL FISCAL YEAR 1994 WORK PLAN TO RL	09/30/93	EEA-E93-071	12/22/93
RL	1EA-94-003	2.3.1.1.01.2	1EA112	SUBMIT DRAFT FISCAL YEAR 1995 WORK PLAN TO RL	08/26/94		
RL	1EA-94-004	2.3.1.1.01.2	1EA112	ISSUE FINAL FISCAL YEAR 1995 WORK PLAN TO RL	09/26/94		
KEY	1EA-94-005	2.3.1.1.01.3	1EA113	ENVIRONMENTAL RESTORATION PROJECT BASELINE DOCUMENT FOR ESAAB APPROVAL	03/03/94		
HQ	1EA-94-006	2.3.1.1.01.9	1EA119	FY94 HOLD SCHEDULED TPA PUBLIC MEETINGS	09/30/94		
RL	1EA-94-007	2.3.1.1.01.16	1EA11H	TRANSMIT DRAFT FY 1994 HMP VOL 2 INTEGRATION ANALYSIS TO RL	11/29/93		
RL	1EA-94-008	2.3.1.1.01.16	1EA11H	COMPLETE FY 1994 HMP VOL 2 INTEGRATION ANALYSIS	12/31/93		
RL	1EA-94-009	2.3.1.1.01.16	1EA11H	COMPLETE HANFORD STRATEGIC ANALYSIS	01/31/94		
RL	1EA-94-0010	2.3.1.1.01.16	1EA11H	TRANSMIT DRAFT FY 1995 HMP VOL 1, SITE GUIDANCE TO RL	02/16/94		
RL	1EA-94-011	2.3.1.1.01.16	1EA11H	COMPLETE FY 1995 HMP VOL 1, SITE GUIDANCE	03/31/94		
KEY	1EA-94-012	2.3.1.1.01.16	1EA11H	TRANSMIT DRAFT FY 1995 HMP VOL 2, PROGRAM INTEGRATION TO RL	08/19/94		
RL	1EA-94-013	2.3.1.1.01.16	1EA11H	COMPLETE HANFORD STRATEGIC ANALYSIS ADDENDUM	09/30/94		
RL	1EA-94-014	2.3.1.2.01.1	1EA211	DELIVERY OF DRAFT REVISIONS OF DOE/RL 90-28, (QASR) DOCUMENT TO THE USERS GROUP	08/29/94		
RL	1EA-94-015	2.3.1.4.01.2	1EA412	PUBLISH FEDERAL REGISTER NOTICE OF IMPLEMENTATION PLAN	02/28/94		
RL	1EA-94-016	2.3.1.4.01.2	1EA412	ISSUE DRAFT HRA-EIS TO RL	09/02/94		
RL	1EB-94-001	2.3.2.1.01.4	1EB114	REVIEW AND UPDATE THE HANFORD SURPLUS FACILITIES HAZARDS IDENTIFICATION DOCUMENT	09/30/94		
RL	1EB-94-002	2.3.2.1.01.4	1EB114	PROVIDE PROCUREMENT PLAN UPDATES/FORECASTS ON ALL ERO CENRTC ACTIVITIES	QUARTERLY 09/30/94		

Table C3-2. Milestone Description Sheets.

TITLE:	COMPLETE ANNUAL (FY94) UPDATE TO THE SURPLUS FACILITIES PROGRAM PLAN				
MILESTONE ID #:	1EA-94-001	**TYPE:**	RL		
DUE DATE:	09/30/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER PROGRAM MANAGEMENT AND SUPPORT				
RL WBS:	2.3.1.1.01.1	**FY94 WHC WBS:**	1EA111		
DELIVERABLE:	SUBMISSION OF THE ANNUAL (FY94) UPDATE TO THE SURPLUS FACILITIES PROGRAM PLAN TO RL CONSTITUTES COMPLETION OF THIS RL MILESTONE				
ACTIVITY ENGINEER:	P.D. MIX	**COST ACCOUNT MGR:**	J.L. BLACK		
DOE MONITOR:	N.A. WERDEL				

TITLE:	ISSUE FINAL FISCAL YEAR 1994 WORK PLAN TO RL				
MILESTONE ID #:	1EA-94-002	**TYPE:**	RL		
DUE DATE:	09/30/93	**REVISION DATE:**	12/22/93	**CIN:**	EEA-E93-071
ASSIGNEE:	HANFORD ER PROGRAM MANAGEMENT AND SUPPORT				
RL WBS:	2.3.1.1.01.2	**FY94 WHC WBS:**	1EA112		
DELIVERABLE:	SUBMISSION OF THE FINAL FY94 FISCAL YEAR WORK PLAN TO RL CONSTITUTES COMPLETION OF THIS RL MILESTONE.				
ACTIVITY ENGINEER:	J.L. BLACK	**COST ACCOUNT MGR:**	J.A. DIEDIKER		
DOE MONITOR:	N.A. WERDEL				

TITLE:	SUBMIT DRAFT FISCAL YEAR 1995 WORK PLAN TO RL				
MILESTONE ID #:	1EA-94-003	**TYPE:**	RL		
DUE DATE:	08/26/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER PROGRAM MANAGEMENT AND SUPPORT				
RL WBS:	2.3.1.1.01.2	**FY94 WHC WBS:**	1EA112		
DELIVERABLE:	SUBMISSION OF THE DRAFT FY95 FISCAL YEAR WORK PLAN TO RL CONSTITUTES COMPLETION OF THIS RL MILESTONE.				
ACTIVITY ENGINEER:	J.L. BLACK	**COST ACCOUNT MGR:**	J.A. DIEDIKER		
DOE MONITOR:	N.A. WERDEL				

Table C3-2. Milestone Description Sheets.

TITLE:	ISSUE FINAL FISCAL YEAR 1995 WORK PLAN TO RL				
MILESTONE ID #:	1EA-94-004	**TYPE:**	RL		
DUE DATE:	09/26/94	**REVISION DATED:**		**CIN:**	
ASSIGNEE:	HANFORD ER PROGRAM MANAGEMENT AND SUPPORT				
RL WBS:	2.3.1.1.01.2	**FY94 WHC WBS:**	1EA112		
DELIVERABLE:	SUBMISSION OF THE FINAL FY95 FISCAL YEAR WORK PLAN TO RL CONSTITUTES COMPLETION OF THIS RL MILESTONE.				
ACTIVITY ENGINEER:	J.L. BLACK	**COST ACCOUNT MGR:**	J.A. DIEDIKER		
DOE MONITOR:	N.A. WERDEL				

TITLE:	SUBMIT DRAFT FY94 MULTI-YEAR PROGRAM PLAN FORMAL DRAFT TO RL				
MILESTONE ID #:	1EA-94-005	**TYPE:**	RL		
DUE DATE:	05/31/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER PROGRAM MANAGEMENT AND SUPPORT				
RL WBS:	2.3.1.1.01.3	**FY94 WHC WBS:**	1EA113		
DELIVERABLE:	SUBMISSION OF THE DRAFT FY94 MULTI-YEAR PROGRAM PLAN TO RL CONSTITUTES COMPLETION OF THIS RL MILESTONE.				
ACTIVITY ENGINEER:	J.L. BLACK	**COST ACCOUNT MGR:**	P.E. LEWIS		
DOE MONITOR:	N.A. WERDEL				

TITLE:	FY94 HOLD SCHEDULED TPA PUBLIC MEETINGS				
MILESTONE ID #:	1EA-94-006	**TYPE:**	HQ		
DUE DATE:	09/30/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER PROGRAM MANAGEMENT AND SUPPORT				
RL WBS:	2.3.1.1.01.9	**FY94 WHC WBS:**	1EA119		
DELIVERABLE:	COMPLETION OF THE LAST SCHEDULED QUARTERLY TPA MEETING CONSTITUTES COMPLETION OF THIS HQ MILESTONE.				
ACTIVITY ENGINEER:	J.L. BLACK	**COST ACCOUNT MGR:**	P.E. LEWIS		
DOE MONITOR:	N.A. WERDEL				

Table C3-2. Milestone Description Sheets.

TITLE:	TRANSMIT DRAFT FY 1994 HMP VOL 2 INTEGRATED ANALYSIS TO RL		
MILESTONE ID #:	1EA-94-007	**TYPE:**	RL
DUE DATE:	11/29/93	**REVISION DATE:**	**CIN:**
ASSIGNEE:	HANFORD ER PROGRAM MANAGEMENT AND SUPPORT		
RL WBS:	2.3.1.1.01.16	**FY94 WHC WBS:**	1EA11H
DELIVERABLE:	TRANSMITTAL OF THE DRAFT FY 1994 HMP VOL 2 INTEGRATED ANALYSIS TO RL CONSTITUTES COMPLETION OF THIS RL MILESTONE.		
ACTIVITY ENGINEER:	J.L. BLACK	**COST ACCOUNT MGR:**	S.M. O'TOOLE
DOE MONITOR:	N.A. WERDEL		

TITLE:	COMPLETE FY 1994 HMP VOL 2 INTEGRATED ANALYSIS		
MILESTONE ID #:	1EA-94-008	**TYPE:**	RL
DUE DATE:	12/31/93	**REVISION DATE:**	**CIN:**
ASSIGNEE:	HANFORD ER PROGRAM MANAGEMENT AND SUPPORT		
RL WBS:	2.3.1.1.01.16	**FY94 WHC WBS:**	1EA11H
DELIVERABLE:	COMPLETION OF THE FY 1994 HANFORD MISSION PLAN VOL 2 INTEGRATED ANALYSIS CONSTITUTES COMPLETION OF THIS RL MILESTONE.		
ACTIVITY ENGINEER:	J.L. BLACK	**COST ACCOUNT MGR:**	S.M. O'TOOLE
DOE MONITOR:	N.A. WERDEL		

TITLE:	COMPLETE HANFORD STRATEGIC ANALYSIS		
MILESTONE ID #:	1EA-94-009	**TYPE:**	RL
DUE DATE:	01/31/94	**REVISION DATE:**	**CIN:**
ASSIGNEE:	HANFORD ER PROGRAM MANAGEMENT AND SUPPORT		
RL WBS:	2.3.1.1.01.16	**FY94 WHC WBS:**	1EA11H
DELIVERABLE:	COMPLETION OF THE STRATEGIC ANALYSIS CONSTITUTES COMPLETION OF THIS RL MILESTONE.		
ACTIVITY ENGINEER:	J.L. BLACK	**COST ACCOUNT MGR:**	S.M. O'TOOLE
DOE MONITOR:	N.A. WERDEL		

Table C3-2. Milestone Description Sheets.

TITLE:	TRANSMIT DRAFT FY 1995 HMP VOL 1, SITE GUIDANCE TO RL				
MILESTONE ID #:	1EA-94-010	**TYPE:**	RL		
DUE DATE:	02/16/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER PROGRAM MANAGEMENT AND SUPPORT				
RL WBS:	2.3.1.1.01.16	**FY94 WHC WBS:**	1EA11H		
DELIVERABLE:	TRANSMITTAL OF THE DRAFT FY 1995 HANFORD MISSION PLAN VOL 1, SITE GUIDANCE CONSTITUTES COMPLETION OF THIS RL MILESTONE.				
ACTIVITY ENGINEER:	J.L. BLACK	**COST ACCOUNT MGR:**	S.M. O'TOOLE		
DOE MONITOR:	N.A. WERDEL				

TITLE:	COMPLETE FY 1995 HMP VOL 1, SITE GUIDANCE				
MILESTONE ID #:	1EA-94-011	**TYPE:**	RL		
DUE DATE:	03/31/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER PROGRAM MANAGEMENT AND SUPPORT				
RL WBS:	2.3.1.1.01.16	**FY94 WHC WBS:**	1EA11H		
DELIVERABLE:	COMPLETION OF THE FY 1995 HANFORD MISSION PLAN VOL 1, SITE GUIDANCE CONSTITUTES COMPLETION OF THIS RL MILESTONE.				
ACTIVITY ENGINEER:	J.L. BLACK	**COST ACCOUNT MGR:**	S.M. O'TOOLE		
DOE MONITOR:	N.A. WERDEL				

TITLE:	TRANSMIT DRAFT FY 1995 HMP VOL 2, PROGRAM INTEGRATION TO RL				
MILESTONE ID #:	1EA-94-012	**TYPE:**	KEY		
DUE DATE:	08/19/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER PROGRAM MANAGEMENT AND SUPPORT				
RL WBS:	2.3.1.1.01.16	**FY94 WHC WBS:**	1EA11H		
DELIVERABLE:	TRANSMITTAL OF THE DRAFT FY 1995 HANFORD MISSION PLAN VOL 2, PROGRAM INTEGRATION TO RL CONSTITUTES COMPLETION OF THIS WHC KEY MILESTONE.				
ACTIVITY ENGINEER:	J.L. BLACK	**COST ACCOUNT MGR:**	S.M. O'TOOLE		
DOE MONITOR:	N.A. WERDEL				

Table C3-2. Milestone Description Sheets.

TITLE:	COMPLETE HANFORD STRATEGIC ANALYSIS ADDENDUM				
MILESTONE ID #:	1EA-94-013	**TYPE:**	RL		
DUE DATE:	09/30/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER PROGRAM MANAGEMENT AND SUPPORT				
RL WBS:	2.3.1.1.01.16	**FY94 WHC WBS:**	1EA11H		
DELIVERABLE:	COMPLETION OF THE HANFORD STRATEGIC ANALYSIS ADDENDUM CONSTITUTES COMPLETION OF THIS RL MILESTONE.				
ACTIVITY ENGINEER:	J.L. BLACK	**COST ACCOUNT MGR:**	S.M. O'TOOLE		
DOE MONITOR:	N.A. WERDEL				

TITLE:	DELIVERY OF DRAFT REVISIONS OF DOE/RL 90-28, (QASR) DOCUMENT TO THE USERS GROUP				
MILESTONE ID #:	1EA-94-014	**TYPE:**	RL		
DUE DATE:	08/29/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER PROGRAM MANAGEMENT AND SUPPORT				
RL WBS:	2.3.1.2.01.1	**FY94 WHC WBS:**	1EA211		
DELIVERABLE:	DELIVERY OF THE DRAFT REVISIONS (QASR) TO THE USERS GROUP CONSTITUTES COMPLETION OF THIS RL MILESTONE.				
ACTIVITY ENGINEER:	G. BENTLEY	**COST ACCOUNT MGR:**	G. BENTLEY		
DOE MONITOR:	D.C. SMITH				

TITLE:	PUBLISH FEDERAL REGISTER NOTICE OF IMPLEMENTATION PLAN				
MILESTONE ID #:	1EA-94-015	**TYPE:**	RL		
DUE DATE:	02/28/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER PROGRAM MANAGEMENT AND SUPPORT				
RL WBS:	2.3.1.4.01.2	**FY94 WHC WBS:**	1EA412		
DELIVERABLE:	PUBLISHING THE FEDERAL REGISTER NOTICE CONSTITUTES COMPLETION OF THIS RL MILESTONE.				
ACTIVITY ENGINEER:	R.W. HOOKFIN	**COST ACCOUNT MGR:**	R.H. ENGELMANN		
DOE MONITOR:	S. WEISSBERG				

Table C3-2. Milestone Description Sheets.

TITLE:	ISSUE DRAFT HRA-EIS TO RL				
MILESTONE ID #:	1EA-94-016	**TYPE:**	RL		
DUE DATE:	09/02/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER PROGRAM MANAGEMENT AND SUPPORT				
RL WBS:	2.3.1.4.01.2	**FY94 WHC WBS:**	1EA412		
DELIVERABLE:	SUBMISSION OF THE DRAFT PRELIMINARY HRA-EIS TO RL CONSTITUTES COMPLETION OF THIS RL MILESTONE.				
ACTIVITY ENGINEER:	R.W. HOOKFIN	**COST ACCOUNT MGR:**	R.H. ENGELMANN		
DOE MONITOR:	S. WEISSBERG				

TITLE:	REVIEW AND UPDATE THE HANFORD SURPLUS FACILITIES HAZARDS IDENTIFICATION DOCUMENT				
MILESTONE ID #:	1EB-94-001	**TYPE:**	RL		
DUE DATE:	09/30/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER PROGRAM MANAGEMENT AND SUPPORT				
RL WBS:	2.3.2.1.01.4	**FY94 WHC WBS:**	1EB114		
DELIVERABLE:	SUBMISSION OF THE UPDATED HANFORD SURPLUS FACILITIES HAZARDS IDENTIFICATION DOCUMENT TO RL CONSTITUTES COMPLETION OF THIS RL MILESTONE.				
ACTIVITY ENGINEER:	P.D. MIX	**COST ACCOUNT MGR:**	S.F. MCCOY		
DOE MONITOR:	A.C. HARRIS				

TITLE:	PROVIDE PROCUREMENT PLAN UPDATES/FORECASTS ON ALL ERO CENRTC ACTIVITIES				
MILESTONE ID #:	1EB-94-002	**TYPE:**	RL		
DUE DATE:	09/30/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER PROGRAM MANAGEMENT AND SUPPORT				
RL WBS:	2.3.2.1.01.4	**FY94 WHC WBS:**	1EB114		
DELIVERABLE:	SUBMISSION OF THE QUARTERLY PROCUREMENT PLAN UPDATES/FORECASTS TO WHC PROCUREMENT ON ALL ERO CENRTC ACTIVITIES CONSTITUTES COMPLETION OF THIS RL MILESTONE.				
ACTIVITY ENGINEER:	P.D. MIX	**COST ACCOUNT MGR:**	S.F. MCCOY		
DOE MONITOR:	A.C. HARRIS				

C4.0 PROGRAM COST BASELINE

Table C4-1 presents the PM&S Program funding deviations between the FYWP funding and the baseline. Section C1.5 contains the specific narrative for these deviations.

The total ER Program funding deviation between the FYWP and the baseline are summarized in Table 4-3 of the Mission Section of this document.

Indentation in Title Column displays the "roll-up" function within the program and provides line item identification.

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Table C4-1. Hanford Site Environmental Restoration Program Fiscal Year 1994 Work Plan Versus Baseline Funding ($000).

			FY 1994 ($000)		
ADS #	WBS	Title	FWYP	Baseline	Change
3400	EA1	Program Management RA	$16,913	$18,953	($2,040)
3400	EA2	ER Program Self-Assessment and Development	$3,250	$3,211	$39
3400	EA3	RL/State/Tribal Governments	$14,366	$10,924	$3,442
3400	EA4	Technology Adaptations	$12,435	$13,023	($588)
3400	EA5	Laboratory Support	$4,824	$5,588	($764)
3400	EA6	Facilities, Systems, and Equipment Support	$18,605	$17,461	$1,144
3400	EA	Program Management and Support RA	$70,393	$69,160	$1,233
3410	EB	Program Management and Support D&D	$1,125	$2,179	($1,054)
	E	Program Management and Support	$71,518	$71,339	$179

ADS# = activity data sheet number
D&D = decontamination and decommissioning
ER = environmental restoration
FY = fiscal year
FYWP = fiscal year work plan
RA = remedial actions
RL = U.S. Department of Energy, Richland Operations Office
WBS = work breakdown structure

C5.0 PROGRAM FUNDING BASELINE

The PM&S Program funding is displayed in Table C5-1 at the activity level and summarized to the total PM&S Program funding by major participant. The summarized ER program funding requirements are included in the Mission Section of this document.

Indentation in Title Column displays the "roll-up" function within the program and provides line item identification.

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Table C5-1. Environmental Restoration Program Fiscal Year 1994 Funding Baseline Mission Summary ($000).

			FYWP 1994 ($000)			
ADS #	WBS	Title	WHC	USACE	RL	Total
3400	EA1	Program Management RA	$15,467	$1,446	$0	$16,913
3400	EA2	ER Program Self-Assessment and Development	$3,250	$0	$0	$3,250
3400	EA3	RL/State/Tribal Governments	$0	$1,874	$12,492	$14,366
3400	EA4	Technology Adaptations	$7,601	$1,664	$3,170	$12,435
3400	EA5	Laboratory Support	$4,824	$0	$0	$4,824
3400	EA61	General Support	$7,311	$0	$0	$7,311
3400	EA62	Site Characterization	$769	$0	$0	$769
3400	EA63	ER Drilling Support	$10,525	$0	$0	$10,525
3400	EA6	Facilities, Systems, and Equipment Support	$18,605	$0	$0	$18,605
3400	EA	Program Management and Support RA	$49,747	$4,984	$15,662	$70,393
3410	EB1	Program Management D&D	$1,125	$0	$0	$1,125
3410	EB	Program Management and Support D&D	$1,125	$0	$0	$1,125
	E	Program Management and Support	$50,872	$4,984	$15,662	$71,518

ADS# = activity data sheet number
D&D = decontamination and decommissioning
ER = environmental restoration
FYWP = fiscal year work plan
RA = remedial actions
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

C6.0 PROGRAM STAFFING BASELINE

The PM&S Program staffing baseline FTEs are presented in Table C6-1. The FTEs are displayed by activity level and summarized to the total PM&S Program FTE requirement. The summarized ER Program FTE requirements are included in the Mission Section of this document.

Indentation in Title Column displays the "roll-up" function within the program and provides line item identification.

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Table C6-1. Environmental Restoration Remedial Action Program Fiscal Year 1994 Work Force Full-Time Equivalents.

			FYWP 1994 FTEs			
ADS #	WBS	Title	WHC	USACE	RL	Total
3400	EA1	Program Management RA	93.1	9.4	0.0	102.5
3400	EA2	ER Program Self-Assessment and Development	7.2	0.0	0.0	7.2
3400	EA3	RL/State/Tribal Governments	0.0	16.0	0.0	16.0
3400	EA4	Technology Adaptations	15.2	14.0	0.0	29.2
3400	EA5	Laboratory Support	8.8	0.0	0.0	8.8
3400	EA61	General Support	37.6	0.0	0.0	37.6
3400	EA62	Site Characterization	2.9	0.0	0.0	2.9
3400	EA63	ER Drilling Support	20.8	0.0	0.0	20.8
3400	EA6	Facilities, Systems, and Equipment Support	61.3	0.0	0.0	61.3
3400	EA	Program Management and Support RA	185.6	39.4	0.0	225.0
3410	EB1	Program Management D&D	11.4	0.0	0.0	11.4
3410	EB	Program Management and Support D&D	11.4	0.0	0.0	11.4
	E	Program Management and Support	197.0	39.4	0.0	236.4

ADS# = activity data sheet number
D&D = decontamination and decommissioning
ER = environmental restoration
FTE = full-time equivalent
FYWP = fiscal year work plan
RA = remedial actions
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

C7.0 PROGRAM WORKSCOPE CARRYOVER

Carryover information will be provided on approval of the Class I change request documenting carryover workscope, milestones, and funds.

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C8.0 REFERENCES

Agreement in Principle (Tentative) dated October 1993, "Pacific Northwest Laboratory Columbia River Study", Washington State Department of Ecology, U.S. Environmental Protection Agency, U.S. Department of Energy, Richland Operations Office.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 USC 9601 et seq.

DOE Order 5820.2A, *Radioactive Waste Management*.

DOE-RL, 1993, "Guidance for Fiscal Year (FY) 1994 Environmental Restoration (ER) Program Unfunded Activities", letter 94-EPB-001, Mr. Freeberg to Mr. Anderson, dated October 22, 1993.

Ecology, EPA, and DOE, 1992, *Hanford Federal Facility Agreement and Consent Order*, 2 vols., Washington State Department of Ecology, U.S. Environmental Protection Agency, and U.S. Department of Energy, Olympia, Washington.

General Support Services Contract, Request for Proposal No. DE-RP06-92RL12434.

Resource Conservation and Recovery Act of 1976, 42 USC 6901 et seq.

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APPENDIX D

SURVEILLANCE AND MAINTENANCE

The Surveillance and Maintenance Program is not a part of the FY 1994 workscope.

No Hanford Site environmental restoration postclosure or postremediation workscope is scheduled through FY 1998.

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APPENDIX E

DISPOSAL FACILITIES

APPENDIX E

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GLOSSARY

AAMS	aggregate area management study
AAP	affirmative action plan
ACM	asbestos containing material
Admin	Administration
ADS	activity data sheet
AIP	agreement in principal
AIU	agreement in understanding
ALE	Arid Lands Ecology (Reserve)
ARAR	applicable or relevant and appropriate requirements
ASI	Advanced Sciences, Incorporated
ATSDR	Agency for Toxic Substances and Disease Registry
BAM	baseline analysis matrix
BDAT	best demonstrated available technology
BOP	balance of plant
CAMU	corrective action management unit
CDR	conceptual design report
CERCLA	*Comprehensive Environmental Response, Compensation, and Liability Act of 1980*
CFR	Code of Federal Regulations
CLP	contract laboratory program
CMP	configuration management plan
CRADA	Cooperative Research and Development Agreement
CY	calendar year
D&D	decontamination and decommissioning
DCP	document control plan
DF	disposal facilities
DOE	U.S. Department of Energy
DOE-HQ	U.S. Department of Energy, Headquarters
DOE-RL	U.S. Department of Energy, Richland Operations Office
DOW	description of work
Ecology	Washington State Department of Ecology
EE/CA	engineering evaluation/cost analysis
EGW	200 East Area groundwater
EII	environmental investigation instruction
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
equip	equipment
ER	environmental restoration
ERA	expedited response action
ERB	engineering review board
ERDF	Environmental Restoration Disposal Facility
ERMC	environmental restoration management contractor
ERO	environmental restoration operations
ERPO	environmental restoration program office
ERSDF	environmental restoration storage and disposal facility

GLOSSARY (cont)

FDB	functional design basis
FDC	functional design criteria
FDS	financial data system
FEMP	facility effluent monitoring plan(s)
FFS	focused feasibility study
FS	feasibility study
FSPRD	Final Surplus Production Reactor Decommissioning
FTE	full-time equivalent
FY	fiscal year
FYP	fiscal year plan
FYWP	fiscal year work plan
G&A	general and administrative
GAO	General Accounting Office
GIS	geographic information system
govt	government
HASM	Hanford Analytical Services Management
HEIS	Hanford Environmental Information System
HGP	Hanford Generating Plant
HEHF	Hanford Environmental Health Facility
HLAN	Hanford Local Area Network
HRA	Hanford remedial action
HSAAP	Hanford Site Asbestos Abatement Program
IMS	information management system
IMSP	information management system plan
IROD	interim record of decision
IRM	interim response measure
ISV	in-situ vitrification
JCS	job control system
KEH	Kaiser Engineers Hanford Company
lab	laboratory
LDR	land disposal restrictions
LFI	limited field investigation
LIMS	laboratory information management system
LRPP	long-range planning program
M&O	maintenance and operations
MCL	milestone control log
MDS	milestone description sheets
mgmt	management

GLOSSARY (cont)

MOU	memorandum of understanding
MSA	major system acquisition
MYPP	multi-year program plan
NEPA	*National Environmental Policy Act of 1969*
NOD	notice of deficiency
NPC	notice of project closeout
NPL	National Priorities List
NRDA	National Resource Damage Assessment
NRDWL	nonradioactive dangerous waste landfill
NW	northwest
OMB	Office of Management and Budget
OU	operable unit
PAS	preliminary assessment screening
PFP	plutonium finishing plant
PM&S	program management and support
PNL	Pacific Northwest Laboratory
Pu Conc	plutonium concentration
PUREX	plutonium-uranium extraction
QA	quality assurance
QASR	quality assurance system requirements
QTR	quality training requirement
RA	remedial action
RAM	responsibility assignment matrix
RARA	radiation area remedial action
RCRA	*Resource Conservation and Recovery Act of 1976*
REDOX	reduction oxidation
RFI-CMS	RCRA facility investigation/corrective measure studies
RFP	request for proposal
RI	remedial investigation
RIDS	record inventory disposition schedule
RI/FS	remedial investigation/feasibility study
RL	U.S. Department of Energy, Richland Operations Office
RLID	Richland implementation document
RLP	Richland procurement instruction
RMP	records management plan
RMWDF	radioactive mixed waste disposal facility
ROD	record of decision
S&M	surveillance and maintenance
SEMP	systems engineering management plan
SMS	site management system
SPRD	Surplus Production Reactor Decommissioning
SST	single-shell tank

GLOSSARY (cont)

SWEC	Stone & Webster Engineering Corporation
Sys. Eng	systems engineering
TPA	Tri-Party Agreement
TRU	transuranic
Tri-Party Agreement	*Hanford Federal Facility Agreement and Consent Order*
TSD	treatment, storage, and/or disposal
USACE	U.S. Army Corps of Engineers
USACE/PM	U.S. Army Corps of Engineers/Program Manager
USGS	U.S. Geological Survey
UST	underground storage tank
WAC	Washington Administrative Code
WBS	work breakdown structure
Westinghouse Hanford	Westinghouse Hanford Company
WGW	200 West Area groundwater
WHC	Westinghouse Hanford Company
WIDS	waste information data system

E1.0 DISPOSAL FACILITIES

This appendix describes the DF Program and provides the program statement, objectives, assumptions and constraints, WBS structures, schedules, and fiscal information.

E1.1 DISPOSAL FACILITIES PROGRAM STATEMENT

The DF Program funds and manages the planning and construction of facilities required to remediate contaminated sites. The major facilities to be provided in this workscope are the ERDF and the RMWDF. Both facilities are required for disposal of remediated waste and are cornerstones in the ER Program. The RMWDF is the near-term disposal facility to be used until the ERDF is ready for use.

E1.2 DISPOSAL FACILITIES PROGRAM OBJECTIVES

The DF objectives for FY 1994 are as follow:

- Ensure the safety of operations
- Comply with the laws and regulations intended to protect human health and the environment
- Provide near-term disposal capabilities (RMWDF) to support scheduled interim remediation actions and emergency response actions
- Complete definition of long-range disposal requirements and proceed with facility design (ERDF).

E1.3 DISPOSAL FACILITIES PROGRAM PRIORITIES

The DF Program priorities for FY 1994 are addressed in the Mission portion of this plan.

E1.4 DISPOSAL FACILITIES PROGRAM ASSUMPTIONS AND CONSTRAINTS

The following are the assumptions and constraints for the DF Program.

- Full funding will be available to support project schedules on both the near-term and the long-range disposal facilities. The ER Program will fund construction and operation of a disposal facility and any other DFs required for ER Program needs.
- Near-term disposal capability (RMWDF) will be provided to support scheduled ER activities.

- Site characterization, environmental baseline, and other activities required to support design and construction of the ERDF will be provided.
- Ecology will allow for and participate in revision to the design basis and permitting documents to expand capacity of the initial and follow-on near-term disposal facility.
- The ERDF will be a NEPA/CERCLA integration pilot project.
- The ERDF will be regulated under the Corrective Action Management Unit (CAMU).
- Funds currently are not available for the ERDF, and funding was not included in the original baseline. The ERDF is considered a high priority item and funding will be reevaluated once the FY 1994 budget is established.
- Regulators will agree on the regulatory approach for facility siting and permitting.
- The DF will be capable of accepting all wastes from remediation activities in the 100, 200, and 300 Areas.

E1.5 MAJOR DEVIATIONS FROM THE BASELINE

Major deviations between FYWP and the baseline, as identified in Section E4.0, Table E4-1, are detailed as follows ($000):

ADS 3700 ERDF FYWP $12,000 Baseline $3,400 Change +$8,600

Because of accelerated workscope being accomplished in FY 1994 and a change in schedule based on negotiation with the regulators, resources are being made available to fund necessary activities associated with disposal capabilities. This facility is required to support IRODs for 100-BC-1, 100-HR-1, and other 100 Area OUs. An IROD in FY 1995 will drive remediation activities to begin in the FY 1996 to FY 1997 timeframe. This is in addition to the $3,400 required to bring the near-term disposal capability to support IRMs and ERAs in FY 1994 (up to 50,000 cubic yards of soil).

E2.0 PROGRAM TECHNICAL BASELINE

This section contains the WBS and RAM for the DF Program.

E2.1 WORK BREAKDOWN STRUCTURE

The WBS charts for this program have been excluded per a waiver from the DOE-RL Office of Planning and Integration. The WBS is displayed by line number in Table E2-1 of this appendix.

E2.2 WORK BREAKDOWN STRUCTURE DICTIONARY

The WBS Dictionary is developed to the cost account level in the Part I-Index, Table E2-1. The complete DF WBS structure, including outyear activities, is displayed in an effort to portray the range of effort that these activities cover. The activities that are not part of the FY 1994 workscope are shaded to differentiate the FY efforts from the total workscope. Applicable pages of the Part I - Index are extracted for this appendix.

Table E2-2 contains the WBS Dictionary, Part II-Element Definition work sheets. Work sheets are included for DF activities at the MSA subproject and MSA activity WBS levels for WHC and USACE directed workscope. In addition, work sheets to the cost account level are included for selected RA activities under the direction of the USACE in lieu of cost account authorizations. While the WBS Part II-Element Definition work sheets at the subproject level could depict workscope beyond FY 1994, the work sheets included at the activity level address only FY 1994 workscope.

E2.3 RESPONSIBILITY ASSIGNMENT MATRIX

The DF Program RAM is shown in Table E2-3. The title, SMS and FDS WBS to the cost account level, as well as the responsible manager and DOE-RL contact, are identified.

E2.4 DISPOSAL FACILITIES LOGIC DIAGRAM

The DF Logic Diagram, Logic Diagram E2-1, depicts the broad spectrum of the planning; permitting; design; and location of the facilities, through construction to facility operation; and eventual closure, and finally, the environmental monitoring. Output to S&M (long term) are indicated on the diagram. The cost accounts associated with this function are indicated in Figure E2-2. Cost accounts are grouped within their respective activities and displayed in a manner that reflects the sequence of events that will take place within the disposal function.

Within the DF Program logic diagram, the functional elements building the pathway are as follows:

- Storage and disposal facility

  - permitting
  - design
  - construction
  - operation
  - closure
  - environmental monitoring

- W-025 Disposal Facility

  - program management
  - design
  - construction
  - operational readiness leading toward operation and future disposal facilities

- W-025A Disposal Facility

  - program management
  - design
  - construction
  - operational readiness leading toward operation and future disposal facilities

- Technical support and engineering

  - program management
  - technical engineering
  - regulatory documentation

- Facility design and construction

  - program management
  - studies
  - design
  - construction
  - operational readiness leading toward ERDF operations

- ERDF operations and closures leading to long-term S&M.

E2.0 PROGRAM TECHNICAL BASELINE

This section contains the WBS and RAM for the DF Program.

E2.1 WORK BREAKDOWN STRUCTURE

Figure E2-1 depicts the DF Program to the cost account level. A cross-reference among the DOE-HQ WBS (1.4.10.1.2), the Hanford Site WBS (2.2), and the participant WBS (C) is provided.

E2.2 WORK BREAKDOWN STRUCTURE DICTIONARY

The WBS Dictionary is developed to the cost account level in the Part I-Index, Table E2-1. The complete DF WBS structure, including outyear activities, is displayed in an effort to portray the range of effort that these activities cover. The activities that are not part of the FY 1994 workscope are shaded to differentiate the FY efforts from the total workscope. Applicable pages of the Part I - Index are extracted for this appendix.

Table E2-2 contains the WBS Dictionary, Part II-Element Definition work sheets. Work sheets are included for DF activities at the MSA subproject and MSA activity WBS levels for WHC and USACE directed workscope. In addition, work sheets to the cost account level are included for selected RA activities under the direction of the USACE in lieu of cost account authorizations. While the WBS Part II-Element Definition work sheets at the subproject level could depict workscope beyond FY 1994, the work sheets included at the activity level address only FY 1994 workscope.

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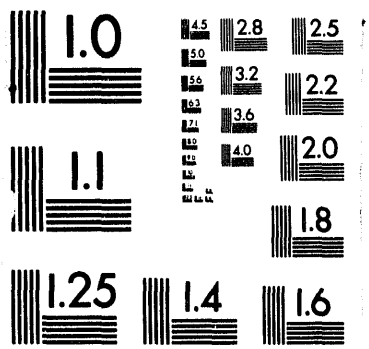
The DF Logic Diagram, Logic Diagram E2-1, depicts the broad spectrum of the planning; permitting; design; and location of the facilities, through construction to facility operation; and eventual closure, and finally, the environmental monitoring. Output to S&M (long term) are indicated on the diagram. The cost accounts associated with this function are indicated in Figure E2-2. Cost accounts are grouped within their respective activities and displayed in a manner that reflects the sequence of events that will take place within the disposal function.


1.0
4.5
2.8
2.5
5.0
3.2
2.2
5.6
6.3
3.6
7.1
8.0
4.0
2.0
1.1
1.8
1.25
1.4
1.6

6 of 6

Within the DF Program logic diagram, the functional elements building the pathway are as follows:

- Storage and disposal facility

  - permitting
  - design
  - construction
  - operation
  - closure
  - environmental monitoring

- W-025 Disposal Facility

  - program management
  - design
  - construction
  - operational readiness leading toward operation and future disposal facilities

- W-025A Disposal Facility

  - program management
  - design
  - construction
  - operational readiness leading toward operation and future disposal facilities

- Technical support and engineering

  - program management
  - technical engineering
  - regulatory documentation

- Facility design and construction

  - program management
  - studies
  - design
  - construction
  - operational readiness leading toward ERDF operations

- ERDF operations and closures leading to long-term S&M.

The WBS charts for this program have been excluded per a waiver from the DOE-RL Office of Planning and Integration. The WBS is displayed by line number in Table E2-1 of this appendix.

Figure E2-1. Work Breakdown Structure Charts.

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Table E2-1. WORK BREAKDOWN STRUCTURE DICTIONARY
PART I - INDEX

DOE F1332.10
(11-84)

FORM APPROVED
OMB NO. 1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC687RL10930

4. LINE NO	INDENTURE LEVEL 4	5	6	7	8	9	TITLE	6. PARTICIPANT WBS ELEMENT CODE		7. BUDGET AND REPORTING NO.	8. SITE WBS NO.	9. OTHER (ADS NO.)
1	X						Hanford Environmental Restoration	1.4.10.1	(E)		2.0	
2		X					Disposal Facilities	1.4.10.1.6	(C)		2.5	
3			X				Disposal Facilities	1.4.10.1.6.1	(CF)	EW201030	2.5.1	3700
4				X			Long-Term Disposal Facilities and Equipment - ERDF	1.4.10.1.6.1.1	(CF1)	EW201030	2.5.1.1	3700
5					X		Technical Support and Engineering	1.4.10.1.6.1.1.1	(CF11)	EW2010302	2.5.1.1.20	3700
6						X	Program Management and Administrative	1.4.10.1.6.1.1.1.1	(CF111)	EW2010302	2.5.1.1.20.1	3700
7						X	Project Definition and Technical Engineering	1.4.10.1.6.1.1.1.2	(CF112)	EW2010302	2.5.1.1.20.2	3700
8						X	Regulatory Documentation	1.4.10.1.6.1.1.1.3	(CF113)	EW2010302	2.5.1.1.20.3	3700
9						X	Operational Readiness	1.4.10.1.6.1.1.1.4	(CF114)	EW2010302	2.5.1.1.20.4	3700
10					X		Facilities Design and Construction-USACE	1.4.10.1.6.1.1.2	(CF12)	EW2010302	2.5.1.1.21	3700
11						X	Construction Management-USACE	1.4.10.1.6.1.1.2.1	(CF121)	EW2010302	2.5.1.1.21.1	3700
12						X	Engineering Studies-USACE	1.4.10.1.6.1.1.2.2	(CF122)	EW2010302	2.5.1.1.21.2	3700
13						X	Conceptual Design-USACE	1.4.10.1.6.1.1.2.3	(CF123)	EW2010302	2.5.1.1.21.3	3700
13a						X	Definitive Design-USACE	1.4.10.1.6.1.1.2.4	7CF124	EW2010302	2.5.1.1.21.4	3700
13b						X	Construction-USACE	1.4.10.1.6.1.1.2.5	7CF125	EW2010302	2.5.1.1.21.5	3700
14				X			Near-Term Disposal Facilities and Equipment	1.4.10.1.6.1.2	(CF2)	EW2010302	2.5.1.2	3700
15					X		Disposal Facility, W-025	1.4.10.1.6.1.2.1	(CF21)	EW2010302	2.5.1.2.25	3700
16						X	Project Management and Support	1.4.10.1.6.1.2.1.1	(CF211)	EW2010302	2.5.1.2.25.1	3700
17						X	Design	1.4.10.1.6.1.2.1.2	7CF212	EW2010302	2.5.1.2.25.2	3700
17a						X	Construction	1.4.10.1.6.1.2.1.3	7CF213	EW2010302	2.5.1.2.25.3	3700
17b						X	Operational Readiness	1.4.10.1.6.1.2.1.4	(CF214)	EW2010302	2.5.1.2.25.4	3700
18					X		Disposal Facility, W-025A	1.4.10.1.6.1.2.2	(CF22)	EW2010302	2.5.1.2.26	3700
19						X	Project Managemnt and Support	1.4.10.1.6.1.2.2.1	(CF221)	EW2010302	2.5.1.2.26.1	3700
20						X	Design	1.4.10.1.6.1.2.2.2	7CF222	EW2010302	2.5.1.2.26.2	3700
20a						X	Construction	1.4.10.1.6.1.2.2.3	7CF223	EW2010302	2.5.1.2.26.3	3700
20b						X	Operational Readiness	1.4.10.1.6.1.2.2.4	(CF224)	EW2010302	2.5.1.2.26.4	3700
21					X		Future Disposal Facility	1.4.10.1.6.1.2.3	(CF23)	EW2010302	2.5.1.2.27	3700
21a						X	Future Trench, W-025B	1.4.10.1.6.1.2.3.1	(CF231)	EW2010302	2.5.1.2.27.1	3700

**	Surveillence and Maintenance (S) is not a part of the FY 1994 work breakdown structure
♦	P3 - 1100-EM Operable Units and UC - 300 Area D&D are non-FDS work breakdown structures.
ALE	-Arid Lands Ecology (Reserve)
BOP	-balance of plant
CENTRC	-capital equipment not related to construction
CRADA	-Cooperative Research and Development Agreement
D&D	-decontamination and decommissioning
EGW	-200 East Area groundwater
ER	-environmental restoration
ERA	-expedited response actions
ERDF	-environmental restoration disposal facility
ERMC	-environmental restoration management contractor
FDS	-financial data system
JCS	-job control system
GIS	-geographic information system
HASM	-Hanford Analytical Services Management
HGP	-Hanford Generating Plant
HEIS	-Hanford Environmental Information System
HRA-EIS	-Hanford remedial actions- environmental impact statement
IMS	-information management system
ISV	-in situ vitrification
IRM	-interim response measure
LIMS	-laboratory information management system
NEPA	-*National Environmental Policy Act of 1969*
NPL	-national priorities list
NRDWL	-nonradioactive dangerous waste landfill
NW	-northwest
OU	-operable unit-(The initials-PO,BP, CP, TP, UP,ZP,RO,IU, and FF are OU designators).
PNL	-Pacific Northwest Laboratory
Pu Conc	-plutonium concentration
PUREX	-Plutonium-Uranium Extraction Plant
QA	-quality assurance
RA	-remedial actions
RARA	-radiation area remedial action
RCRA	-*Resource Conservation and Recovery Act of 1976*
REDOX	-Reduction Oxidation Plant
RI/FS	-remedial investigation/feasibility study
S&M	-surveillance and maintenance
SST	-single-shell tank
TPA	-Tri-party Agreement (*Hanford Federal Facility Agreement and Consent Order)*
UST	-underground storage tank
WIDS	-waste information data system
WHC	-Westinghouse Hanford Company
WGW	-200 West Area groundwater

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Table E2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.5.1.1.20 (CF11)	Technical Support and Engineering	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
5	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
DOE Orders 4700.1 and 6430.1A	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Provide a long-term ERDF for final disposal of hanford past-practice remedial waste.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

Provide the overall project management for administrative, technical engineering, regulatory documentation, and operational readiness for ERDF.

C. Work Statement

The following actions will be performed:

- Perform WHC management of administrative support and reporting, including project documentation and master schedule.
- Perform WHC management of technical engineering in preparation of FDC, CDR, engineering studies, safety and quality assurance, including environmental, nuclear, and fire safety.
- Perform WHC management in preparation of regulatory documentation, i.e., strategy, performance assessment, permitting, and site characterization.

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Table E2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-93RL12107
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.5.1.1.21 (CF12)	Facilities Design and Construction	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
10	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
Tri-Party Agreement and DOE Order 4700.1	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Provide ERDF for the final disposal of Hanford Site past-practice waste.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Provide USACE construction management for engineering studies, conceptual design, definitive design, and construction of ERDF. The ERDF activities includes site preparation, disposal facilities, support facilities, offloading facilities, and miscellaneous facilities.

C. Work Statement

The following actions will be performed:

- Perform USACE construction management of engineering studies, conceptual design, detailed design, and construction
- Perform engineering studies
- Perform conceptual design
- Perform detailed design
- Perform construction.

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Table E2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-93RL12107
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.5.1.1.21.1 (CF121)	Construction Management	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
11	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
Tri-Party Agreement and DOE Order 4700.1	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Provide USACE construction management of the ERDF.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Provide USACE construction management for conceptual design, definitive design, and construction of the ERDF. This also includes obtaining M&O for USACE and USACE contractors.

C. Work Statement

The following actions will be performed:

- Perform project management for planning, coordination, scoping, scheduling, estimating, budgeting, and review
- Perform technical management of conceptual design and definitive design
- Provide technical support for procurement, planning, safety, and quality assurance
- Perform technical management of construction
- Obtain M&O for USACE and USACE contractors.

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Table E2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-93RL12107
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.5.1.1.21.2 (CF122)	Engineering Studies	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
12	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
Tri-Party Agreement and DOE Order 4700.1	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Provide USACE engineering studies of the ERDF.

A. Cost Content

Cost content includes the following cost types: USACE labor, overhead, G&A, materials, equipment, utilities, engineering services, subcontracts, and M&O.

B. Technical Content

Provide USACE project management and technical management for engineering studies. Perform engineering studies of the ERDF. The ERDF includes site preparation, disposal facilities, support facilities, offloading facilities, and miscellaneous facilities.

C. Work Statement

The following actions will be performed:

- Perform project management for planning, coordination, scoping, scheduling, estimating, budgeting, and review
- Perform technical management of engineering studies
- Provide technical support for procurement
- Prepare work plan for engineering studies and CDR
- Perform engineering studies and design analysis.

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Table E2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-93RL12107
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.5.1.1.21.3 (CF123)	Conceptual Design	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
13	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
Tti-Party Agreement and DOE Order 4700.1	EW201030	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Provide USACE conceptual design of the ERDF.

A. Cost Content

Cost content includes the following cost types: USACE subcontract labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

Perform conceptual design of the ERDF. The ERDF includes site preparation, disposal facilities, support facilities, offloading facilities, and miscellaneous facilities.

C. Work Statement

The following actions will be performed.

- Perform conceptual design per approved FDC
- Coordinate and incorporate M&O contractor data into conceptual design for regulatory, NEPA, performance assessment, safety, and other landlord functions
- Incorporate approval review comments in CDR.

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Table E2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-93RL12107
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.5.1.1.21.4 (7CF124)	Definitive Design	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
13a	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
Tri-Party Agreement and DOE Order 4700.1	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Provide USACE definitive design of the ERDF.

A. Cost Content

Cost content includes the following cost types: USACE subcontract labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

Perform definitive design of the ERDF. The ERDF includes site preparation, disposal facility, support facilities, offloading facilities, and miscellaneous facilities.

C. Work Statement

The following actions will be performed:

- Prepare work plan for performing detailed design
- Perform detailed design per approved FDC and CDR
- Coordinate and incorporate M&O contractor data into the design for regulatory, NEPA, performance assessment, safety, and other landlord functions
- Prepare remedial design report per Tri-Party Agreement Action Plan 7.3.9.

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Table E2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration/ USACE	December 22, 1993	DE-AI06-90RL12074 DE-AT06-93RL12107
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.5.1.1.21.5 (7CF125)	Construction	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
13b	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
Tri-Party Agreement and DOE Order 4700.1	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Provide USACE construction of the ERDF.

A. Cost Content

Cost content includes the following cost types: USACE subcontract labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

Perform construction of the ERDF. The ERDF includes site preparation, disposal facility, support facilities, offloading facilities, and miscellaneous facilities.

C. Work Statement

The following actions will be performed:

- Prepare remedial action work plan for performing construction per Tri-Party Agreement Action Plan 7.3.10
- Perform construction per approved remedial design report and remedial action work plan
- Coordinate and incorporate M&O contractor operational readiness review requirements
- Obtain from regulators a remedial action certificate of completion per Tri-Party Agreement Action Plan 7.3.10.

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Table E2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.5.1.2.25 (CF21)	W-025 Disposal Facility	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
15	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
DOE Orders 4700.1 and 6430.1A	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Provide a near-term disposal facility for past-practice remedial waste.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

Provide WHC project management of W-025 construction and operational readiness activities.

C. Work Statement

The following actions will be performed:

- Perform WHC management for support documentation of Part B permit, performance assessment, and safety audit or integration.
- Perform project management of construction activities, including operational readiness.

U.S. DEPARTMENT OF ENERGY

Table E2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.5.1.2.26 (CF22)	W-025A Disposal Facility	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
18	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
DOE Orders 4700.1 and 6430.1A	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Provide a near-term (2nd trench) disposal facility for past-practice remedial waste.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

Provide WHC project management of W-025A design, construction, and operational readiness activities.

C. Work Statement

The following actions will be performed:

- Perform WHC management for support documentation of FDC changes, safety evaluation, and audits, CDR waiver, NEPA, PA MODS, and quality assurance plan.
- Perform project management for design, construction, and operational readiness activities.

U.S. DEPARTMENT OF ENERGY

Table E2-2. WORK BREAKDOWN STRUCTURE DICTIONARY
PART II - ELEMENT DEFINITION

DOE F1332.11
(11-84)

FORM APPROVED
OMB NO.1901-1400

1. PROJECT TITLE/PARTICIPANT	2. DATE	3. IDENTIFICATION NUMBER
Hanford Environmental Restoration	December 22, 1993	DE-AC06-87RL10930
4. WBS ELEMENT CODE	**5. WBS ELEMENT TITLE**	
2.5.1.2.27 (CF23)	Future Disposal Facility	
6. INDEX LINE NO.	**7. REVISION NO. AND AUTHORIZATION**	**8. DATE**
21	Not Applicable	Not Applicable
9. APPROVED CHANGES		
Not Applicable		
10. SYSTEM DESIGN DESCRIPTION	**11. BUDGET AND REPORTING NUMBER**	
DOE Orders 4700.1 and 6430.1A	EW2010302	

12. ELEMENT TASK DESCRIPTION

OBJECTIVE:

Provide a near term (3rd trench) disposal facility for past-practice remedial waste.

A. Cost Content

Cost content includes the following cost types: M&O labor, overhead, G&A, materials, equipment, utilities, engineering services, and subcontracts.

B. Technical Content

Provide WHC project management of (3rd trench) design, construction, and operational readiness activities.

C. Work Statement

The following actions will be performed:

- Perform WHC project management of activities listed in item B, if 3rd trench is required, i.e., insufficient disposal space in W-025 and W-025A before ERDF startup.
- Perform project management for design, construction, and operational readiness activities.

Table E2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 FISCAL YEAR WORK PLAN RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE							
PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
DISPOSAL FACILITIES 2.5 [1C]							
2.5.1 CF				DISPOSAL FACILITIES	WINTCZAK, TM	RP	FOLEY, BL
	2.5.1.1 CF1			LONG TERM DISPOSAL FACILITIES & EQUIPMENT-ERDF	DRONEN, VR	RP	FOLEY, BL
		2.5.1.1.20 CF11		TECHNICAL SUPPORT AND ENGINEERING	DRONEN, VR	RP	FOLEY, BL
			2.5.1.1.20.1 CF111	PROGRAM MANAGEMENT AND ADMINISTRATIVE	BREWER, IW	RP	FOLEY, BL
			2.5.1.1.20.2 CF112	PROJECT DEFINITION AND TECHNICAL ENGINEERING	HODGE, CE	RP	FOLEY, BL
			2.5.1.1.20.3 CF113	REGULATORY DOCUMENTATION	ROECK, FV	RP	FOLEY, BL
			2.5.1.1.20.4 CF114	OPERATIONAL READINESS	BREWER, IW	RP	FOLEY, BL
		2.5.1.1.21 CF12		FACILITIES DESIGN AND CONSTRUCTION-USACE	DRONEN, VR	USACE	FOLEY, BL
			2.5.1.1.21.1 CF121	CONSTRUCTION MANAGEMENT-USACE	CASBON, MA	USACE	FOLEY, BL
			2.5.1.1.21.2 CF122	ENGINEERING STUDIES-USACE	CASBON, MA	USACE	FOLEY, BL
			2.5.1.1.21.3 CF123	CONCEPTUAL DESIGN-USACE	CASBON, MA	USACE	FOLEY, BL
			2.5.1.1.21.4 7CF124	DEFINITIVE DESIGN-USACE	CASBON, MA	USACE	FOLEY, BL
			2.5.1.1.21.5 7CF125	CONSTRUCTION - USACE	CASBON, MA	USACE	FOLEY, BL
	2.5.1.2 CF2			NEAR TERM DISPOSAL FACILITIES & EQUIPMENT	DRONEN, VR	RP	FOLEY, BL
		2.5.1.2.25 CF21		W-025 DISPOSAL FACILITY	DRONEN, VR	RP	FOLEY, BL

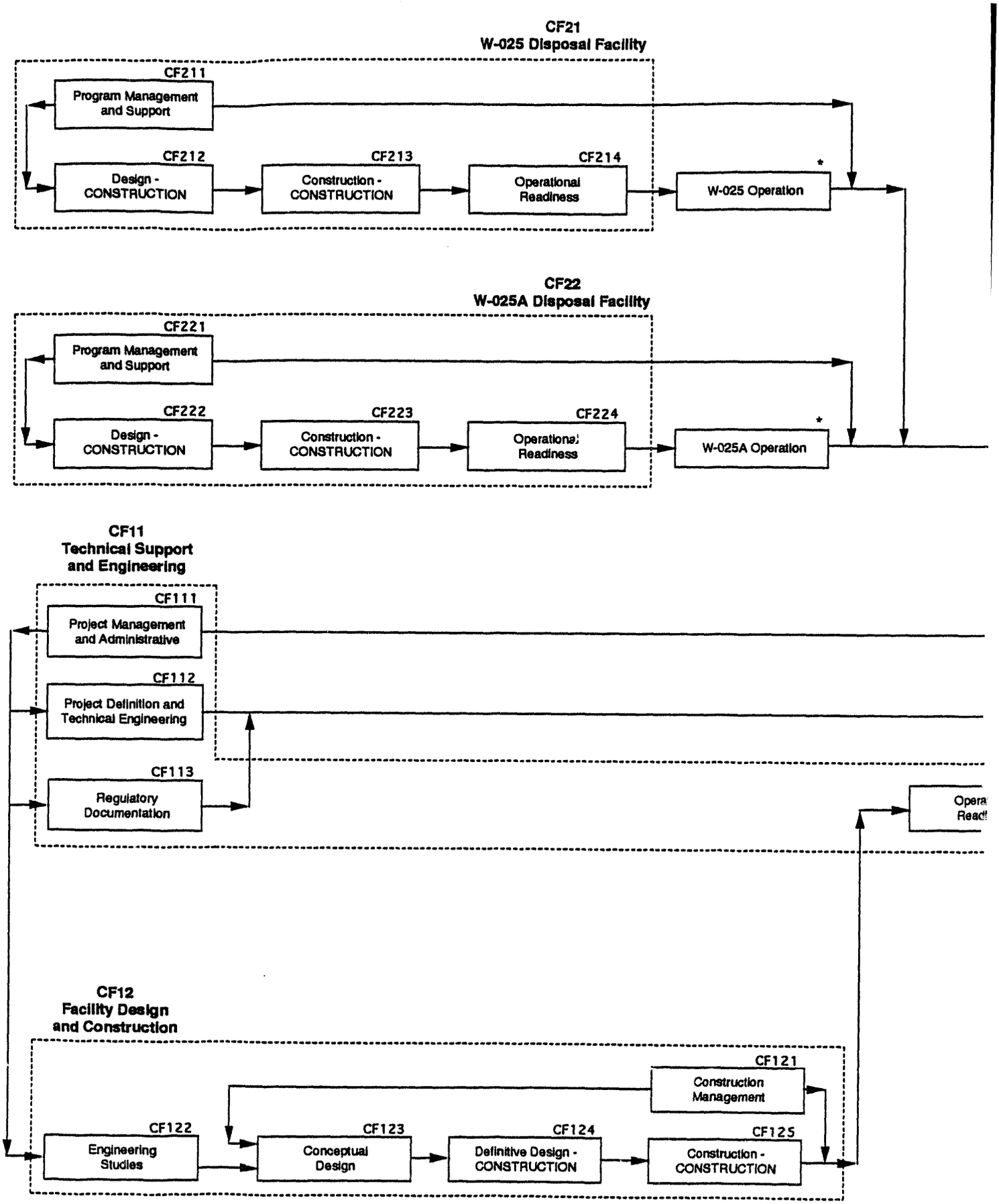
Table E2-3. Responsibility Assignment Matrix.

FISCAL YEAR 1994 FISCAL YEAR WORK PLAN
RESPONSIBILITY ASSIGNMENT MATRIX BY WORK BREAKDOWN STRUCTURE

PROG/ELEMENT [SUBPROJECT LEVEL]	END FUNCTION	ACTIVITY	COST ACCOUNT	TITLE	RESPONSIBLE MANAGER	RESP ORG	DOE-RL CONTACT
			2.5.1.2.25.1 CF211	PROJECT MANAGEMENT AND SUPPORT	TOLLBOM, LR	RP	FOLEY, BL
			2.5.1.2.25.2 7CF212	DESIGN	TOLLBOM, LR	RP	FOLEY, BL
			2.5.1.2.25.3 7CF213	CONSTRUCTION	TOLLBOM, LR	RP	FOLEY, BL
			2.5.1.2.25.4 CF214	OPERATIONAL READINESS	TOLLBOM, LR	RP	FOLEY, BL
		2.5.1.2.26 CF22		W-025A DISPOSAL FACILITY	DRONEN, VR	RP	FOLEY, BL
			2.5.1.2.26.1 CF221	PROJECT MANAGEMENT AND SUPPORT	TOLLBOM, LR	RP	FOLEY, BL
			2.5.1.2.26.2 7CF222	DESIGN	TOLLBOM, LR	RP	FOLEY, BL
			2.5.1.2.26.3 7CF223	CONSTRUCTION	TOLLBOM, LR	RP	FOLEY, BL
			2.5.1.2.26.4 CF224	OPERATIONAL READINESS	TOLLBOM, LR	RP	FOLEY, BL
		2.5.1.2.27 CF23		FUTURE DISPOSAL FACILITY	DRONEN, VR	RP	FOLEY, BL
			2.5.1.2.27.1 CF231	FUTURE TRENCH, W-025B	TOLLBOM, LR	RP	FOLEY, BL

WESTINGHOUSE HANFORD & OTHER RESPONSIBLE ORGANIZATIONS
EE ENVIRONMENTAL ENGINEERING
RP REMEDIATION PROJECTS
USACE UNITED STATES ARMY CORPS OF ENGINEERS
ABBREVIATIONS
TSD TREATMENT, STORAGE, AND/OR DISPOSAL
ERDF ENVIRONMENTAL RESTORATION DISPOSAL FACILITY

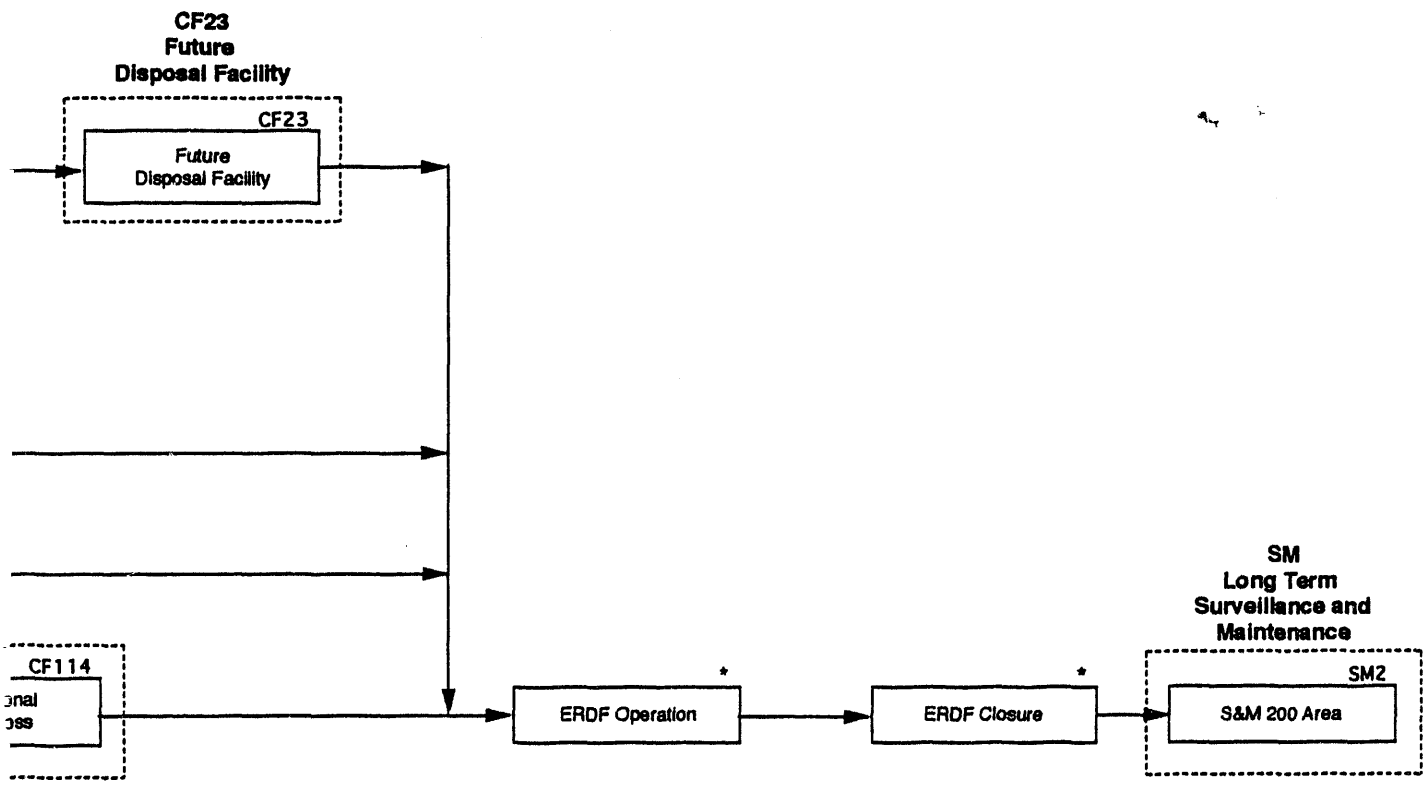
NOTE: THE (7) IN FRONT OF THE ER WBS CAP NUMBER, i.e, 7CF222, INDICATES EXPENSE FUNDED CAPITAL.


CF21
W-025 Disposal Facility
CF211
Program Management and Support
CF212
Design - CONSTRUCTION
CF213
Construction - CONSTRUCTION
CF214
Operational Readiness
W-025 Operation
CF22
W-025A Disposal Facility
CF221
Program Management and Support
CF222
Design - CONSTRUCTION
CF223
Construction - CONSTRUCTION
CF224
Operational Readiness
W-025A Operation
CF11
Technical Support and Engineering
CF111
Project Management and Administrative
CF112
Project Definition and Technical Engineering
CF113
Regulatory Documentation
CF12
Facility Design and Construction
CF121
Construction Management
CF122
Engineering Studies
CF123
Conceptual Design
CF124
Definitive Design - CONSTRUCTION
CF125
Construction - CONSTRUCTION

Legend

HANFORD SITE WORK BREAKDOWN STRUCTURE

2.6 Disposal Facilities



* Not Currently Included in the Hanford Environmental Restoration Program Work Breakdown Structure

Logic Diagram E2-1. Disposal Facilities Logic Diagram.

E3.0 PROGRAM SCHEDULE BASELINE AND MILESTONE CONTROL LOG

The DF Program schedule is depicted in Figure E3-1. The schedule depicts key activities for FY 1994.

Table E3-1 is the MCL. However, no DF milestones have been defined in FY 1993.

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The DF Schedule presently is not developed.

Figure E3-1. Program Schedule.

Table E3-1. Hanford Environmental Restoration Milestone Control Log.

Hanford Environmental Restoration Program Disposal Facility

TYPE	Milestone ID	RL WBS	WHC WBS	Milestone description	Original baseline due date	CIN change authority	Baseline revision date
HQ	1CF-94-001	2.5.1.1.21.3	1CF123	COMPLETE CONCEPTUAL DESIGN REPORT FOR (W-296) TRENCH	02/28/94		
KEY	1CF-94-002	2.5.1.1.21.4	1CF124	START DEFINITIVE DESIGN FOR (W-296) TRENCH	03/01/94		
KEY	1CF-94-003	2.5.1.2.25.3	1CF213	COMPLETE CONSTRUCTION OF (W-025) TRENCH	05/31/94		
KEY	1CF-94-004	2.5.1.2.25.3	1CF223	START CONSTRUCTION OF (W-025A) TRENCH	06/31/94		

Table E3-2. Milestone Description Sheets.

TITLE:	COMPLETE CONCEPTUAL DESIGN REPORT FOR (W-296) TRENCH				
MILESTONE ID #:	1CF-94-001	**TYPE:**	HQ		
DUE DATE:	02/28/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER DISPOSAL FACILITY				
RL WBS:	2.5.1.1.21.3	**FY94 WHC WBS:**	1CF123		
DELIVERABLE:	SUBMISSION OF THE (W-296) TRENCH CONCEPTUAL DESIGN REPORT TO DOE CONSTITUTES COMPLETION OF THIS HQ MILESTONE.				
ACTIVITY ENGINEER:	V.R. DRONEN	**COST ACCOUNT MGR:**	M.A. CASBON		
DOE MONITOR:	B.L. FOLEY				

TITLE:	START DEFINITIVE DESIGN FOR (W-296) TRENCH				
MILESTONE ID #:	1CF-94-002	**TYPE:**	KEY		
DUE DATE:	03/01/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER DISPOSAL FACILITY				
RL WBS:	2.5.1.1.21.4	**FY94 WHC WBS:**	1CF124		
DELIVERABLE:	THIS WHC KEY MILESTONE IS TO KEY THE BEGINNING OF DEFINITIVE DESIGN FOR THE (W-296) TRENCH.				
ACTIVITY ENGINEER:	V.R. DRONEN	**COST ACCOUNT MGR:**	M.A. CASBON		
DOE MONITOR:	B.L. FOLEY				

TITLE:	COMPLETE CONSTRUCTION OF (W-025) TRENCH				
MILESTONE ID #:	1CF-94-003	**TYPE:**	KEY		
DUE DATE:	05/31/94	**REVISION DATE:**		**CIN:**	
ASSIGNEE:	HANFORD ER DISPOSAL FACILITY				
RL WBS:	2.5.1.2.25.3	**FY94 WHC WBS:**	1CF213		
DELIVERABLE:	THIS WHC KEY MILESTONE IS TO KEY THE BEGINNING OF DEFINITIVE DESIGN FOR THE (W-296) TRENCH.				
ACTIVITY ENGINEER:	V.R. DRONEN	**COST ACCOUNT MGR:**	L.R. TOLLBOM		
DOE MONITOR:	B.L. FOLEY				

Table E3-2. Milestone Description Sheets.

TITLE:	START CONSTRUCTION OF (W-025A) TRENCH		
MILESTONE ID #:	1CF-94-004	**TYPE:**	KEY
DUE DATE:	06/01/94	**REVISION DATE:**	**CIN:**
ASSIGNEE:	HANFORD ER DISPOSAL FACILITY		
RL WBS:	2.5.1.2.26.3	**FY94 WHC WBS:**	1CF223
DELIVERABLE:	THIS WHC KEY MILESTONE IS TO KEY THE START OF CONSTRUCTION FOR THE (W-025A) TRENCH.		
ACTIVITY ENGINEER:	V.R. DRONEN	**COST ACCOUNT MGR:**	L.R. TOLLBOM
DOE MONITOR:	B.L. FOLEY		

E4.0 PROGRAM COST BASELINE

Table E4-1 presents the DF Program funding deviations between the FYWP and the baseline. Section E1.5 contains the specific narrative for these deviations.

The total ER Program funding deviations between the FYWP and the baseline are summarized in Table 4-3 in the Mission Section of this document.

Indentation in Title Column displays the "roll-up" function within the program and provides line item identification.

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Table E4-1. Disposal Facilities Program Fiscal Year 1994 Work Plan Versus Baseline Funding ($000).

			FY 1994 ($000)		
ADS #	WBS	Title	FWYP	Baseline	Change
3700	CF	Disposal Facilities	$12,000	$3,400	$8,600
	C	Treatment, Storage, or Disposal	$12,000	$3,400	$8,600

ADS# = activity data sheet number
FY = fiscal year
FYWP = fiscal year work plan
WBS = work breakdown structure

E5.0 PROGRAM FUNDING BASELINE

The DF Program funding is displayed in Table E5-1 at the activity level and summarized to the total DF Program funding by major participant. The summarized ER Program funding requirements are included in the Mission Section of this document.

Indentation in Title Column displays the "roll-up" function within the program and provides line item identification.

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Table E5-1. Disposal Facilities Program Fiscal Year 1994 Funding Baseline Mission Summary ($000).

			FYWP 1994 ($000)			
ADS #	WBS	Title	WHC	USACE	RL	Total
3700	CF11	LTD Technical Support and Engineering	$4,756	$0	$0	$4,756
3700	CF12	LTD Facilities Design and Construction	$0	$3,844	$0	$3,844
3700	CF1	Long-Term Disposal Facilities and Equipment - ERDF	$4,756	$3,844	$0	$8,600
3700	CF21	W-025 Disposal Facility	$3,222	$0	$0	$3,222
3700	CF22	W-025A Disposal Facility	$178	$0	$0	$178
3700	CF23	Future Disposal Facility	$0	$0	$0	$0
3700	CF2	Near-Term Disposal Facilities and Equipment	$3,400	$0	$0	$3,400
3700	CF	Disposal Facilities	$8,156	$3,844	$0	$12,000
	C	Treatment, Storage, or Disposal	$8,156	$3,844	$0	$12,000

ADS# = activity data sheet number
ERDF = environmental restoration disposal facility
FYWP = fiscal year work plan
LTD = long-term disposal
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

E6.0 PROGRAM STAFFING BASELINE

The DF Program staffing baseline FTEs are presented in Table E6-1. The FTEs are displayed by activity level and summarized to the total DF Program FTE requirement. The summarized ER Program FTE requirements are included in the Mission Section of this document.

Indentation in Title Column displays the "roll-up" function within the program and provides line item identification.

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Table E6-1. Disposal Facilities Program Fiscal Year 1994 Work Force Full-Time Equivalents Mission Summary.

			FYWP 1994 FTEs			
ADS #	WBS	Title	WHC	USACE	RL	Total
3700	CF11	LTD Technical Support and Engineering	12.4	0.0	0.0	12.4
3700	CF12	LTD Facilities Design and Construction	0.0	30.8	0.0	30.8
3700	CF1	Long-Term Disposal Facilities and Equipment - ERDF	12.4	30.8	0.0	43.2
3700	CF21	W-025 Disposal Facility	4.0	0.0	0.0	4.0
3700	CF22	W-025A Disposal Facility	0.2	0.0	0.0	0.2
3700	CF23	Future Disposal Facility	0.0	0.0	0.0	0.0
3700	CF2	Near-Term Disposal Facilities and Equipment	4.2	0.0	0.0	4.2
3700	CF	Disposal Facilities	16.6	30.8	0.0	47.4
	C	Treatment, Storage, or Disposal	16.6	30.8	0.0	47.4

ADS# = activity data sheet number
ERDF = environmental restoration disposal facility
FTE = full-time equivalent
FYWP = fiscal year work plan
LTD = long-term disposal
RL = U.S. Department of Energy, Richland Operations Office
USACE = U.S. Army Corps of Engineers
WBS = work breakdown structure
WHC = Westinghouse Hanford Company

E7.0 PROGRAM WORKSCOPE CARRYOVER

Carryover information will be provided on approval of the Class I change request documenting carryover workscope, milestones, and funds.

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E8.0 REFERENCES

Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 USC 9601 et seq.

National Environmental Policy Act of 1969, 422 USC 4321 et seq.

40 CFR 264.552, *Corrective Action Management Units*.

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