EGG-WM-8676
December 1992
Revision 2

INFORMATION ONLY

IMPLEMENTING PROJECT MANAGEMENT PLAN FOR THE EG&G IDAHO ENVIRONMENTAL RESTORATION PROGRAM

Idaho National Engineering Laboratory

Managed by the U.S. Department of Energy

EG&G Idaho

Work performed under DOE Contract No. DE-AC07-76ID01570

EGG-WM-8676
Revision 2

INFORMATION ONLY

IMPLEMENTING PROJECT MANAGEMENT PLAN FOR THE EG&G IDAHO ENVIRONMENTAL RESTORATION PROGRAM

Published December 1992

EG&G Idaho, Inc.
Idaho Falls, Idaho 83415

Prepared for the
U.S. Department of Energy
Office of Environmental Restoration and Waste Management
Under DOE Contract No. DE-AC07-76ID01570

Affected Pages INFORMATION ONLY

The Implementing Project Management Plan for the EG&G Idaho Environmental Restoration Program has been revised to reflect changes in personnel titles, organization, regulatory requirements, and format. All pages are affected, and the entire document should be replaced.

List of pages:

iii
v-ix
xi-xv
1-1 - 1-2
2-1
3-1 - 3-14
4-1 - 4-13
5-1 - 5-14
6-1 - 6-4
7-1
8-1
9-1 - 9-2
10-1 - 10-9
11-1 - 11-3
12-1
13-1
14-1 - 14-2
15-1 - 15-4
16-1 - 16-2
AI-1, AI-3, AI-5 - AI-9, AI-10 - AI-14, AI-16 - A-19, AI-21 - AI-37

(The reverse of this page is blank)

IMPLEMENTING PROJECT MANAGEMENT PLAN FOR THE EG&G IDAHO ENVIRONMENTAL RESTORATION PROGRAM

Approval

INFORMATION ONLY

Approved (EG&G Idaho):	J. L. McAnally, Manager, EG&G Idaho Environmental Restoration and Waste Management Department	12-14-92 Date
Approved (EG&G Idaho):	S. G. Stiger, Manager, Program Support Group	Date
Approved (EG&G Idaho):	R. L. Norland, Manager, Buried Waste Program Group	Date
Approved (EG&G Idaho):	L. C. VanDeusen, Manager, Site Remediation Group	12/14/92 Date
Reviewed (EG&G Idaho):	J. P. Shea, Chair, Environmental Restoration Independent Review Committee	12/9/92 Date

(The reverse of this page is blank)

CONTENTS

INFORMATION ONLY

FIGURES

(The reverse of this page is blank)

ACRONYMS

-A-

ACWP	Actual Cost of Work Performed
ADS	Activity Data Sheet
AEA	Atomic Energy Act (of 1954)
AFP	Approved Financial Plan
ANSI	American National Standards Institute
AR	Administrative Record
ARA	Auxiliary Reactor Area
ARAR	Applicable or Relevant and Appropriate Requirement
ARDC	Administrative Record and Document Control
ARVFS	Army Reentry Vehicle Facility Site
ASME	American Society of Mechanical Engineers

-B-

BAC	Budget at Completion
BCWP	Budgeted Cost of Work Performed
BCWS	Budgeted Cost of Work Scheduled
BORAX	Boiling Water Reactor Experiment
BWP	Buried Waste Program

-C-

CAA	Clean Air Act
CAM	Cost Account Manager
CAP	Cost Account Plan
CCB	Change Control Board
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (of 1980) (PL 96-510)
CFA	Central Facilities Area
CFR	Code of Federal Regulations
CRF	Change Request Form
CRP	Community Relations Plan
CSCSC	Cost and Schedule Control System Criteria
CWBS	Contract Work Breakdown Structure

-D-

D&D	Decontamination and Decommissioning
DOE	Department of Energy
DOE-HQ	Department of Energy - Headquarters
DOE-ID	Department of Energy - Idaho Field Office
DQO	Data Quality Objective

-E-

EAC	Estimate at Completion
EBR	Experimental Breeder Reactor
EG&G	EG&G Idaho, Inc.
EPA	Environmental Protection Agency
ER	Environmental Restoration
ERIS	Environmental Restoration Information System
ERMO	Environmental Restoration Management Office
ER&WM	Environmental Restoration and Waste Management Department (EG&G Idaho)
ES&H	Environment, Safety, and Health

-F-

FFA/CO	Federal Facility Agreement and Consent Order
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FONSI	Finding of No Significant Impact
FS	Feasibility Study
FTE	Full Time (Employee) Equivalent
FY	Fiscal Year

-G-

GIS	Geographic Information System

-H-

None

-I-

ICPP	Idaho Chemical Processing Plant
IDHW	Idaho Department of Health and Welfare
INEL	Idaho National Engineering Laboratory
IPMP	Implementing Program Management Plan
IRC	Independent Review Committee

-J-

None

-K-

None

-L-

LDR	Land Disposal Restrictions
LDU	Land Disposal Unit
LOFT	Loss of Fluid Test (Facility)

-M-

M&O	Management and Operating (contractor)
MBWA	Management By Walking Around
MK-FIC	MK-Ferguson of Idaho Company
MR	Management Reserve
MSA PP	Major System Acquisition Project Plan
MSA PMP	Major System Acquisition Project Management Plan

-N-

NCP	National Contingency Plan
NEPA	National Environmental Policy Act
NPL	National Priorities List
NQA	Nuclear Quality Assurance
NRC	Nuclear Regulatory Commission

-O-

OSHA	Occupational Safety and Health Act
OSWER	Office of Solid Waste and Emergency Response (EPA)
OU	Operable Unit

-P-

PBF	Power Burst Facility
PD	Program Directive
PMS	Project Management System
PSWBS	Project Summary Work Breakdown Structure

-Q-

QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
QAMS	Quality Assurance Management Staff
QPP	Quality Program Plan

-R-

RAM	Responsibility Assignment Matrix
RCRA	Resource Conservation and Recovery Act (PL 94-580)
RD/RA	Remedial Design/Remedial Action
RDDT&E	Research, Development, Demonstration, Testing, and Evaluation
RI/FS	Remedial Investigation/Feasibility Study
RMP	Records Management Plan
ROD	Record of Decision
RWMC	Radioactive Waste Management Complex

-S-

SAP	Sampling and Analysis Plan
SARA	Superfund Amendments and Reauthorization Act (of 1986)
SDA	Subsurface Disposal Area
SEMP	Systems Engineering and Integration Management Plan
SWMU	Solid Waste Management Unit

-T-

TAN	Test Area North
T&E	Test and Evaluation
TEC	Total Estimated Cost
TQM	Total Quality Management
TRA	Test Reactor Area
TRU	Transuranic
TSA	Transuranic Storage Area
TSF	Technical Support Facility

-U-

USGS	United States Geologic Survey
UST	Underground Storage Tank

-V-

VAR	Variance Analysis Report

-W-

WAG	Waste Area Group
WBS	Work Breakdown Structure
WINCO	Westinghouse Idaho Nuclear Company

-X-

None

-Y-

None

-Z-

None

NOTE: Program definitions may be found in the specific Environmental Restoration Program Directives.

(The reverse of this page is blank)

IMPLEMENTING PROJECT MANAGEMENT PLAN FOR THE EG&G IDAHO ENVIRONMENTAL RESTORATION PROGRAM

1. INTRODUCTION

This Implementing Project Management Plan (IPMP) defines the EG&G Idaho, Inc. (EG&G) management approach for conducting the EG&G Idaho Environmental Restoration (ER) Program at the Idaho National Engineering Laboratory (INEL). The Idaho Environmental Restoration and Waste Management Department (ER&WM) is responsible for conducting the ER Program in accordance with the Federal Facility Agreement and Consent Order (FFA/CO) and other guidance. This plan defines the organization, work plan, management control system, and subordinate plans that EG&G Idaho shall use. The plan will be kept current as the Program progresses, reviewed at least annually, and updated periodically as needed. The IPMP implements the requirements of the Department of Energy - Idaho Field Office (DOE-ID) ER Program Major System Acquisition (MSA) Project Management Plan (DOE/ID-10306) and conforms with DOE Order 4700.1, "Project Management System."

Annex I to this IPMP (Environmental, Safety, and Health Protection Implementation Plan) defines specific actions being taken by EG&G Idaho to comply with existing Federal, State of Idaho, and DOE requirements on environmental, safety, and health (ES&H) issues.

1.1 Program Purpose

The purpose of the EG&G Idaho ER Program is to identify, assess, and remediate designated areas, close out underground storage tanks, and to decommission surplus facilities so that the INEL may be removed from the National Priorities List.

1.2 Scope

EG&G Idaho's near-term portion of the ER Program consists of remediating assigned waste area groups on the INEL, conducting the Buried Waste Program (BWP), closeout of underground storage tanks (USTs), and the Decontamination and Decommissioning (D&D) Program. These activities are described in DOE-ID's Program Management Plan and summarized in the following paragraphs.

1.2.1 Remedial Action

Remedial action consists of an assessment phase and a cleanup phase. During the assessment phase, all potential release sites within Operable Units (OUs), will be characterized to determine the nature and extent of any contamination. Depending on the assessed risk and urgency, interim actions will be taken to mitigate any hazards to human health and the environment. Information gathered

during the assessment phase will be used to develop remediation methods to be used during the cleanup phase of the ER Program, which may be accomplished by a separate DOE-ID contractor.

Included in Remedial Action is the closeout of inactive underground storage tanks. This effort involves the permanent closeout of inactive (out of service or abandoned) USTs at the INEL in compliance with 40 CFR 261, 265, and 280.

1.2.2 Buried Waste Program (BWP)

The BWP addresses assessment and cleanup of Waste Area Group 7, known as the Radioactive Waste Management Complex. The purpose of the BWP is to identify possible remedial actions and to demonstrate and implement remedial actions selected by DOE.

1.2.3 Decontamination and Decommissioning (D&D Program)

The D&D Program is concerned with safe caretaking of surplus nuclear facilities and their decontamination for reuse, entombment, or dismantlement and removal. D&D activities are directed to all facilities on DOE-ID's Surplus Facilities List that are scheduled to be decommissioned in accordance with NRC regulations and DOE Orders. Releases to the environment associated with facilities and structures are addressed by remedial action projects.

2. OBJECTIVES

The overall objective of the ER Program is to remediate potential release sites on the INEL within 30 years, or by the year 2019. The objectives of the EG&G Idaho ER Program are to comply with the Federal Facility Agreement and Consent Order (FFA/CO) by implementing the FFA/CO Action Plan and supporting the DOE ER Program objectives described in DOE-ID's MSA Project Plan (PP) for the Environmental Restoration Program (DOE/ID 10344), MSA Project Management Plan (PMP) (DOE/ID 10306), and as directed by DOE-ID.

The objectives for technical, cost, schedule, public involvement, and compliance with regulatory requirements are stated in DOE-ID's PMP.

(The reverse of this page is blank)

3. MANAGEMENT ORGANIZATION AND RESPONSIBILITIES

This section describes the EG&G Idaho organization and responsibilities for managing ER Program activities. Significant project interfaces are described as well as lines of authority, responsibility, accountability, and communication.

3.1 Department of Energy

The DOE-ID Environmental Restoration Management Office (ERMO) directs EG&G Idaho's ER Program activities at the INEL. Figure 3-1 shows the organizational interfaces between DOE-ID and EG&G Idaho for the ER Program.

3.2 EG&G Idaho ER Program Organization and Responsibilities

The ER Program includes project management, integration, and coordination of remediating waste sites at the following Waste Area Groups (WAGs):

- WAG 1 Test Area North (TAN)
- WAG 2 Test Reactor Area (TRA)
- WAG 4 Central Facilities Area (CFA)
- WAG 5 Power Burst Facility/Auxiliary Reactor Area (PBF/ARA)
- WAG 6 Experimental Breeder Reactor I (EBR-I)/Boiling Water Reactor Experiment (BORAX)
- WAG 7 Radioactive Waste Management Complex (RWMC), known as the Buried Waste Program
- WAG 10 Miscellaneous

The ER Program also manages interfaces with the facilities, and is responsible for decontaminating and decommissioning surplus DOE facilities and closeout of inactive Underground Storage Tanks (USTs).

Site remediation activities encompass the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) assessment of WAGs 1, 2, 4, 5, 6, and 10 waste sites and coordinates activities with other INEL programs. Included under site remediation are the closeout of inactive USTs in accordance with 40 CFR 261, 265, and 280 and the decontamination and decommissioning of surplus facilities in accordance with Nuclear Regulatory Commission (NRC) regulations, DOE Orders, Resource Conservation and Recovery Act (RCRA), and other guidance as appropriate.

The RWMC, designated INEL WAG 7, which has both active and inactive waste sites, is the repository for low-level radioactive waste and a past repository for radioactive, hazardous, and mixed waste. Waste management operations at the RWMC determine the waste acceptance criteria requirements. The complexity of the wastes—hazardous, transuranic (TRU), and mixed—will require

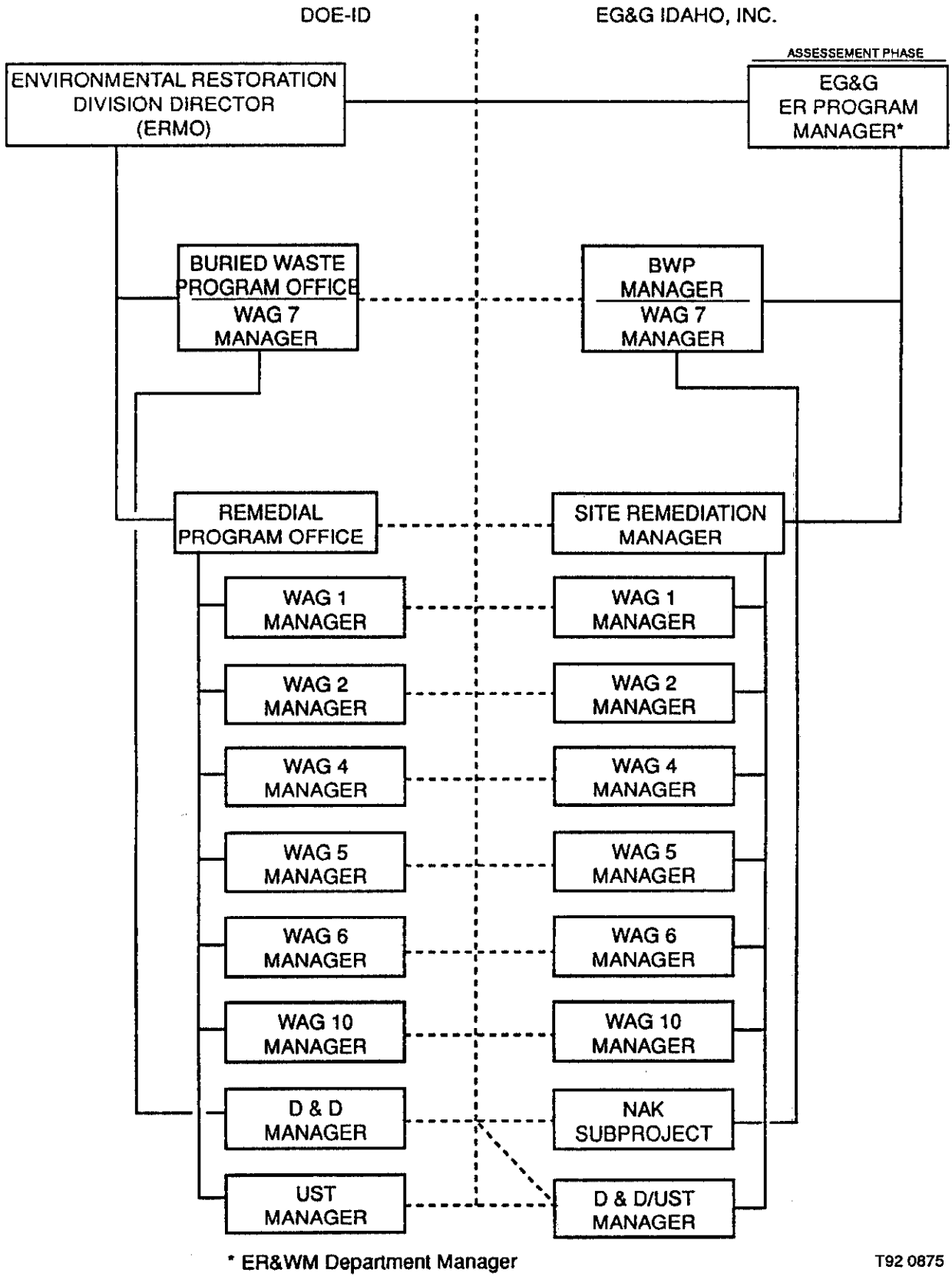


Figure 3-1. DOE-ID/EG&G Idaho organizational technical interfaces.

technology development to identify optimum approaches to treatment and ultimate disposal. DOE established the BWP to address RWMC remediation.

The BWP encompasses the remediation (CERCLA) of RWMC inactive waste sites. In addition, the program coordinates activities with the Buried Waste Integrated Demonstration (BWID) Program, which is under the purview of the Engineering Research and Applications Department. The BWP includes the investigation and remediation of releases of hazardous substances from buried waste at the Subsurface Disposal Area (SDA) as well as any releases from waste stored in the Transuranic Storage Area (TSA) and active subsurface disposal areas or other solid waste management units within the RWMC.

The ER&WM Information Systems and Laboratory Management Unit provides technical support to all EG&G Idaho WAGs, the MK-Ferguson of Idaho Company (MK-FIC), and to other contractors. Support includes analytical services through the Sample Management Office (SMO) and information systems integration and support including geographic information systems, database integration, networking services, and applications development systems analysis.

3.2.1 EG&G Idaho, Inc., Organization

EG&G Idaho recently reorganized to improve communication and collaboration. The reorganization reduced the number of departments from 13 to 7 and provides a more effective use of resources while developing a foundation for becoming a process-oriented organization. The seven departments are:

- Environment, Safety, and Quality
- Administration
- Facilities and Maintenance
- Engineering Research and Applications
- New Production Reactor
- Power Reactors Programs
- Environmental Restoration and Waste Management.

3.2.2 Environmental Restoration and Waste Management Department

The process of environmental restoration and waste management requires the identification, retrieval (if required), processing, and disposition of waste to meet environmental, safety, and health standards. Using risk-based decisions, ER Program characterizes and remediates inactive waste sites regulated by CERCLA and administered as defined in the FFA/CO. This process may require the development of new technologies to retrieve, process and dispose of wastes.

The Environmental Restoration and Waste Management Department (ER&WM) provides coordination and minimization of interfaces required for successful execution of the ER Program, the BWP, and management of the RWMC. Figure 3-2 shows the EG&G Idaho ER Program-ER&WM reporting relationships. Specific responsibilities required for day-to-day management and control are outlined below.

The ER&WM Department manager serves as the EG&G Idaho ER Program manager and interfaces with DOE-ID to meet the INEL ER Program needs for EG&G's assigned area of responsibility. The ER Program manager is responsible and accountable to DOE-ID for investigating and remediating inactive waste sites at EG&G's WAGs, closeout of inactive USTs, and decontamination and decommissioning (D&D) of surplus facilities. Other responsibilities of the ER Program manager include:

- Support and interface with DOE-ID and other EG&G Idaho departments in the most effective manner possible in accordance with applicable regulations and DOE requirements
- Develop and implement environmental, safety, health, and quality programs to protect the health and well-being of employees and the public and to produce quality products safely
- Identify any new inactive potential release sites at EG&G Idaho-managed facilities
- Provide for planning, direction, coordination, and reporting of WAG, D&D, and UST activities
- Monitor program budget and schedules and ensure availability of necessary personnel, facilities, equipment, and subcontractors
- Ensure technical quality of all projects and participate in evaluation of findings and development of conclusions and recommendations
- Interface with DOE research and development organizations and investigate remediation technologies
- Control ER Program management reserve funds
- Chair the Internal Change Control Board (ICCB)
- Conduct other activities directed by DOE-ID.

Reporting to the ER Program manager are the Site Remediation Group manager, the Buried Waste Program Group manager, the Program Support Group manager, the Operations Support Group manager, and the Technical Support and Waste Stream Management Group manager. Other ER&WM groups involved in waste management and technology development interface and coordinate their efforts. The Business Management Services (BMS) Unit manager for ER&WM functions as the comptroller for the ER&WM Department to meet the needs of the ER Program.

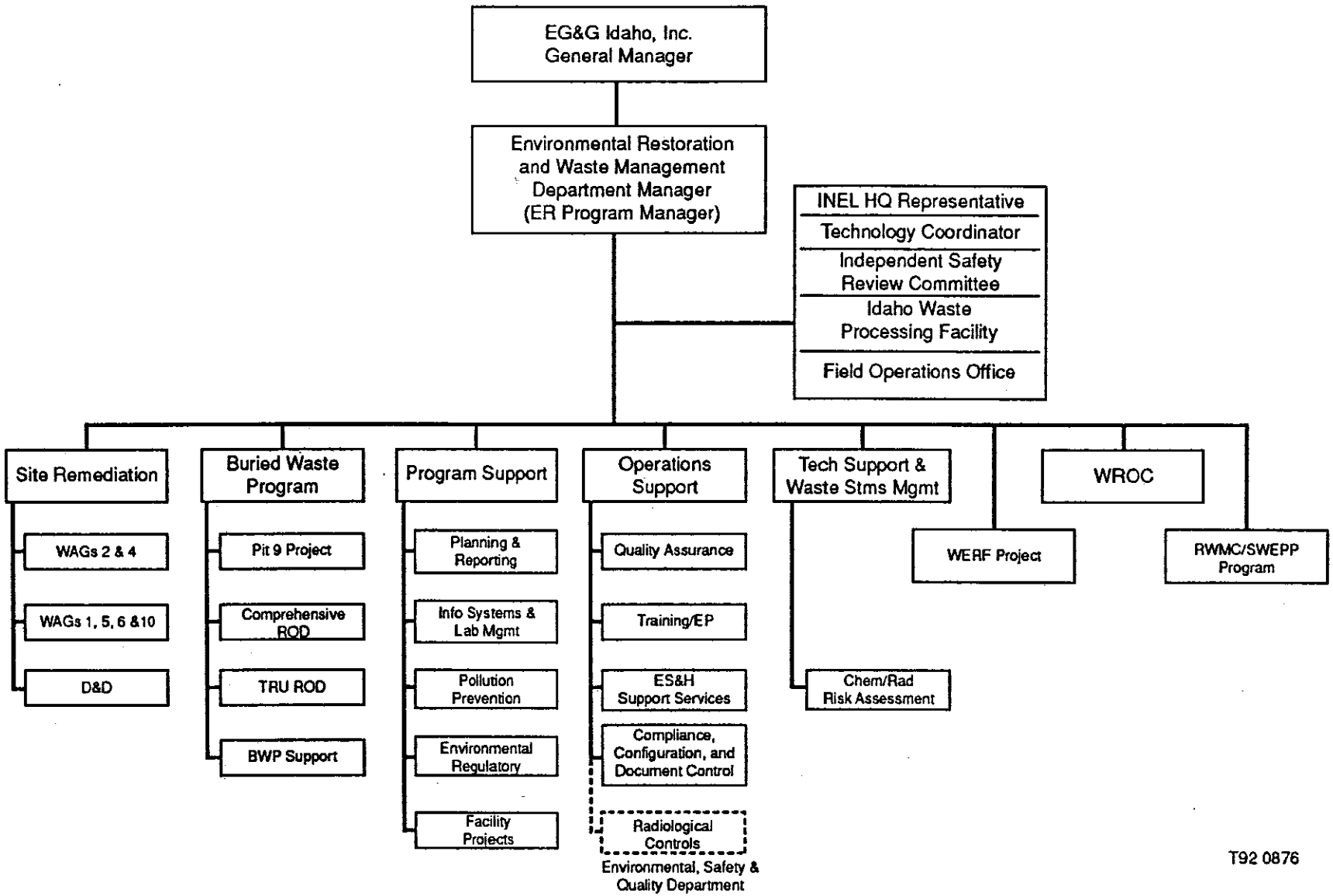


Figure 3-2. EG&G Idaho ER Program-ER&WM Department reporting relationships.

3.2.2.1 Site Remediation Group Manager. The Site Remediation Group manager is responsible for managing remedial actions at WAGs 1, 2, 4, 5, 6, and 10, D&D of surplus facilities, and closeout of USTs. Units in the Site Remediation Group manage WAGs 2 and 4, WAGs 1, 5, 6, and 10, and D&D/UST. The Site Remediation Group manager works closely with a DOE-ID counterpart. Functions and responsibilities of the Site Remediation Group manager include:

- Strategic long-term planning to ensure compliance with the INEL's FFA/CO and all applicable environmental, safety, and health laws, rules, regulations, and DOE Orders
- Technical review and acceptance of all remedial action documentation associated with WAGs 1, 2, 4, 5, 6, and 10, closeout of USTs, and D&D of surplus facilities
- Establishing and maintaining the technical, cost, and schedule baselines for the Site Remediation Group subproject cost accounts
- Identifying configuration changes involving the baselines and the proper characterization and coordination of proposed changes
- Preparing site characterization, remedial investigation and feasibility studies, interim remedial actions, and developing documentation required to support Record of Decisions (RODs) associated with the processes of NEPA, RCRA, and CERCLA
- Developing site-specific plans required by the ER Program such as Work Plans, Environmental, Safety and Health Plans, Sampling and Analysis Plans, etc.
- Ensuring that all site remediation activities and deliverables meet schedule and scope requirements as described in the FFA/CO Action Plan and applicable guidance
- Providing all personnel in the group with appropriate legally mandated training, such as OSHA Environmental, Safety, and Health
- Identifying requirements, schedule and support for CERCLA and NEPA public review and comment process.

Supporting the Site Remediation Group manager in these responsibilities are unit managers, WAG managers, D&D/UST manager and cost account managers assigned to specific tasks within the Site Remediation Group.

3.2.2.2 Buried Waste Program Group Manager. The BWP Group manager is responsible for the technical management of the BWP, the Army Reentry Vehicle Facility Site (ARVFS) NaK subproject, and for administering and implementing WAG 7 remedial actions. Units within the BWP Group manage the Pit 9 project, comprehensive ROD, transuranic ROD, and perform BWP support functions. The BWP Group manager coordinates external ER Program activities with the DOE-ID counterpart and internal activities with the RWMC/Solid Waste Experimental Pilot Plant (RWMC/SWEPP). Functions and responsibilities of the BWP Group manager include:

- Strategic long-term planning to ensure compliance with the INEL's FFA/CO and all applicable environmental, safety, and health laws, rules, regulations, and DOE Orders

- Identifying appropriate technologies and technology demonstration under the BWID program, in conjunction with the EG&G Idaho Environmental Restoration Waste Technology Development Program, to be used in proposed remedial actions for the RWMC

- Technical review and acceptance of all WAG-7 remedial action documentation

- Establishing and maintaining the technical, cost and schedule baselines for the BWP group subproject cost accounts

- Identifying configuration changes involving the baselines and the proper characterization and coordination of proposed changes

- Preparing site characterization, remedial investigation and feasibility studies, interim remedial actions, and developing documentation required to support RODs associated with the processes of NEPA and CERCLA and closure plans for RCRA

- Developing site-specific plans required by the ER Program such as Work Plans, Environmental, Safety and Health Plans, Sampling and Analysis Plans, etc.

- Coordinate with RWMC operating staff to ensure efficient and effective implementation of the ER Program strategy

- Ensuring that all BWP activities and deliverables meet schedule and scope requirements as described in the FFA/CO Action Plan and applicable guidance

- Providing all personnel in the group with appropriate legally mandated training as defined by ER Program Directives, OSHA, DOE Orders, and EPA

- Identifying requirements, schedule, and support for CERCLA and NEPA public review and comment process.

Supporting the BWP Group manager in these responsibilities are unit managers and cost account managers assigned to specific tasks within the BWP Group.

3.2.2.3 Program Support Group Manager. The Program Support Group manager is responsible for providing services and support to ER Program group managers, unit/WAG managers, and cost account managers in the areas of project management systems, system integration and engineering, software configuration management, information systems, laboratory and sample management, and environmental regulations. Units within the Program Support Group manage planning and reporting, information systems and laboratory management, pollution prevention, environmental regulatory and facility projects. Functions and responsibilities of the Program Support Group manager include:

- Establishing and maintaining the technical, cost, and schedule baselines for the Program Support Group cost accounts

- Maintaining ER Program major milestone schedules and assisting in the development of long-range planning

- Supporting the ER Program unit managers, WAG managers and cost account managers in developing and maintaining the technical, cost, and schedule baselines

- Developing and implementing program-level plans and procedures such as:

  - Implementing Project Management Plan
  - Systems Engineering and Integration Management Plan
  - Software Configuration Management Plan
  - Data Management Plan
  - Test and Evaluation Plan

- Supporting analysis of program resources, requirements, effects on overall schedule, and preparation of progress reports

- Providing for analysis of funding constraint effects on programmatic schedules and developing constrained funding effect analysis strategies

- Maintaining the Administrative Record (AR) files, project files, indexing system on an optical imaging system, and an electronic AR remote application system

- Supporting ER data storage and retrieval for characterization and mapping data, developing computer systems applications, and providing end-user access to technical information to support decision making

- Preparing and maintaining Master Task Agreement subcontracts for inorganic, organic, and radiochemical analytical services, and for analytical laboratory methods data validation—providing technical support to projects from sample collection to final use of analytical results

- Preparing requests for proposals and reviewing proposals received from Master Task Agreement subcontractors, ensuring that mandatory technical requirements are met including acceptable performance on an on-site audit for laboratory approvals

- Preparing and maintaining analytical laboratory methods data validation and data entry capabilities that support laboratory approval and performance assessment, sample tracking, field data entry, sampling and analysis plan entry, and chemical analysis data entry

- Providing, in conjunction with the Quality Assurance unit, the ER Program quality assurance (QA) oversight for all analytical laboratories analyzing samples from ER Program subprojects

- Developing and maintaining a program-level community relations plan

- Supporting public involvement activities for the ER Program at the INEL, including the public outreach requirements of CERCLA, NEPA, and DOE Orders

- Coordinating NEPA documentation.

Supporting the Program Support Group manager in these responsibilities are unit managers and cost account managers assigned to specific tasks within the Program Support Group.

3.2.2.4 Operations Support Group Manager. The Operations Support Group manager is responsible for providing support services to the ER Program Group managers, unit/WAG managers, and cost account managers. Units within the Operations Support Group provide support services in the areas of QA, training, and emergency preparations (EP), safety and health support, and configuration and document control. The manager also coordinates and interfaces with the Radiological Controls unit. Functions and responsibilities of the Operations Support Group manager relating to ER Program activities include:

- Developing and maintaining an up-to-date quality program plan/QA project plans that are responsive to DOE requirements

- Establishing and maintaining the technical, cost, and schedule baselines for the Operations Support Group cost accounts

- Preparing field surveillance and monitoring reports and providing information for the monthly progress reports

- Performing Quality monitoring to assess compliance with EG&G's quality manual

- Implementing the department's Total Quality Management Program

- Maintaining a trained, EG&G Idaho-certified staff of safety, quality, radiological, industrial hygiene, engineering, and support personnel

- Maintaining industrial hygiene and safety sampling equipment

- Document control

- Records management and configuration management

- Administratively supporting the ER Program Independent Review Committee tasks of reviewing documents and verifying data

- Supporting the Waste Management Independent Safety Review Committee
- Developing and implementing program-level and subproject-specific ES&H plans
- Providing technical guidance and assistance in environmental issues affecting the ER Program
- Establishing criteria and preparing procedures to verify data as required in DOE Order 5400.1, "General Environmental Protection Program," and the Environmental Compliance Planning Manual.

Unit managers and cost account managers support the Operations Support Group manager in these responsibilities.

3.2.2.5 Unit and WAG Managers. EG&G Idaho unit managers are responsible for administering and implementing ER Program tasks, which involve actual or potential environmental releases of hazardous substances/constituents from the sites designated in the FFA/CO. Unit managers ensure that the ER Program cost accounts are well defined and developed to permit execution of the assigned tasks. Unit managers are also responsible for administrative duties such as personnel, salary, promotion, evaluation, periodic reporting, office administration, and other tasks as directed by the group manager.

WAG managers are responsible for implementing FFA/CO remedial actions for their assigned WAG and interfacing and coordinating with DOE-ID counterparts. The WAG managers interface with other ER&WM groups and units for support and coordination. Functions and responsibilities of the WAG managers include:

- Developing strategic, long-range planning for ER Program subprojects to meet FFA/CO requirements and ensure compliance with all applicable environmental, safety, and health laws, rules and regulations, and DOE Orders
- Establishing and maintaining the technical, cost, and schedule baselines for the WAG cost accounts
- Identifying all inactive potential release sites, including identification of those outside the vicinity of contractor-operated facilities
- Identifying changes involving the baselines and coordinating proposed changes
- Preparing NEPA, RCRA, and CERCLA documentation for characterization, remedial investigation and feasibility studies, interim remedial actions, and input documentation for the ROD
- Preparing site-specific plans such as work plans, groundwater monitoring plans, sampling and analysis plans, quality assurance project plans, and other required plans

- Identifying, planning, justifying, executing, and controlling treatability study tests
- Identifying remediation subproject technology needs
- Developing budgets, cost estimates, and schedules as well as weekly and monthly progress reports
- Preparing and reviewing RCRA documents
- Coordinating and interfacing with the units within the Operational Support Group on issues relating to QA, ES&H, and NEPA support for the Remedial Design/Remedial Action (RD/RA) contractor
- Collecting site-specific data, reviewing for technical adequacy, and data input to an approved database such as ERIS
- Delisting of CERCLA sites
- Interfacing and coordinating risk assessments with the Chemical/Radiological Risk Assessment unit of the Technical Support and Waste Stream Management group
- Identifying requirements, schedule, and support of CERCLA and NEPA public review and comment process

Cost account managers support the unit and WAG managers and are responsible for assigned ER Program tasks.

3.2.2.6 D&D and UST Manager. The D&D and UST manager is responsible for safe caretaking of surplus nuclear facilities and their decontamination for reuse, their entombment, or dismantling and removal. These facilities contain radioactive contamination and require Health Physics control. D&D and UST activities include remediation of contaminated soil adjacent to the facility or tank. The D&D and UST manager is also responsible for permanent closeout of inactive (out of service or abandoned) USTs. Functions and responsibilities of the D&D and UST manager include:

- Developing strategic long-range planning for D&D to ensure compliance with all applicable environmental, safety, and health laws, rules, regulations, and DOE Orders
- Establishing and maintaining the technical, cost, and schedule baselines for D&D and UST subproject cost accounts
- Identifying and coordinating changes involving the baselines
- Developing budgets, cost estimates, and planning and preparing weekly and monthly progress reports

- Coordinating and interfacing with the Operations Support Group on issues relating to quality, environment, safety, and health
- Collecting site-specific data, reviewing for technical adequacy, and inputting data to an approved database
- Collecting and preparing data for each facility to support a thorough physical, chemical, and radiological characterization to fulfill NEPA, RCRA, and CERCLA requirements
- Performing and developing decision analyses to support a ROD
- Preparing decommissioning plans, performing required engineering, and developing detailed procedures for the target facility
- Conducting detailed D&D operations including coordinating and interfacing with other EG&G Idaho departments and any subcontractors
- Performing final surveys upon completion of D&D, and preparing final reports
- Coordinating and integrating D&D and UST activities with Westinghouse Idaho Nuclear Company (WINCO)
- Preparing and controlling a database of inactive USTs
- Preparing a closure notification for each UST scheduled for removal
- Interfacing and coordinating risk assessments with the Chemical/Radiological Risk Assessment unit of the Technical Support and Waste Stream Management Group
- Preparing and documenting all UST closure reports, photographs, sampling results, final disposal manifests, and procedural signoff sheets
- Conducting UST closures, including coordinating and interfacing with other EG&G Idaho departments, WINCO, and any subcontractors
- Performing final surveys upon completion of UST closure and preparing final reports.

Cost account managers support the D&D and UST manager and are responsible for assigned ER Program tasks.

3.2.2.7 Cost Account Managers. Cost Account Managers (CAMs) are responsible for developing resource loaded, time phased Cost Account Plans (CAPs) based on ER Program technical requirements, target budgets, and schedules. CAMs implement the ER Program requirements and ensure that work is performed according to plan.

3.2.2.8 Business Management Services. The Business Management Services (BMS) Unit manager functions as the comptroller for ER&WM and maintains financial liaison between ER&WM and other EG&G Idaho and DOE-ID financial organizations and develops and maintains financial policies and procedures for ER&WM. The functions and responsibilities of the BMS include:

- Develops and maintains standards for project controls, including baseline development, project performance, and change management; and for program/project financially related reports and all special requests regarding financial information
- Coordinates the financial portion of the ER&WM Five-Year Plan and assists in development of long-range planning
- Prepares implementing financial guidance and schedule for the annual funding call submittal and assists in the preparation of, and concurs with, all financial requests
- Supports the ER Program unit managers, WAG managers, and cost account managers in developing and maintaining the performance measurement baseline (cost and schedule)
- Provides funding determinations and analysis, authorizes funding expenditure, and has the authority to issue stop work orders based on funding implications
- Provides funds control management, which includes analysis of funding constraint impacts on the performance measurement baseline
- Reviews Estimate at Completion (EAC) data, variance statements, and proposed corrective actions prepared by the cost account managers for reasonableness and consistency before issuance of monthly reports
- In conjunction with the Program Support Group, develops and maintains the Contract Work Breakdown Structure (CWBS), the Funding Breakdown Structure (FBS), the Responsibility Assignment Matrix, the ER Program Cost Account Plan library, the change control process, the Project Management System software and the Cost and Planning System (CAPS) interface, and the Performance Measurement Baseline
- Reconciles approved change control board (CCB) actions with the funds control baseline and facilitates required actions
- Assists in preparation of a closeout package for all completed work.

3.3 ER Program Task Responsibilities

Typical ER Program task responsibilities for documentation preparation, review, and approval are shown in Figure 3-3. Specific requirements for internal and independent document review are established in ER PD 4.8.

Typical Documents	ER Program Manager	Site Remediation & BWP	Program Support	Operations Support	D&D Manager	WAG Managers	Cost Account Manager	Business Management Services
Technical Baseline	A	R	R	R	R	R	P	R
Cost Baseline	A	R	R		R	R	P	R
Schedule Baseline	A	R	R		R	R	P	R
Change Requests	A	R	R		R	R	P	R
Implementing Prog. Mgmt. Plan	A	R	P	R	R	R		
• Annex I, ES&H Plan	A	R	P	P	R	R		
Configuration Mgmt. Plan	A	R	P		R	R	R	
Environ.,Safety, and Health Prog.	A	R	R	P	R	R	R	
Quality Program Plan	A	R	R	P	R	R		
Records Mgmt. Plan	A	R	P	R	R	R		R
Data Mgmt. Plan	A	R	P	R	R	R		R
Groundwater Monitoring Plan		A	R	R	R	R	P	
Remedial Investigations		A	R	R	R	R	P	
Feasibility Studies		A	R	R	R	R	P	
Assessment Activities		A	R		R	R	P	
Site-Specific Plans								
• Work Plan		A	A	R	A	A	P	
• Sampling & Analysis Plan		A	A	R	A	A	P	
• Safety & Health Plan		A	A	R	A	A	P	
• QA Project Plans		A	A	R	A	A	P	
• Others		A	A		A	A	P	
QA Audits*	R	R	R	P/R	R	R	R	
Monthly Progress Report	A	P	P	P	P	P		R
Site Support Requirements		A	A		A	A	P	
Training Plan**	A	R	R	R	R	R	R	

P - Responsible for preparation of document R - Reviews document A - Approves document

** Prepared by Training and Emergency Preparation
* ES&Q Department also performs QA audits
Note: Documents follow lines of authority shown on organization chart.
Support functions provided by Program Support, Operations Support, and Technical Support

T92 0877

Figure 3-3. EG&G Idaho ER Program document preparation, review, and approval responsibilities.

4. WORK PLAN

This section describes the EG&G Idaho ER Program Work Plan for RCRA/CERCLA projects, decontamination and decommissioning of surplus facilities, closeout of inactive underground storage tanks and ER Program support. This work plan describes the ER Program activities and the approach to accomplishing the tasks in accordance with the Contract Work Breakdown Structure. Detailed work plans required by the CERCLA process will be prepared for each RI/FS project. The performance criteria for this work plan are described in Section 7, and a discussion of ER Program quality assurance (QA) is contained in Section 14.

4.1 RCRA/CERCLA Projects

At INEL, WAGs designate major facilities and groupings of inactive waste sites. Within each WAG, inactive sites have been identified and classified into confirmed release sites (three on the INEL), solid waste management units (SWMUs), and designated Land Disposal Units (LDUs). These inactive sites are incorporated into the FFA/CO as release sites under CERCLA, and the LDUs remain under RCRA.

4.1.1 WAG Remediation

The EG&G Idaho ER Program conducts environmental restoration activities for WAGs 1, 2, 4, 5, 6, 7, and 10. A description of each of these WAGs may be found in the DOE-ID MSA Project Management Plan (DOE/ID-10306). EG&G Idaho divides the work associated with each WAG into discrete work packages as dictated by the complexity of the work at hand. The specific location or problem to be remediated is specified as an Operable Unit (OU), which may be similar to geographical portions of a SWMU; a group of similar SWMU's sites; a specific remediation problem; or all or part of a location, such as a WAG.

The assessment and cleanup effort as well as project management are described in ER Program Activity Data Sheets (ADSs). ADSs include funding levels (compliant with budget planning year requirements) and priority rankings, regulatory drivers, NEPA documentation, budget and reporting codes (B&R), and a narrative description of the activity. Cost account plan development, further detailing the work scope, estimated cost and schedule, is discussed in Section 10.

Remediation work for inactive waste sites at a National Priorities List (NPL) site consists of the following elements:

- Characterization/assessment of sites and determining the nature and extent of contamination
- Interim remedial actions at selected sites based on characterization results
- Remedial investigations/feasibility studies (RI/FS)

- Development and/or assessment of remediation alternatives, recommendation of preferred alternative, and Record of Decision (ROD)

- Support of Remedial Design (RD) and Remedial Action (RA)

- Operation and maintenance (O&M), including monitoring to ensure compliance.

The RI/FS elements of a typical environmental restoration project are shown in the flow chart, Figure 4-1, and the remediation process is shown in Figure 4-2. The flow chart of Figure 4-1 is based on the National Contingency Plan (NCP) and EPA Superfund directives and guidance.

Because the CERCLA is a risk-based decision process, it is expected that many of the inactive waste sites will be deemed to require no further action. Under NEPA, proposed actions that clearly will have no adverse environmental impacts are documented as Categorical Exclusions. Proposed actions with unknown environmental impacts are initially analyzed in an Environmental Assessment. If it is determined that potential impacts are significant, the proposed action and reasonable alternatives are analyzed and compared in an Environmental Impact Statement. If impacts are not significant, a Finding of No Significant Impact is issued and work proceeds. Figures 4-1 and 4-2 diagram the process where it is determined that potential impacts are significant.

Figures 4-1 and 4-2 show the NEPA process being conducted in parallel with the CERCLA process. The NEPA process includes environmental impact studies and related activities involving the development and analysis of remedial action alternatives. The DOE-ID policy for integrating CERCLA and NEPA requirements is stated in "Integrating CERCLA and NEPA Requirements for Environmental Restoration Activities and INEL" (July 1992).

The WAGs and associated OUs are shown in Table A.2 of the FFA/CO Action Plan. The table shows which sites are designated for No Further Action and presents the tracks on which each OU will be managed. Additional inactive waste sites may be added with the evolution of the ER Program.

The ER Program consists of two major program elements: an assessment phase and a cleanup phase. The WAGs correspond to the subproject as shown on the Contract WBS (CWBS) in Section 5.

Assessment and cleanup tasks will be planned and conducted with DOE-ID guidance and direction in accordance with the provisions of RCRA and/or CERCLA/NCP/FFA/CO, whichever is applicable. RCRA/Hazardous Waste Management Act (HWMA) requirements will be followed in operating, closure, and post-closure permits. Closure under RCRA is performed in accordance with 40 CFR 265. CERCLA/NCP/FFA/CO requirements are specified in the FFA/CO's Action Plan.

The EG&G Idaho remediation activities follow the CERCLA process overview as shown in Figure 4-3. Remediation activities include:

- Conducting all work associated with the remediation efforts at WAGs 1, 2, 4, 5, 6, 7, and 10, including planning, organizing, coordinating, controlling, directing work, and conducting program reviews

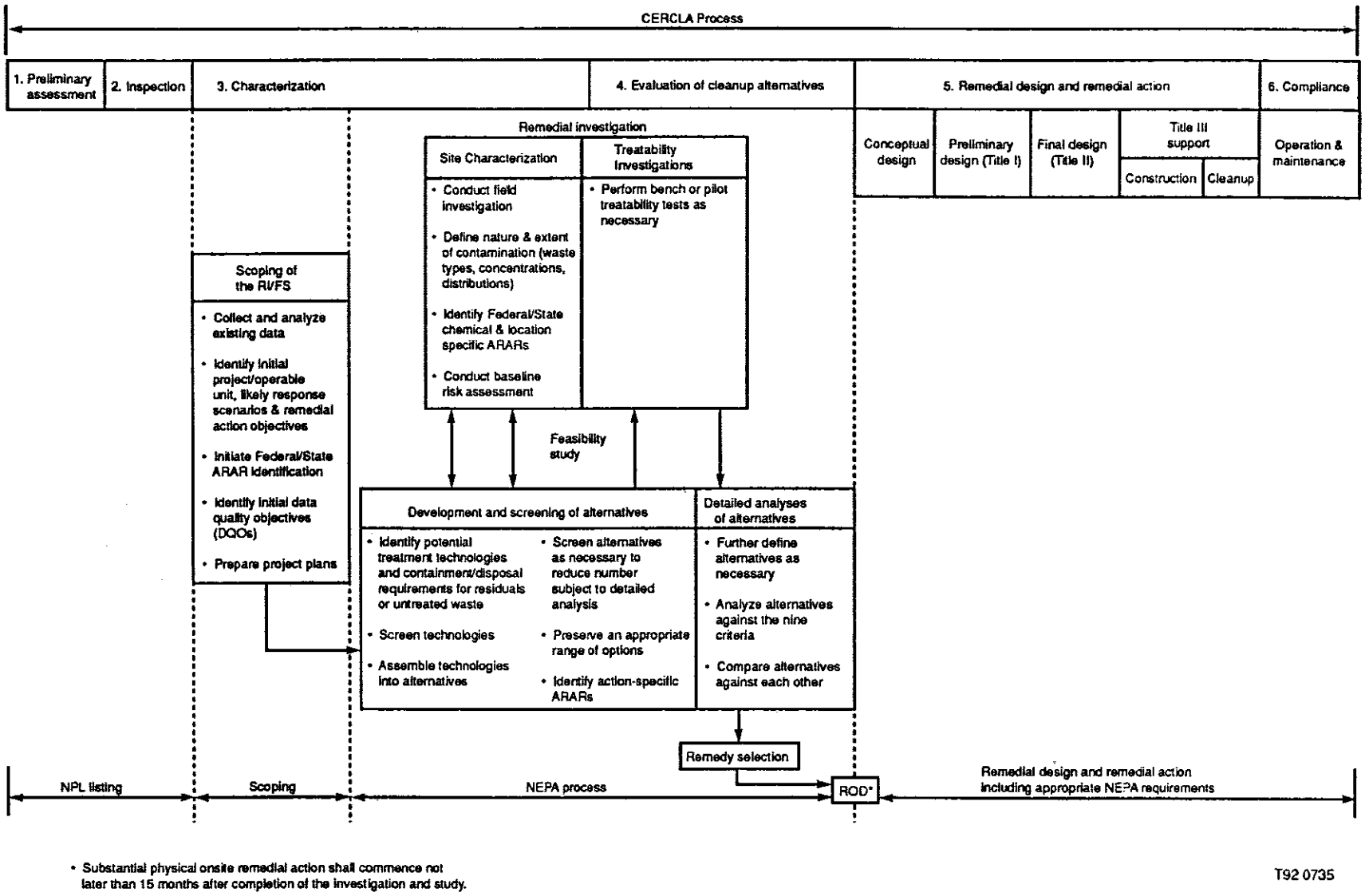


Figure 4-1. RI/FS activities of typical ER Program remediation projects.

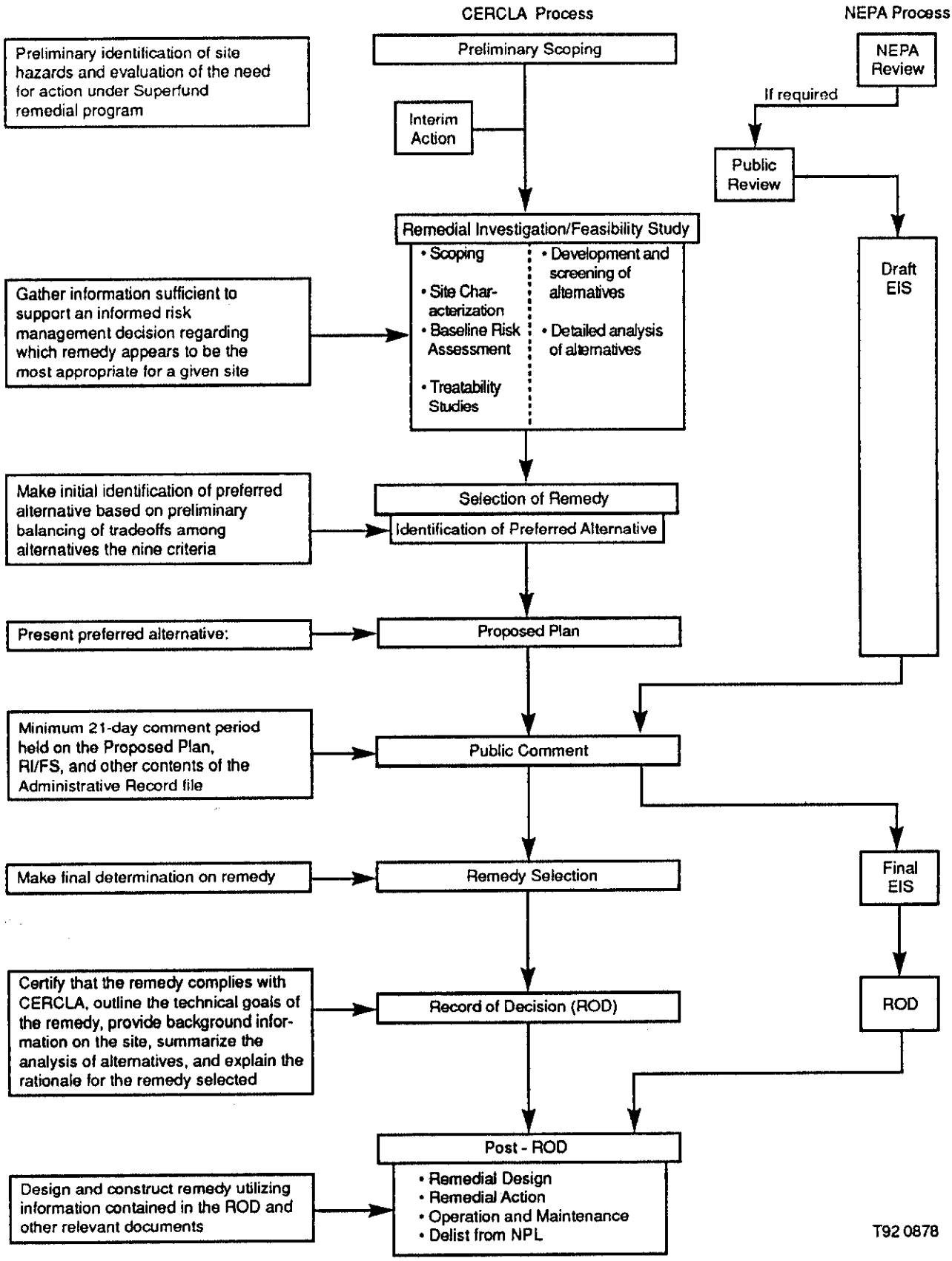


Figure 4-2. The remediation process.

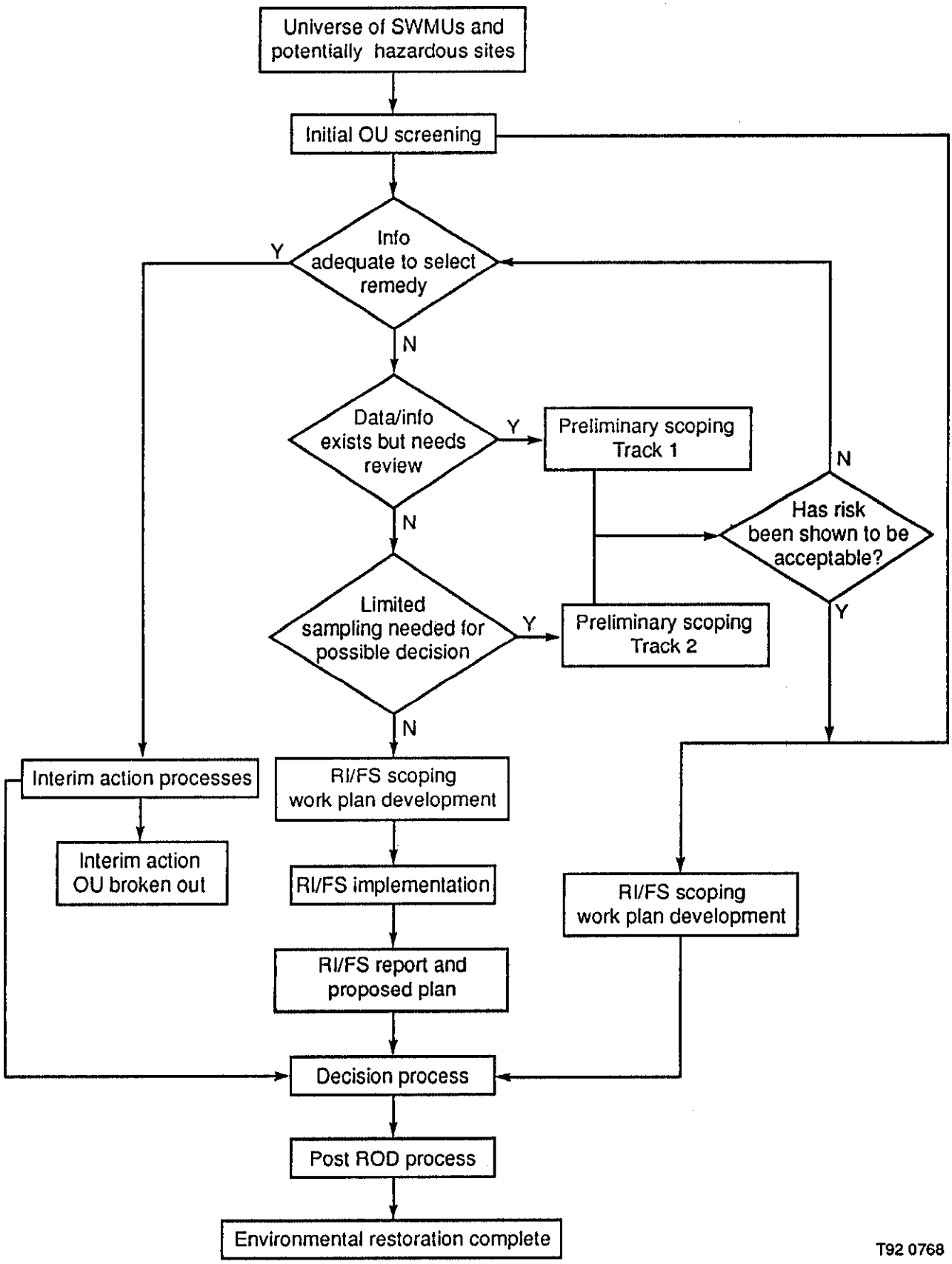


Figure 4-3. CERCLA process overview.

- Supporting DOE-ID readiness reviews, audits, and surveillances

- Providing data for and maintenance of the ER Program data base and the Administrative Record (AR) files

- Preparing ER Program planning, programming, and budgeting information such as ADSs, Annual Budget Submittal, Budget Prioritization, Financial Plan, Site-Specific Plan, and Current-Year Plan as requested by DOE-ID

- Preparing documentation required to plan and execute remediation work, which may include scopes of work, requests for working plans (including Health and Safety Plan, Community Relations Plan, Sampling and Analysis Plans, and Conceptual Site Models), review of analytical laboratory quality assurance/quality control (QA/QC) plans, treatability study testing, baseline risk assessments, NEPA/permitting documentation, RODs, safety analyses, preclosure plans, and postclosure plans.

- Executing remediation work according to the approved work plan, including:

  - Ensuring that data items meet regulatory requirements
  - Controlling technical, cost, and schedule performance

- Conducting interim remedial actions

- Performing other activities, as required, to achieve the stated objectives.

4.1.2 New Site Identification

During the conduct of the ER Program, other potential release sites may be discovered. These newly discovered sites will be reported, documented, and appropriate action assigned according to the procedure in ER PD 5.17.

4.1.3 Inactive USTs

The closeout of inactive (out of service or abandoned) USTs is considered a parallel effort of D&D activities. A description of inactive USTs that are to be closed out is provided in the DOE-ID PMP. Tanks that are no longer used will be closed in accordance with 40 CFR 261, 265, and 280 and applicable DOE Orders and Regulations. If, during closeout of an inactive UST, contamination is found to have migrated extensively beyond the soil adjacent to the tank boundary, the remediation of this contamination will be evaluated for inclusion as a CERCLA project under the FFA/CO.

This task involves the location and identification of inactive USTs. Tanks that leak and cannot be repaired economically must also be closed. Once identified for removal, USTs are prioritized and a proposed closure schedule prepared.

The activities for UST closeout follow a path similar to that of decontamination and decommissioning.

4.2 D&D

D&D addresses the safe caretaking of surplus nuclear facilities and their decontamination for reuse, their entombment, or dismantling and removal.

D&D of surplus INEL facilities is carried out by the assignment of a priority to each surplus facility listed in the surplus facility inventory. A description of the surplus facilities that are to undergo decontamination and decommissioning is provided in the DOE-ID MSA Project Management Plan. D&D activities are carried out in accordance with DOE Orders and Regulations, including DOE Order 5820.2A, Section V, Radioactive Waste Management, and the requirements of the NRC. If, during D&D operations, contamination is found to have migrated extensively beyond the soil adjacent to the foundation of the surplus facility, the remediation of this contamination will be evaluated for inclusion as a CERCLA project under the FFA/CO.

Elements of the D&D work plan are shown in Figure 4-4, Decontamination and Decommissioning Flow Chart, and are briefly described below.

- **Characterization** develops baseline data and provides a comprehensive description of the surplus facility under consideration for D&D. Physical, functional, radiological, and chemical data are collected with quantitative measurements where possible. When sampling is needed, a Sampling and Analysis Plan is prepared and issued. If conditions dictate, a Health and Safety Plan is also prepared.

- **Decision Analysis** is conducted using the characterization information to identify alternative options for conducting D&D operations. The options are evaluated, and a recommended option is selected; rationale for the option selected is documented.

- **D&D Plan** is developed that includes the characterization data, a summary of the alternatives and the preferred alternative, environmental review requirements, radiological criteria, projections of operational exposure, estimated quantities of waste and detailed administrative, cost, schedule, and management information. Detailed engineering is performed after the preferred alternative is selected.

- **NEPA Documentation**, prepared either prior to or in parallel with the D&D Plan, is reviewed in accordance with established and evolving DOE-ID and Department of Energy-Headquarters (DOE-HQ) requirements. In any case, D&D projects are not initiated without the NEPA documentation in place for that project, or portion of a project. The NEPA documentation address all environmental review requirements.

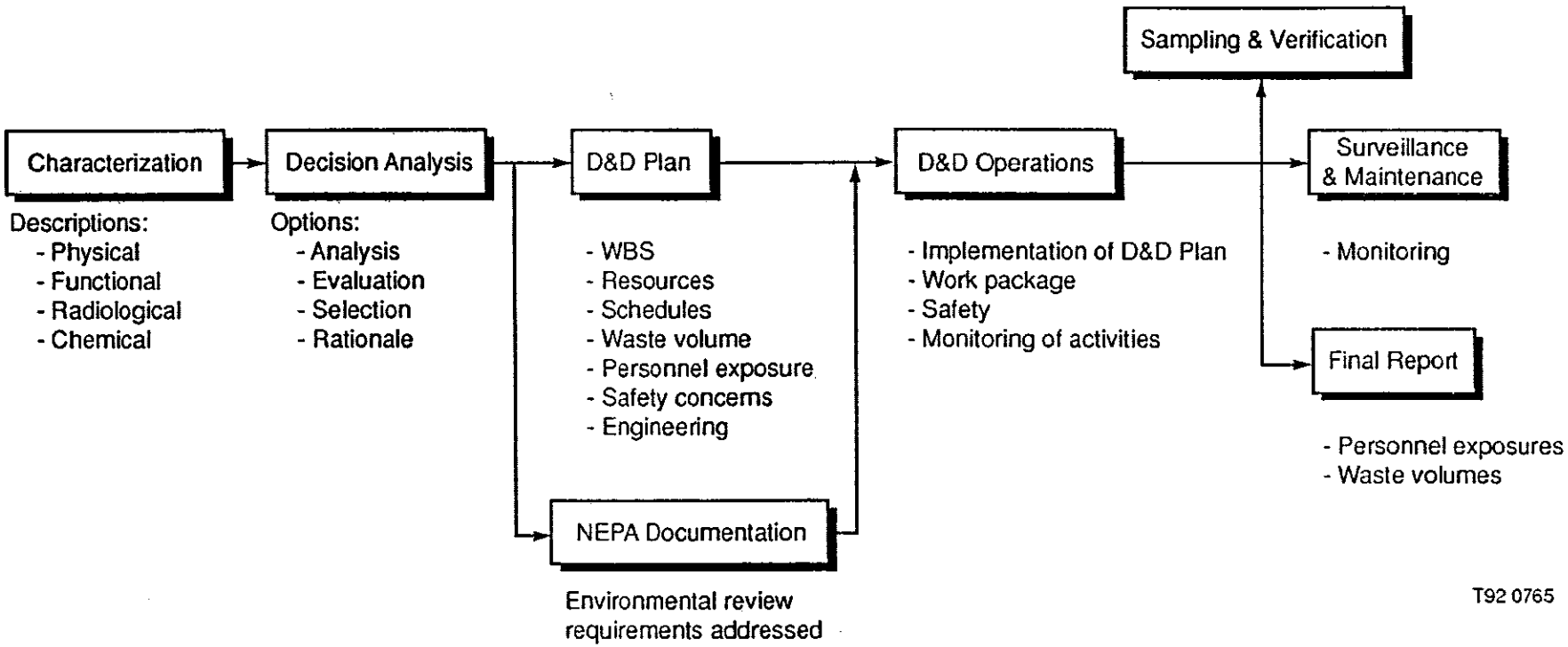


Figure 4-4. Decontamination and Decommissioning flow chart.

- **D&D Operations** consist of all the steps necessary to implement the actions of the D&D Plan and may include, depending on project scope, the preparation of transport plans, preliminary and final Safety Analysis Reports, detailed work packages, etc. Before initiating D&D operations, a readiness review is conducted and all action items are resolved before operations are started. A pre-operational safety meeting is held with all workers to brief them on all aspects of the job as it relates to job-site safety.

- **Sampling and Verification** is conducted upon completion of D&D operations to confirm that all D&D objectives are met.

- **Final Report** is prepared at the completion of each D&D project, to document the project history. Included in this report are personnel exposures, waste volumes generated, occurrence reports (ORs), lessons learned, etc. This document functions as a repository of actual experiences for historical purposes and as a planning tool to be used when working on similar projects. This report is formal and is distributed throughout the DOE system.

- **Surveillance and Maintenance** including any long-term monitoring of the site, if required, is carried out upon completion of the D&D.

4.3 Program Support

Support to the ER Program is provided by service and support groups consisting of the Program Support Group, Operations Support Group, and Technical Support and Waste Systems Management. Program support includes preparing management plans and procedures, and providing guidance necessary for implementing DOE Orders, EPA guidance, and other requirements. Figure 4-5 shows the relationship of ER Program requirements to EG&G's management plans and implementing procedures. The work plan for support organizations is discussed in the following sections.

4.3.1 Planning and Reporting

The Planning and Reporting Unit, within the Program Support group, prepares and maintains the EG&G Idaho ER Program management plans and is responsible for implementing DOE Order 4700.1 (Project Management System) and DOE Notice N 4700.5 (Project Control System Guidelines). Planning and Reporting maintains the ER Program MSA baseline, supports technical performance variance analysis, assists in developing cost account plans, provides oversight monitoring technical analysis of cost and schedule performance, assembles and issues weekly and monthly progress reports, prepares the INEL ER Program roadmap document, coordinates issue resolution, and provides technical writing functions, graphics support, and program procurement support.

4.3.2 Information Systems and Laboratory Management

The Information Systems and Laboratory Management Unit is responsible for developing, operating, and maintaining the information systems supporting ER&WM activities. To provide traceability and reproduceability for decision making, the unit is also charged with developing an integrated approach to information and data management. Integration of the various systems is

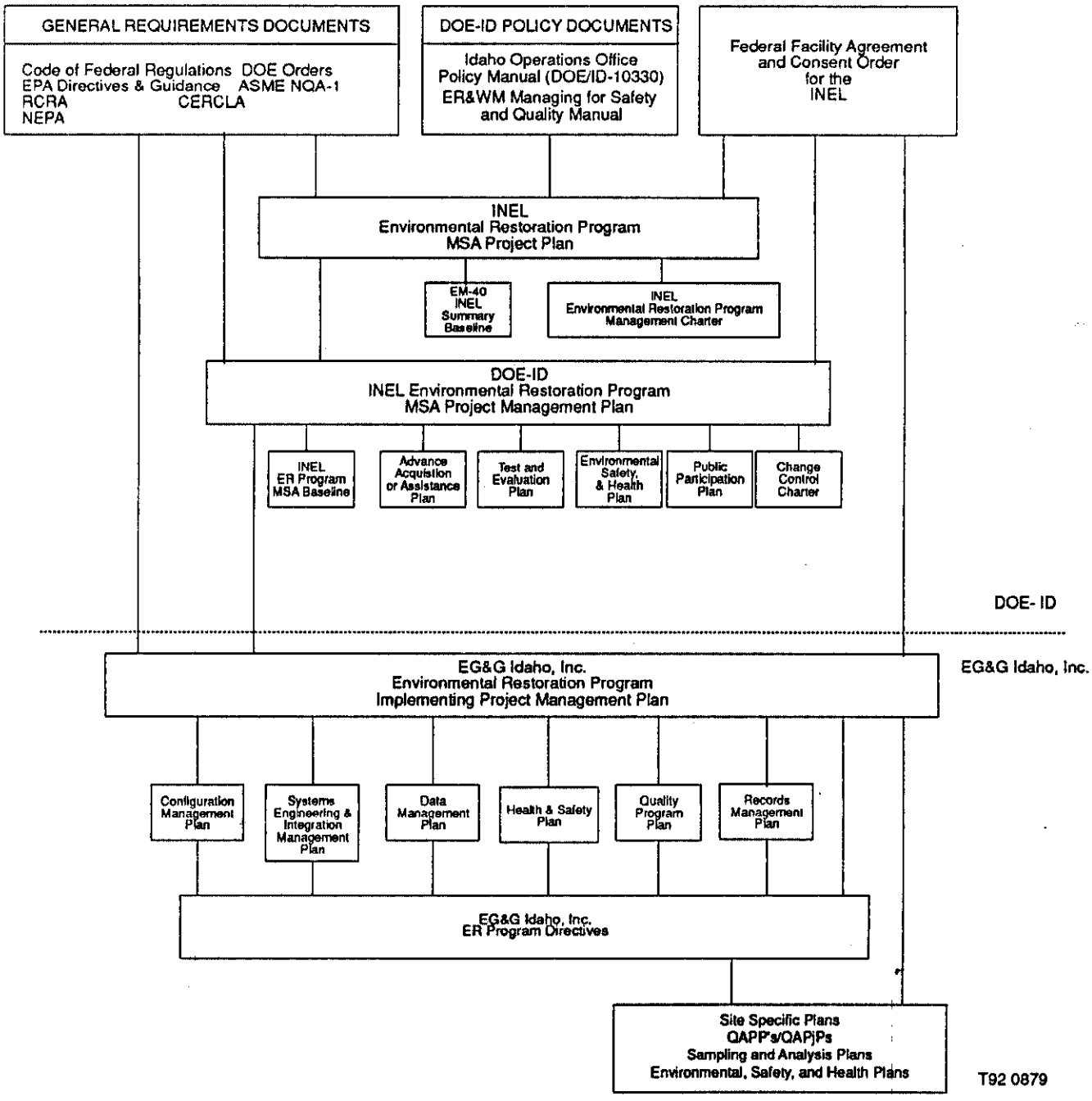


Figure 4-5. Relationship of ER Program requirements to EG&G management plans and implementing procedures.

critical for implementing configuration management controls and cost efficiency in data management. Systems include analytical, technical, management and planning, and document information.

Analytical information is managed by the Sample Management Office (SMO), which operates the computer-based Integrated Environmental Data Management System (IEDMS) and is responsible for analytical laboratory quality assurance for all characterization sampling performed at the INEL. The SMO also supports analytical laboratory audits, procurement, and analytical methods data validation efforts for the ER Program throughout the INEL.

Technical information managed by the unit includes Geographic Information Systems (GISs) and a number of databases with geologic, hydrologic, characterization, and well construction data and related visualization tools.

Management and planning information will be incorporated into an integrated planning database, which is being developed and scheduled for testing and implementation at the end of CY-92. This system will enable managers at all levels to access project data critical to effective management.

The unit is responsible for maintaining the ER Administrative Record (AR), including the electronic AR on an optical imaging system, and other related document control functions. Responsibilities also include configuration management of software, hardware, and data systems; computer system documentation standards and control; computer systems security interfaces; and a computer systems acquisition and enhancement clearinghouse.

Coordinating the integration of these systems is a significant and critical responsibility, and demonstrates that EG&G Idaho ER Program management recognizes that effective decision-making at all levels requires access to appropriate, quality checked data.

4.3.3 Environmental Regulatory

The Environmental Regulatory unit is responsible for coordinating and integrating ER&WM environmental compliance activities. The unit consists of three technical sections: the ER&WM Environmental Impact Statement (EIS) project office, ER&WM community relations, and the regulatory compliance office.

The ER&WM project EIS support manages tasks supporting the ER&WM EIS effort. This includes project management, technical interface to DOE-ID and DOE-HQ, Quality Assurance/Quality Certification Procedures preparation, policies and procedures development as required to ensure compliance with EG&G standards, and company representation at planning meetings with DOE and the EIS Contractor.

The ER&WM Community Relations Office is responsible for community relations-type activities in support of the ER&WM Department. This includes interfacing with DOE-ID, management and oversight of public participation activities, serving as a technical resource, developing the INEL Community Relations Plan, coordinating and editing the INEL Reporter, and providing ER specialist support to the Boise Outreach Office.

The Regulatory Compliance Office (RCO) provides oversight for NEPA, RCRA, and other permitting activities. Responsibilities include NEPA document and permit application preparation, review and approval, compliance planning, and compliance activity status tracking and reporting. The RCO also supports project managers in identifying compliance requirements, developing schedules, and integrating NEPA and permit activities.

4.3.4 Quality Assurance

The Quality Assurance Unit, within the Operations Support group, provides monitoring services to assess compliance with Quality requirements of the EG&G Idaho Quality Assurance Program, ER Program, and DOE Orders. The EG&G Idaho ER Program's approach to quality assurance is detailed in the Quality Program Plan.

The Environmental Restoration Independent Review Committee (IRC), within the Quality Assurance Unit, is responsible for providing consistent, independent, technical, and peer reviews of documents generated by or for ER as required by ER Program Directive 4.8. The IRC process provides independent reviews regarding compliance requirements in the areas of safety, health protection, quality, and environmental issues as set forth in the Company manuals, DOE-ID Orders, and federal and State regulations.

4.3.5 ES&H Support Services

The ES&H Support Services Unit, within the Operations Support group, develops and maintains the Environmental, Safety, and Health Protection Implementation Plan and provides industrial hygiene and safety, and other support services to the unit/WAG managers in developing subproject site-specific health and safety plans.

4.3.6 Chemical/Radiological Risk Assessment

The Chemical/Radiological Risk Assessment Unit, within the Technical Support and Waste Stream Management Group, supports the unit and WAG managers in the areas of risk assessment and safety analysis.

4.3.7 Compliance Configuration and Document Control

The Configuration and Document Control Unit, within the Operation Support Group, provides document control services for the ER Program.

5. WORK BREAKDOWN STRUCTURE

The Contract Work Breakdown Structure (CWBS) for the EG&G Idaho ER Program divides work to be performed into major task areas (Figure 5-1). The CWBS is designed to allow direct correlation to the Project Summary Work Breakdown Structure (PSWBS) of the DOE-ID MSA Program Management Plan (PMP). The subproject level of the PSWBS identifies the ER Program tasks. Cost accounts are developed for each subproject within EG&G's work scope. Assignment of cost accounts within the EG&G Idaho organization is shown in Section 15.

The EG&G Idaho CWBS dictionary is shown in Figure 5-2, CWBS Dictionary Part 1, Index. ER Program CWBS element definitions are found in the INEL ER Program MSA Baseline document, which contains technical, cost, and schedule baseline documents and is submitted to DOE-ID annually for approval.

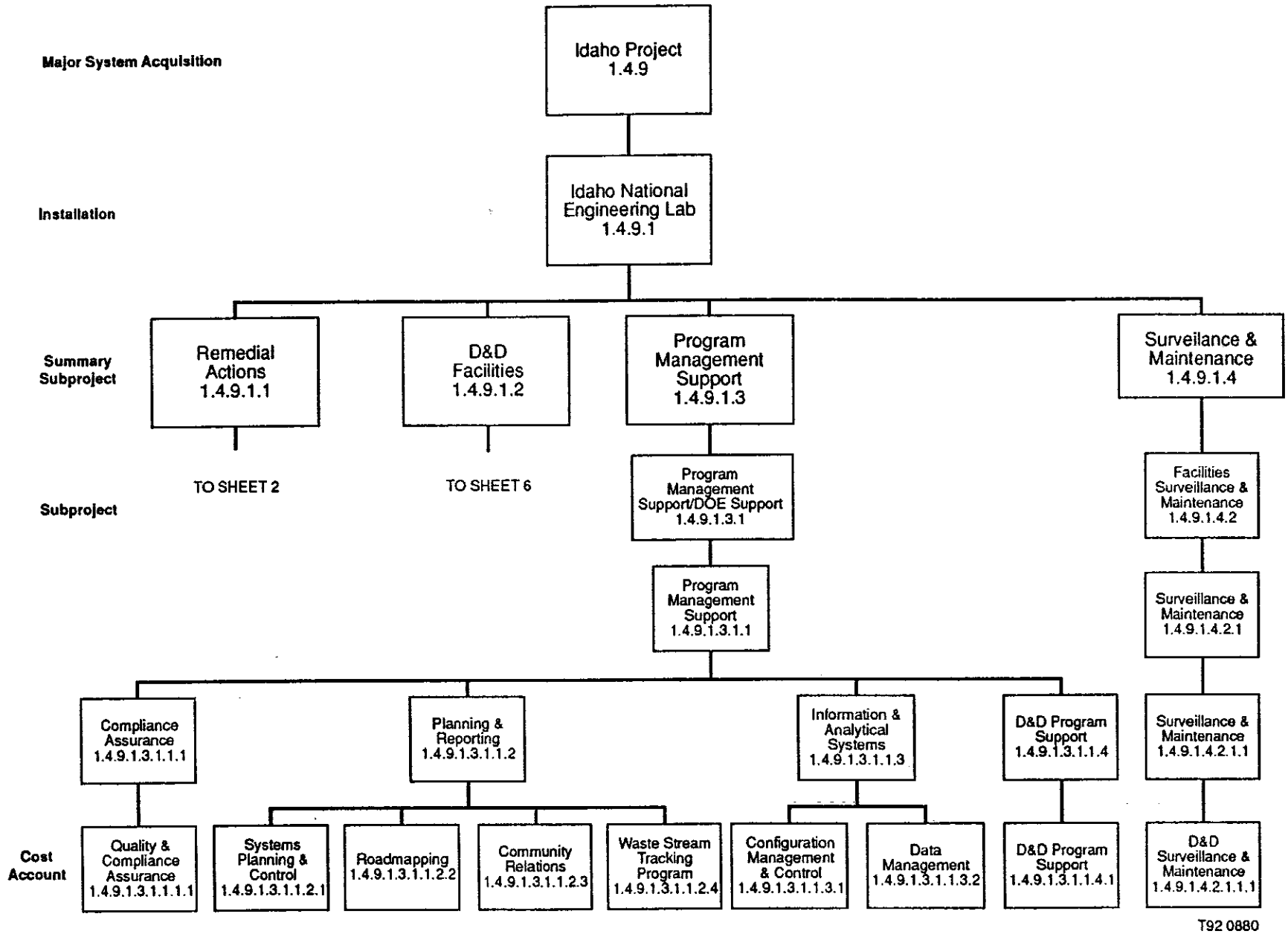


Figure 5-1. EG&G Idaho ER Program Contract Work Breakdown Structure (Sheet 1 of 8).

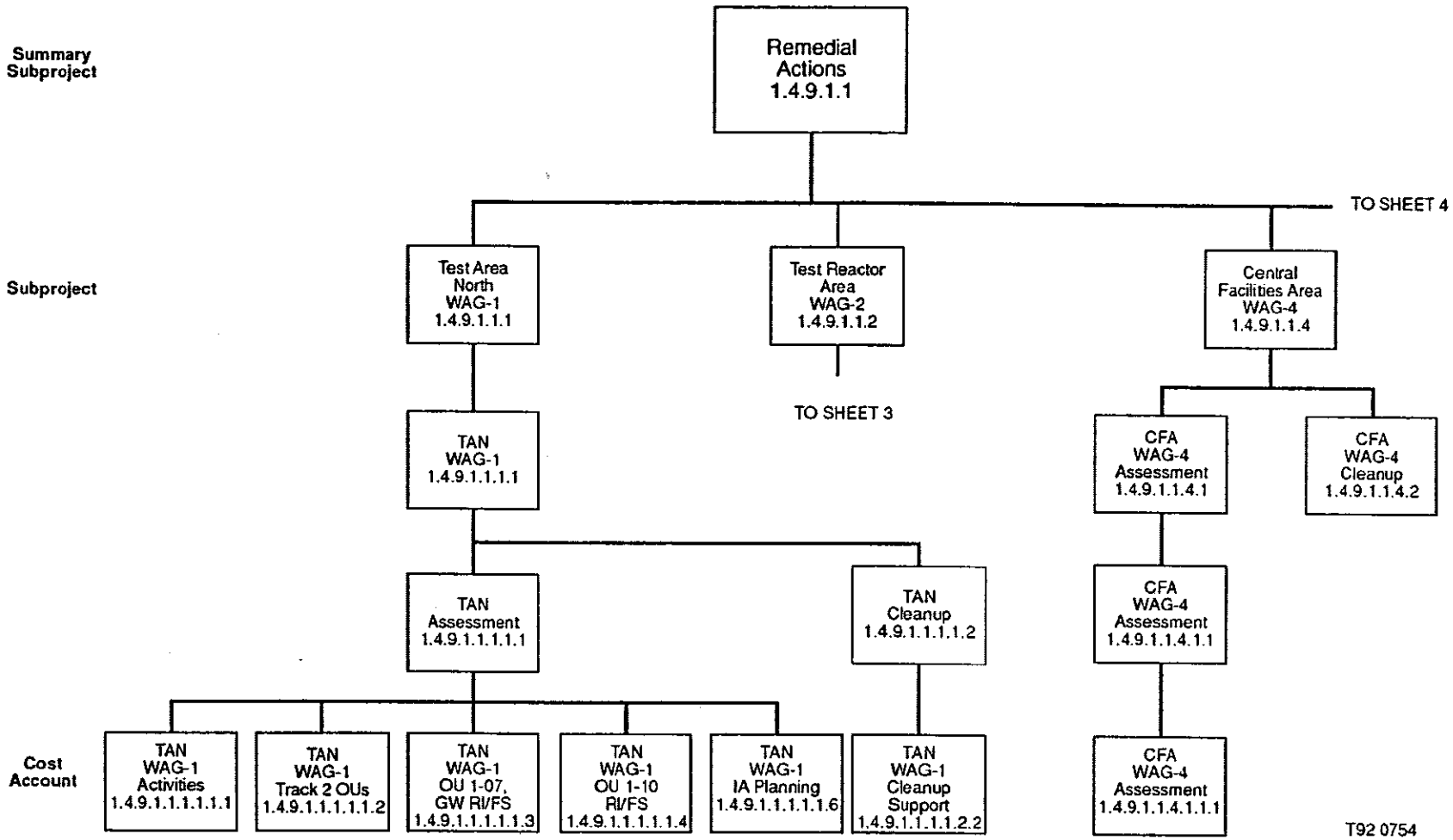


Figure 5-1. EG&G Idaho ER Program Contract Work Breakdown Structure (Sheet 2 of 8).

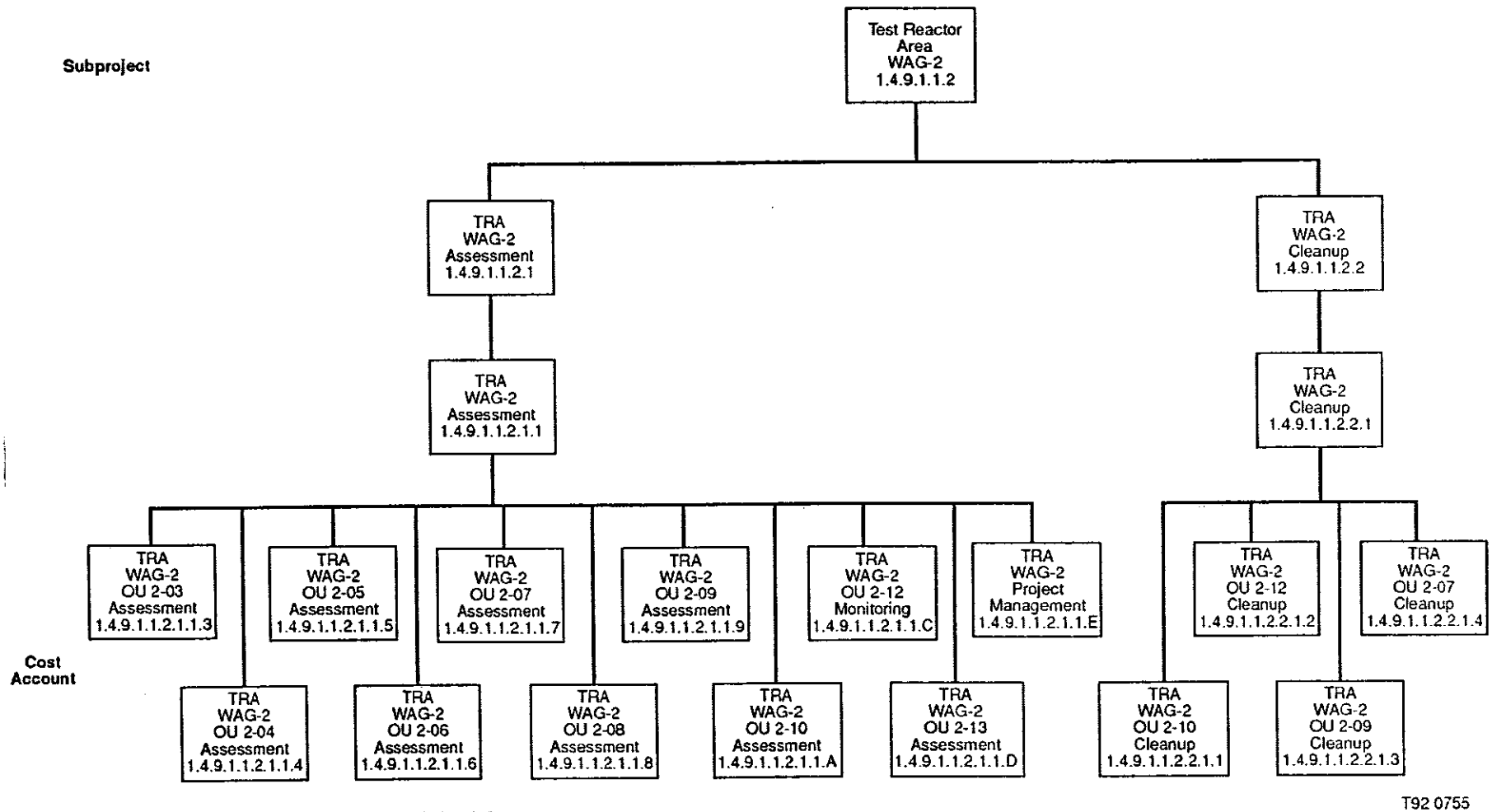


Figure 5-1. EG&G Idaho ER Program Contract Work Breakdown Structure (Sheet 3 of 8).

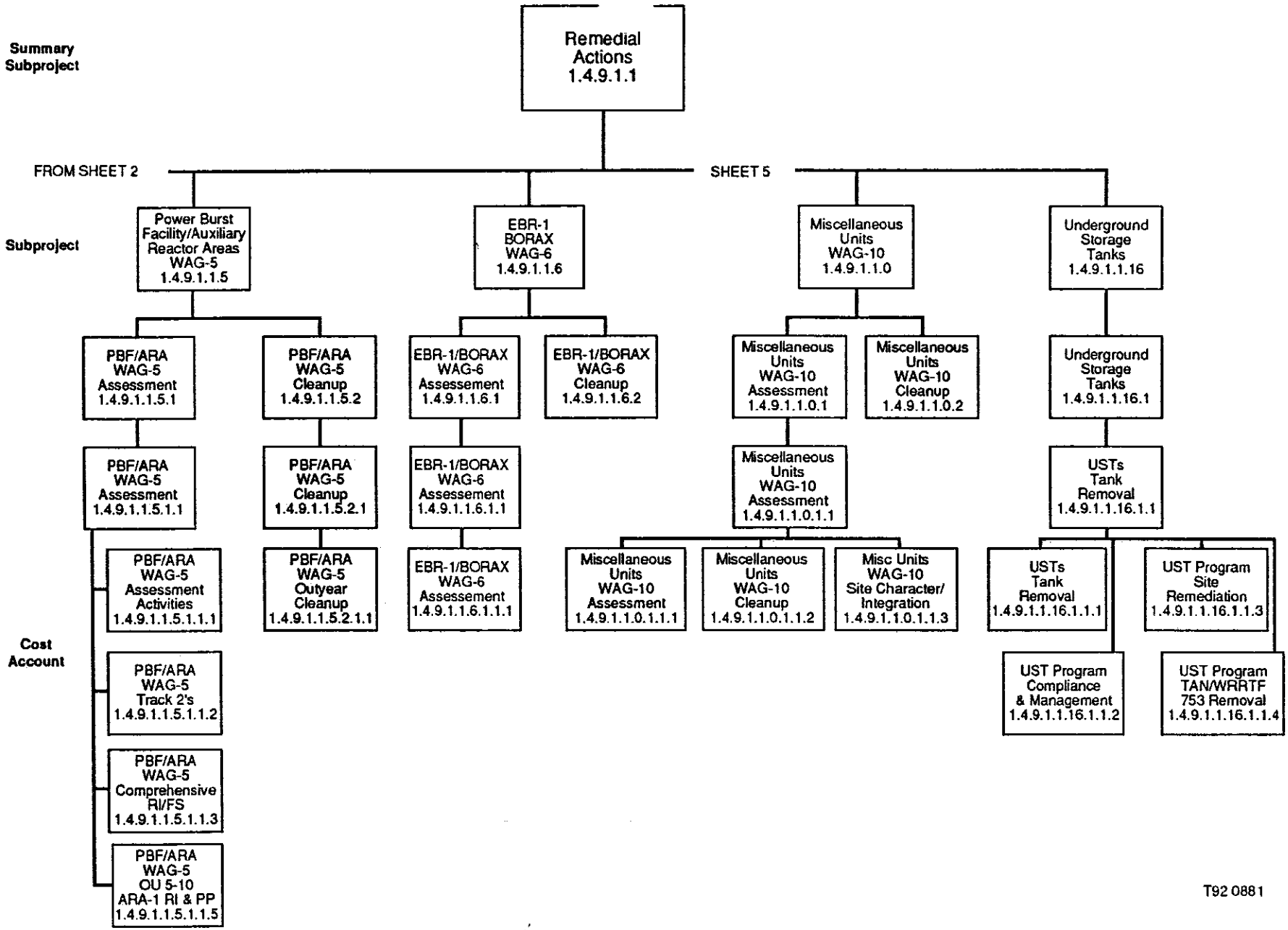


Figure 5-1. EG&G Idaho ER Program Contract Work Breakdown Structure (Sheet 4 of 8).

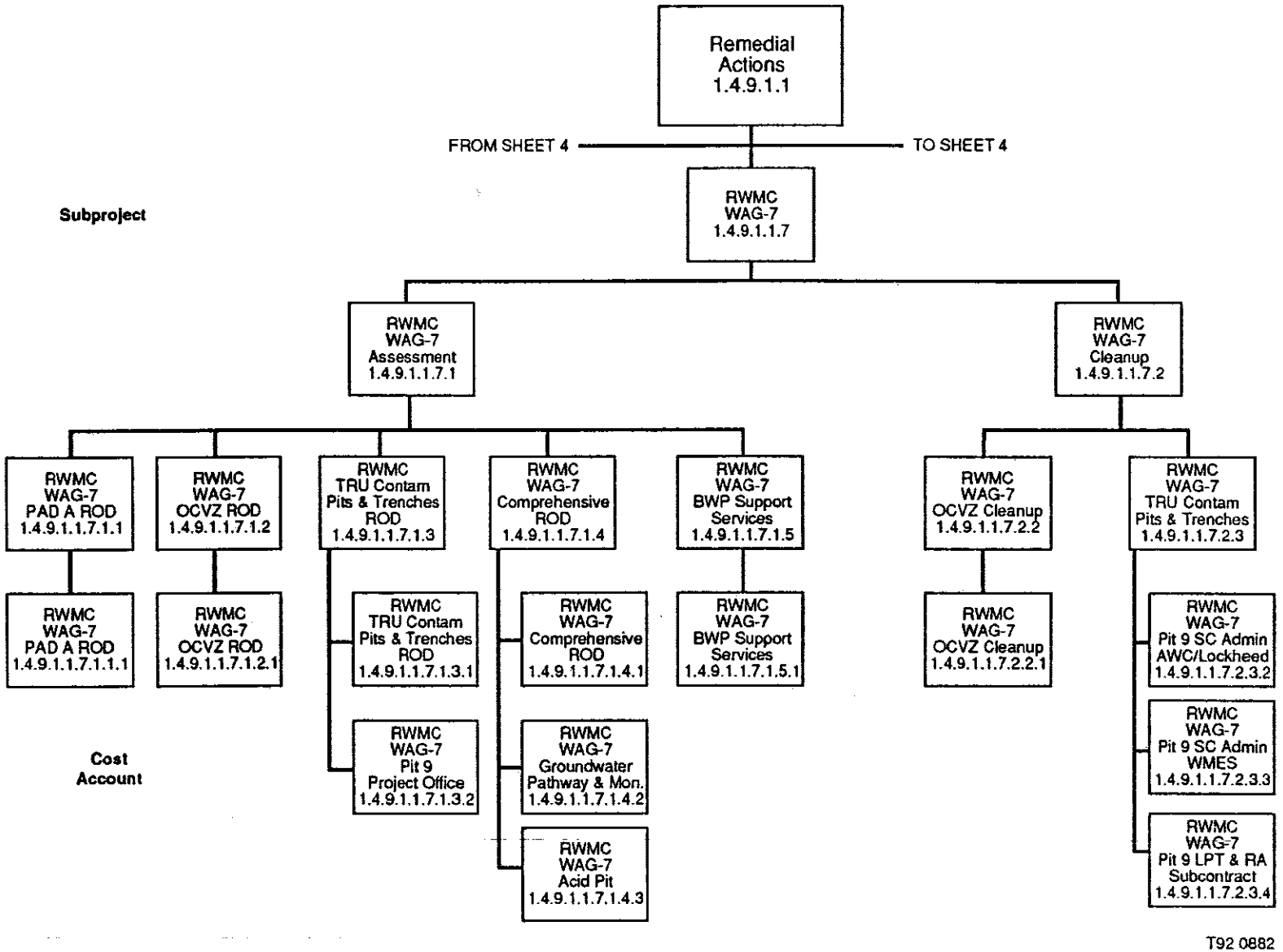


Figure 5-1. EG&G Idaho ER Program Contract Work Breakdown Structure (Sheet 5 of 8).

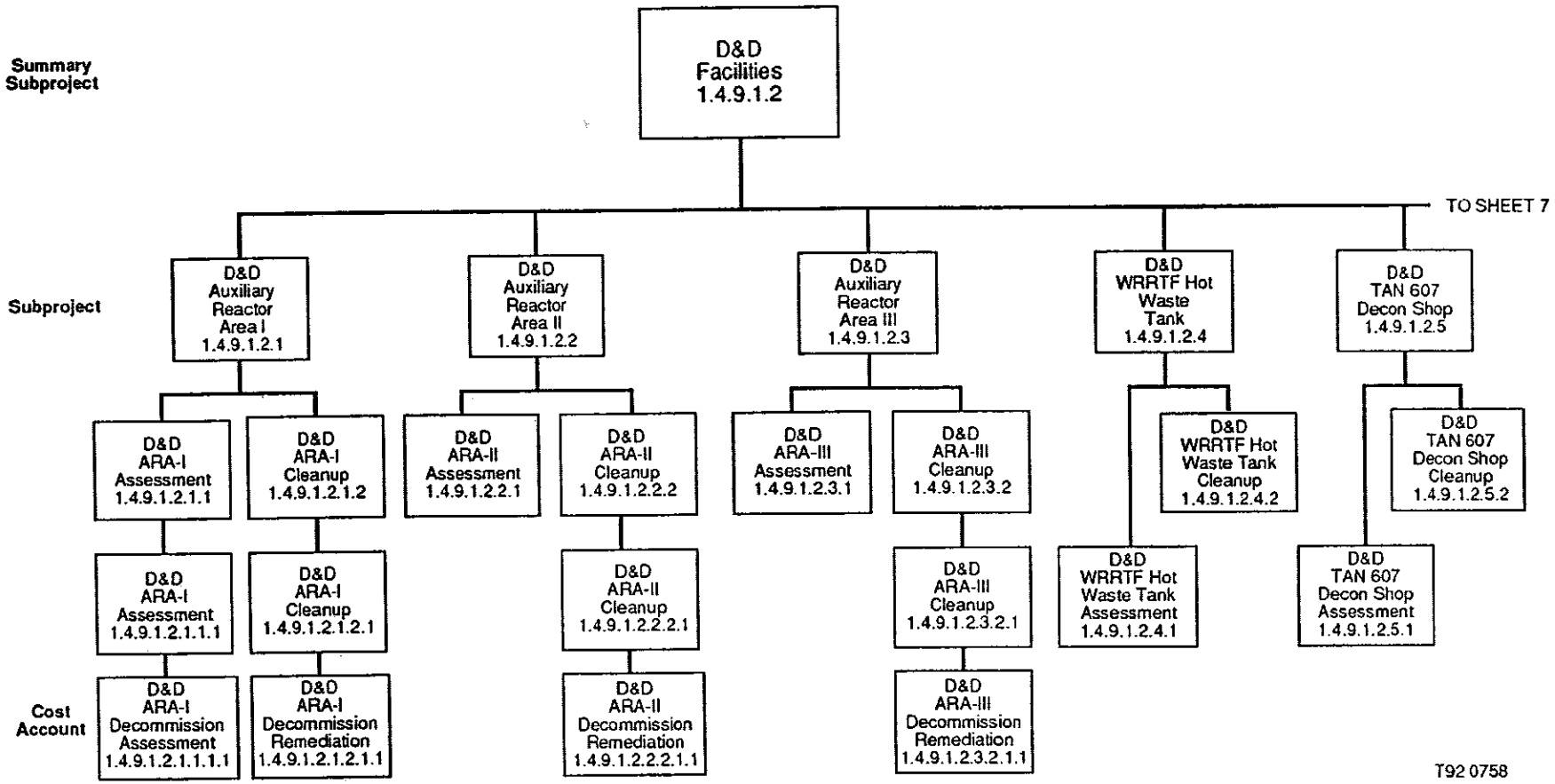


Figure 5-1. EG&G Idaho ER Program Contract Work Breakdown Structure (Sheet 6 of 8).

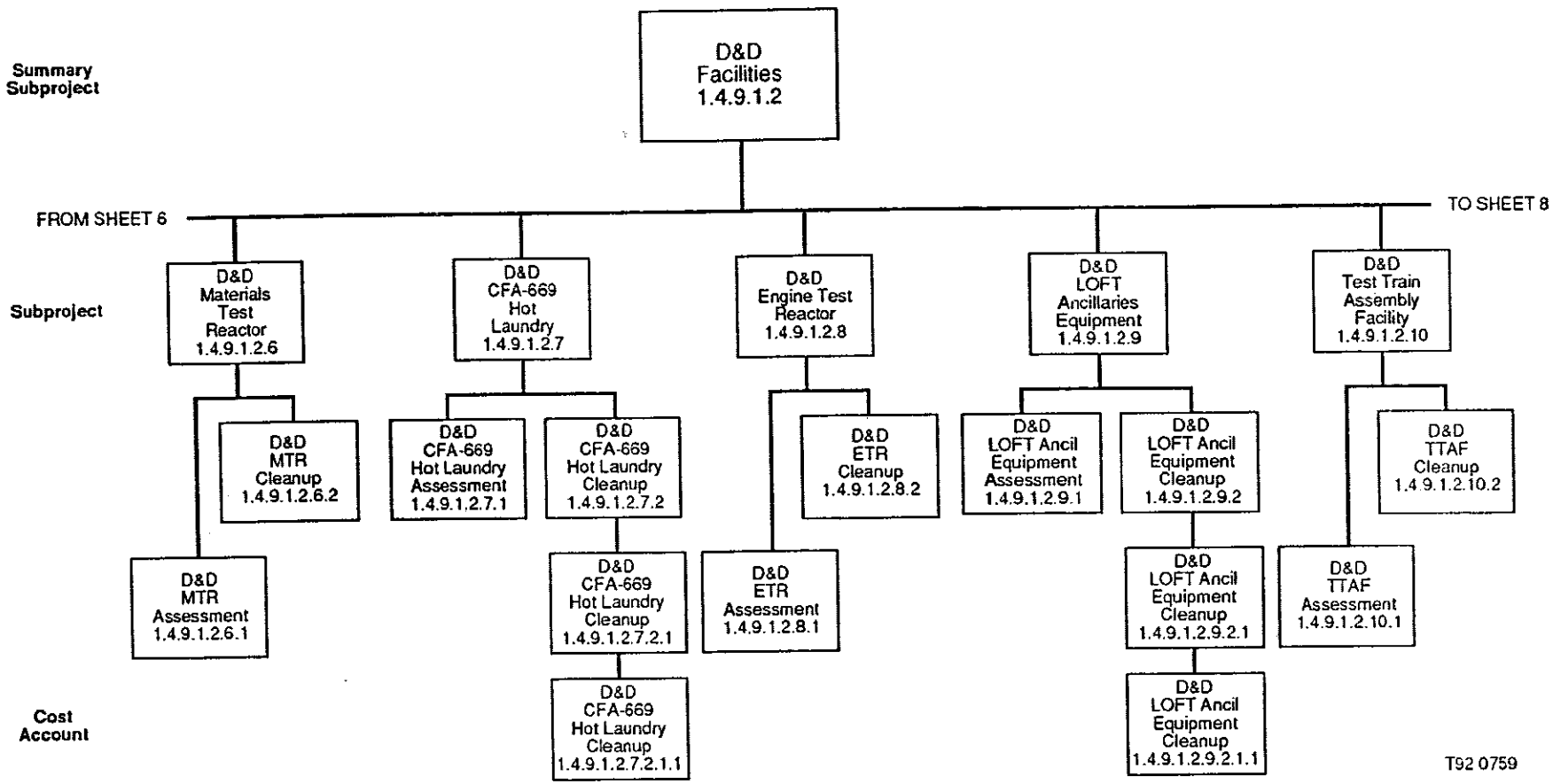


Figure 5-1. EG&G Idaho ER Program Contract Work Breakdown Structure (Sheet 7 of 8).

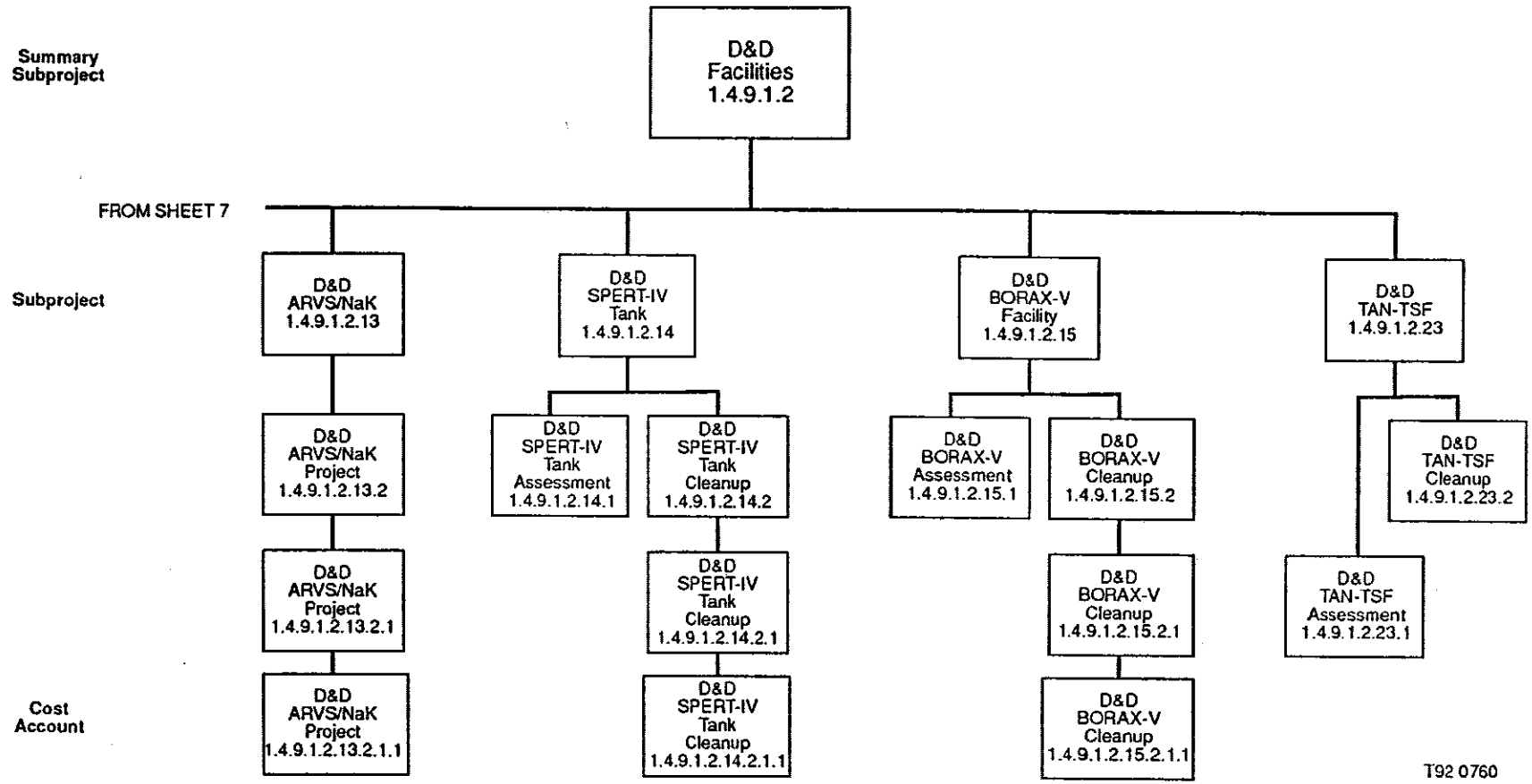


Figure 5-1. EG&G Idaho ER Program Contract Work Breakdown Structure (Sheet 8 of 8).

U. S. Department of Energy
Contract Work Breakdown Structure Dictionary
Part 1 – Index

1. Project Title/Participant ER Program/EG&G Idaho Inc.										2. Date Oct–92		3. Identification No. DE–AC07–761D01570	
4 Line No.	5. CWBS Elements Indenture Level 1	2	3	4	5	6	7	8	9	Title	6. Participant CWBS Element Code	7. Budget and Reporting No	8. Phase	9. Other
1	X									ER Program	1.0			
2		X								EM–40	1.4			
3			X							Idaho (MSA Level)	1.4.9			
4				X						INEL (Instl Level)	1.4.9.1			
5														
6					X					Remedial Actions	1.4.9.1.1.			
7						X				WAG 1, TAN	1.4.9.1.1.1.			
8							X			WAG 1, TAN	1.4.9.1.1.1.1			
9								X		TAN Assessment	1.4.9.1.1.1.1.1			
10									X	TAN WAG 1, Activities	1.4.9.1.1.1.1.1.1			
11									X	TAN , Track 2 OUs	1.4.9.1.1.1.1.1.2			
12									X	TAN, OU 1–07, GW RI/FS	1.4.9.1.1.1.1.1.3			
13									X	TAN, OU 1–10 RI/FS	1.4.9.1.1.1.1.1.4			
14									X	TAN, IA Planning	1.4.9.1.1.1.1.1.6			
15								X		TAN, WAG 1, Cleanup	1.4.9.1.1.1.1.2			
16									X	TAN, Cleanup Support	1.4.9.1.1.1.1.2.1			
17						X				WAG 2, TRA	1.4.9.1.1.2			
18							X			TRA, Assessment	1.4.9.1.1.2.1			
19								X		TRA, Assessment	1.4.9.1.1.2.1.1			
20									X	TRA, OU 2–03 Assessmt	1.4.9.1.1.2.1.1.3			
21									X	TRA, OU 2–04 Assessmt	1.4.9.1.1.2.1.1.4			
22									X	TRA, OU 2–05 Assessmt	1.4.9.1.1.2.1.1.5			
23									X	TRA, OU 2–06 Assessmt	1.4.9.1.1.2.1.1.6			
24									X	TRA, OU 2–07 Assessmt	1.4.9.1.1.2.1.1.7			
25									X	TRA, OU 2–08 Assessmt	1.4.9.1.1.2.1.1.8			
26									X	TRA, OU 2–09 Assessmt	1.4.9.1.1.2.1.1.9			
27									X	TRA, OU 2–10 Assessmt	1.4.9.1.1.2.1.1.A			
28									X	TRA, OU 2–12 Assessmt	1.4.9.1.1.2.1.1.C			
29									X	TRA, OU 2–13 Assessmt	1.4.9.1.1.2.1.1.D			
30									X	TRA, Project Management	1.4.9.1.1.2.1.1.E			
31							X			TRA, Cleanup	1.4.9.1.1.2.2			
32								X		TRA, Cleanup	1.4.9.1.1.2.2.1			
33									X	TRA, OU 2–10 Cleanup	1.4.9.1.1.2.2.1.1			
34									X	TRA, OU 2–12 Cleanup	1.4.9.1.1.2.2.1.2			
35									X	TRA, OU 2–09 Cleanup	1.4.9.1.1.2.2.1.3			
36									X	TRA, OU 2–07 Cleanup	1.4.9.1.1.2.2.1.4			
37						X				WAG 4, CFA	1.4.9.1.1.4			
38							X			CFA, Assessment	1.4.9.1.1.4.1			
39								X		CFA, Assessemnt	1.4.9.1.1.4.1.1			
40									X	CFA, Assessment	1.4.9.1.1.4.1.1.1			
41						X				CFA, Cleanup	1.4.9.1.1.4.2			
42						X				WAG 5, PBF/ARA	1.4.9.1.1.5			
43							X			PBF/ARA, Assessment	1.4.9.1.1.5.1			
44								X		PBF/ARA, Assessment	1.4.9.1.1.5.1.1			
45									X	PBF/ARA, Assess Activ.	1.4.9.1.1.5.1.1.1			
46									X	PBF/ARA, Track 2's	1.4.9.1.1.5.1.1.2			
47									X	PBF/ARA, Comp RI/FS	1.4.9.1.1.5.1.1.3			
48									X	PBF/ARA, OU 5–10 RI & PP	1.4.9.1.1.5.1.1.5			

Figure 5-2. EG&G Idaho ER Program CWBS Dictionary, Part I - Index (Sheet 1 of 4).

U. S. Department of Energy
Contract Work Breakdown Structure Dictionary
Part 1 – Index

1. Project Title/Participant ER Program/EG&G Idaho Inc.											2. Date Oct–92		3. Identification No. DE–AC07–761D01570	
4 Line No.	5. CWBS Elements Indenture Level 1	2	3	4	5	6	7	8	9	Title	6. Participant CWBS Element Code	7. Budget and Reporting No	8. Phase	9. Other
49							X			PBF/ARA. Cleanup	1.4.9.1.1.5.2			
50								X		PBF/ARA, Cleanup	1.4.9.1.1.5.2.1			
51									X	PBF/ARA, Outyear Cleanup	1.4.9.1.1.5.2.1.1			
52						X				WAG 6, EBR–1 BORAX	1.4.9.1.1.6			
53							X			EBR–1 BORAX Assessmnt	1.4.9.1.1.6.1			
54								X		EBR–1 BORAX Assessmnt	1.4.9.1.1.6.1.1			
55									X	EBR–1 BORAX Assessmnt	1.4.9.1.1.6.1.1.1			
56							X			EBR–1 BORAX Cleanup	1.4.9.1.1.6.2			
57						X				WAG 7, RWMC	1.4.9.1.1.7			
58							X			RWMC, Assessment	1.4.9.1.1.7.1			
59								X		RWMC, PAD A ROD	1.4.9.1.1.7.1.1			
60									X	RWMC, PAD A ROD	1.4.9.1.1.7.1.1.1			
61								X		RWMC, OCVZ ROD	1.4.9.1.1.7.1.2			
62									X	RWMC, OCVZ ROD	1.4.9.1.1.7.1.2.1			
63								X		RWMC, TRU Cont, P&T ROD	1.4.9.1.1.7.1.3			
64									X	RWMC, TRU Cont, P&T ROD	1.4.9.1.1.7.1.3.1			
65									X	RWMC, Pit 9 Project Office	1.4.9.1.1.7.1.3.2			
66								X		RWMC, Comprehen ROD	1.4.9.1.1.7.1.4			
67									X	RWMC, Comprehen ROD	1.4.9.1.1.7.1.4.1			
68									X	RWMC, Groundwtr Pathway	1.4.9.1.1.7.1.4.2			
69									X	RWMC, Acid Pit	1.4.9.1.1.7.1.4.3			
70								X		RWMC, BWP Sup Services	1.4.9.1.1.7.1.5			
71									X	RWMC, BWP Sup Services	1.4.9.1.1.7.1.5.1			
72							X			RWMC, Cleanup	1.4.9.1.1.7.2			
73														
74														
75								X		RWMC, OCVZ Cleanup	1.4.9.1.1.7.2.2			
76									X	RWMC, OCVZ Cleanup	1.4.9.1.1.7.2.2.1			
77								X		RWMC, TRU Cont P&T	1.4.9.1.1.7.2.3			
78														
79									X	RWMC, Pit 9 Admin AWC/L	1.4.9.1.1.7.1.3.2			
80									X	RWMC, Pit 9 Admin WMES	1.4.9.1.1.7.1.3.3			
81									X	RWMC, Pit 9 LPT & RA	1.4.9.1.1.7.1.3.4			
82														
83														
84														
85						X				WAG 10, Misc. Units	1.4.9.1.1.0			
86							X			WAG 10, Assessment	1.4.9.1.1.0.1			
87								X		WAG 10, Assessment	1.4.9.1.1.0.1.1			
88									X	WAG 10, Assessment	1.4.9.1.1.0.1.1.1			
89									X	WAG 10, Cleanup	1.4.9.1.1.0.1.1.2			
90									X	WAG 10, Site Char/Integra	1.4.9.1.1.0.1.1.3			
91							X			WAG 10, Cleanup	1.4.9.1.1.0.2			
92						X				Underground Storage Tanks	1.4.9.1.1.16			
93							X			Underground Storage Tanks	1.4.9.1.1.16.1			
94								X		USTs Tank Removal	1.4.9.1.1.16.1.1			
95									X	USTs Tank Removal	1.4.9.1.1.16.1.1.1			
96									X	UST Program Compliance	1.4.9.1.1.16.1.1.2			

Figure 5-2. EG&G Idaho ER Program CWBS Dictionary, Part I - Index (Sheet 2 of 4).

U. S. Department of Energy
Contract Work Breakdown Structure Dictionary
Part 1 – Index

1. Project Title/Participant: ER Program/EG&G Idaho Inc.										2. Date: Oct–92		3. Identification No.: DE–AC07–761D01570	
4 Line No.	5. CWBS Elements: Indenture Level 1	2	3	4	5	6	7	8	9	Title	6. Participant CWBS Element Code	7. Budget and Reporting No.	8. Phase	9. Other
97									X	UST Site Remediation	1.4.9.1.1.16.1.1.3			
98									X	UST TAN/WRRTF 753 Rem	1.4.9.1.1.16.1.1.4			
99														
100					X					D&D Facilities	1.4.9.1.2			
101						X				D&D, Auxiliary React Area I	1.4.9.1.2.1			
102							X			D&D, ARA I Assessment	1.4.9.1.2.1.1			
103								X		D&D, ARA I Assessment	1.4.9.1.2.1.1.1			
104									X	D&D, ARA I Decon Assess	1.4.9.1.2.1.1.1.1			
105							X			D&D, ARA I Cleanup	1.4.9.1.2.1.2			
106								X		D&D, ARA I Cleanup	1.4.9.1.2.1.2.1			
107									X	D&D, ARA I Decon Remed	1.4.9.1.2.1.2.1.1			
108						X				D&D, Auxiliary React Area II	1.4.9.1.2.2			
109							X			D&D, ARA II Assessment	1.4.9.1.2.2.1			
110							X			D&D, ARA II, Cleanup	1.4.9.1.2.2.2			
111								X		D&D, ARA II, Cleanup	1.4.9.1.2.2.2.1			
112									X	D&D, ARA II, Decon Remed	1.4.9.1.2.2.2.1.1			
113						X				D&D, Auxiliary React Area III	1.4.9.1.2.3			
114							X			D&D, ARA III Assessment	1.4.9.1.2.3.1			
115							X			D&D, ARA III Cleanup	1.4.9.1.2.3.2			
116								X		D&D, ARA III Cleanup	1.4.9.1.2.3.2.1			
117									X	D&D, ARA III Decon Remed	1.4.9.1.2.3.2.1.1			
118						X				D&D, WRRTF Hot Wst Tank	1.4.9.1.2.4			
119							X			D&D, WRRTF Assessment	1.4.9.1.2.4.1			
120							X			D&D, WRRTF Cleanup	1.4.9.1.2.4.2			
121						X				D&D TAN 607 Decon Shop	1.4.9.1.2.5			
122							X			TAN 607 Dec Shop Assess	1.4.9.1.2.5.1			
123							X			TAN 607 Dec Shop Cleanup	1.4.9.1.2.5.2			
124						X				D&D, Matl Test Reactor	1.4.9.1.2.6			
125							X			D&D, MTR, Assessment	1.4.9.1.2.6.1			
126							X			D&D, MTR, Cleanup	1.4.9.1.2.6.2			
127						X				D&D, CFA–669 Hot Laundry	1.4.9.1.2.7			
128							X			CFA–669, Hot Laund Assess	1.4.9.1.2.7.1			
129							X			CFA–669, Hot Laund Cleanup	1.4.9.1.2.7.2			
130								X		CFA–669, Hot Laund Cleanup	1.4.9.1.2.7.2.1			
131									X	CFA–669, Hot Laund Cleanup	1.4.9.1.2.7.2.1.1			
132						X				D&D, Engine Test Reactor	1.4.9.1.2.8			
133							X			D&D, ETR, Assessment	1.4.9.1.2.8.1			
134							X			D&D, ETR, Cleanup	1.4.9.1.2.8.2			
135						X				D&D, LOFT Ancil Equip	1.4.9.1.2.9			
136							X			LOFT Ancil Eq Assessment	1.4.9.1.2.9.1			
137							X			LOFT Ancil Eq Cleanup	1.4.9.1.2.9.2			
138								X		LOFT Ancil Eq Cleanup	1.4.9.2.2.9.2.1			
139									X	LOFT Ancil Eq Cleanup	1.4.9.2.2.9.2.1.1			
140						X				D&D, Test Train Asmbly Fac	1.4.9.1.2.10			
141							X			D&D, TTAF, Assessment	1.4.9.1.2.10.1			
142							X			D&D, TTAF, Cleanup	1.4.9.1.2.10.2			
143						X				D&D, ARVS/NaK	1.4.9.1.2.13			
144							X			ARVS/NaK Project	1.4.9.1.2.13.2			

Figure 5-2. EG&G Idaho ER Program CWBS Dictionary, Part I - Index (Sheet 3 of 4).

U. S. Department of Energy
Contract Work Breakdown Structure Dictionary
Part 1 – Index

1. Project Title/Participant ER Program/EG&G Idaho Inc.										2. Date Oct-92		3. Identification No. DE-AC07-761D01570	
4 Line No.	5. CWBS Elements Indenture Level 1	2	3	4	5	6	7	8	9	Title	6. Participant CWBS Element Code	7. Budget and Reporting No.	8. Phase	9. Other
145								X		ARVS/NaK Project	1.4.9.1.2.13.2.1			
146									X	ARVS/NaK Project	1.4.9.1.2.13.2.1.1			
147						X				D&D, SPERT IV Tank	1.4.9.1.2.14			
148							X			SPERT IV Tank Assessmnt	1.4.9.1.2.14.1			
149							X			SPERT IV Tank Cleanup	1.4.9.1.2.14.2			
150								X		SPERT IV Tank Cleanup	1.4.9.1.2.14.2.1			
151									X	SPERT IV Tank Cleanup	1.4.9.1.2.14.2.1.1			
152						X				D&D, BORAX-V Facility	1.4.9.1.2.15			
153							X			BORAX-V Assessment	1.4.9.1.2.15.1			
154							X			BORAX-V Cleanup	1.4.9.1.2.15.2			
155								X		BORAX-V Cleanup	1.4.9.1.2.15.2.1			
156									X	BORAX-V Cleanup	1.4.9.1.2.15.2.1.1			
157						X				D&D, TAN-TSF	1.4.9.1.2.23			
158							X			TAN-TSF Assessment	1.4.9.1.2.23.1			
159							X			TAN-TSF Cleanup	1.4.9.1.2.23.2			
160														
161					X					Program Mgmt Support	1.4.9.1.3			
162						X				Program Mgmt Support	1.4.9.1.3.1			
163							X			Program Mgmt Support	1.4.9.1.3.1.1			
164								X		Compliance Assurance	1.4.9.1.3.1.1.1			
165									X	Quality & Compl Assurance	1.4.9.1.3.1.1.1.1			
166								X		Planning and Reporting	1.4.9.1.3.1.1.2			
167									X	Sys Planning and Control	1.4.9.1.3.1.1.2.1			
168									X	Roadmapping	1.4.9.1.3.1.1.2.2			
169									X	Community Relations	1.4.9.1.3.1.1.2.3			
170									X	Waste Strm Tracking Prog	1.4.9.1.3.1.1.2.4			
171								X		Info & Analytical Systems	1.4.9.1.3.1.1.3			
172									X	Config Managmnt & Control	1.4.9.1.3.1.1.3.1			
173									X	Data Management	1.4.9.1.3.1.1.3.2			
174								X		D&D Program Support	1.4.9.1.3.1.1.4			
175									X	D&D Program Support	1.4.9.1.3.1.1.4.1			
176														
177					X					Surveil & Maintenance	1.4.9.1.4			
178						X				Facil Surveil & Maintenance	1.4.9.1.4.2			
179							X			Surveil & Maintenance	1.4.9.1.4.2.1			
180								X		Surveilance & Maintenance	1.4.9.1.4.2.1.1			
181									X	D&D Surveil & Maintenance	1.4.9.1.4.2.1.1.1			

Figure 5-2. EG&G Idaho ER Program CWBS Dictionary, Part I - Index (Sheet 4 of 4).

(The reverse of this page is Blank)

6. SCHEDULE

The EG&G Idaho ER Program schedules are developed to ensure that all project work is time-phased to meet critical need dates and to show interfaces among project participants and activities. Schedules provide visibility for work progress and information necessary to make timely management decisions. The schedules incorporate and reflect the ER Program's programmatic milestones as well as the activities identified in the Five-Year Plan.

6.1 Schedule Development

The ER Program schedule development is consistent with the requirements outlined in Section 6 of the DOE-ID MSA PMP (DOE/ID-10306). The schedule control format is graphically represented by a hierarchy of schedules that display successively more detail from the Summary Subproject Schedule through the Subproject Schedules down to the cost account schedule and thence to the work package schedule. The schedule hierarchy for the EG&G Idaho ER Program is shown in Figure 6-1, Schedule Hierarchy. The ER Program schedules are prepared and maintained in accordance with EG&G Idaho applicable procedures.

6.1.1 Summary Subproject Schedule

The Summary Subproject Schedule is a planning tool used by the DOE-ID ER Program Division Director and the Remediation Contractors to identify and coordinate subproject-level work, to support achievement of technical objectives, and to complete ER Program milestones at acceptable risks and lowest cost. The Summary Subproject Schedule will reflect critical-path planning, major diagramming, and scheduling at the detailed level where individual corrective actions are implemented.

6.1.2 Subproject Schedule

The Subproject Schedule is prepared, maintained, and controlled by the EG&G Idaho ER Program to provide needed visibility of critical work without the detail of the cost account schedules. The Subproject Schedule corresponds to the CWBS elements 1.4.9.1.x.x and will be statused and revised monthly. All subproject milestones are shown on the Subproject Schedule.

6.1.3 Cost Account Schedules

The Cost Account Schedules contain all milestones from the Summary Subproject Schedules and the Subproject Schedules that affect the cost account. The Cost Account Schedules contain any available schedule information for the life of the cost account such as work package details and interfaces with other cost accounts.

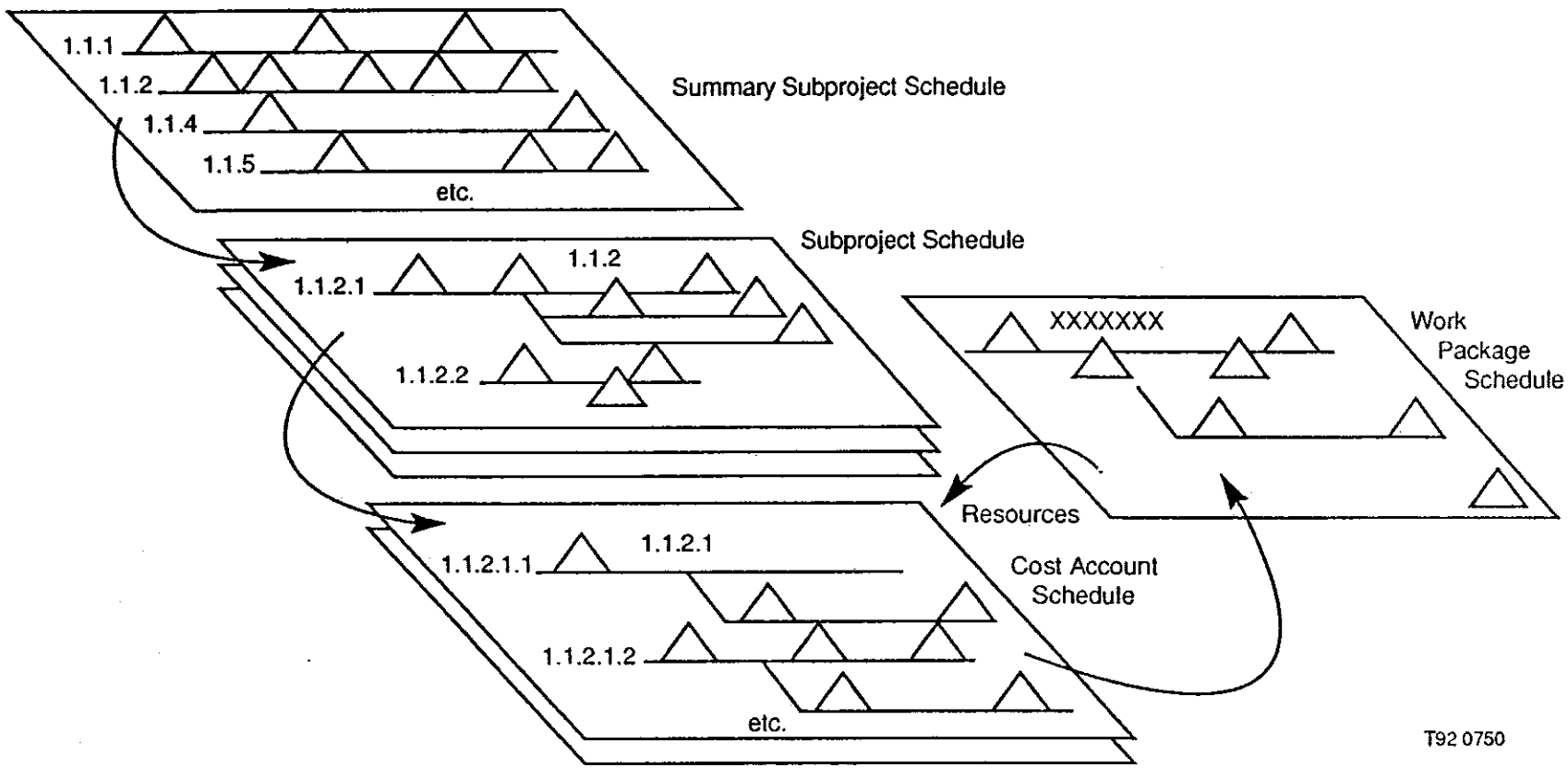


Figure 6-1. Schedule hierarchy.

6.1.4 Work Package Schedule

The work package is where detailed planning information is developed, and shows the activity logic and duration. The Work Package Schedule contains all milestones that affect the work package within the constraints of a cost account.

6.1.5 Schedule Development

Schedules are developed from the top down (by CWBS level) from the Subproject Schedule to the Cost Account Schedule. This approach to hierarchy development is necessary to maintain the rollup capability that relates directly to the DOE-ID ER PSWBS. During the planning and budgeting process (discussed in Baseline Development, Section 10), a bottom-up approach is used by preparing detailed work package schedules based on the best estimate of work that can be accomplished. Upon completion of the baseline development and appropriate approval cycles, the work package schedules are compared and reconciled with the Cost Account Schedule, the Subproject Schedules, and the Summary Subproject Schedules, and milestones are adjusted accordingly.

6.2 Milestones

Milestones of the following types are used in the ER Program to mark a point in time of significant accomplishment. The types of milestones selected for the ER Program include Enforceable Milestones, Subproject Milestones, and other milestones.

The ER Program schedules and milestone logs track milestones for all organizations associated with ER Program work including completion of reviews by DOE-ID, DOE-HQ, EPA, and the State of Idaho.

6.2.1 Enforceable Milestones

These milestones are associated with the primary documents as defined in the INEL FFA/CO. The milestones are established by DOE, EPA, and the State of Idaho. Each Enforceable Milestone has a counterpart Subproject Milestone established with sufficient time margin to ensure that the Enforceable Milestone can be met. Enforceable Milestones are shown in Table A.1 of the FFA/CO.

6.2.2 Subproject Milestones

Subproject Milestones mark major decision points or the accomplishment of a group of important actions leading to significant subproject decisions. These milestones are established by the EG&G Idaho subproject managers and concurred with by the DOE-ID subproject manager. Subproject milestones involving DOE-HQ are coordinated by the DOE-ID subproject manager.

6.2.3 Other Milestones

The cost account manager shall establish other milestones or control points within the cost account to establish a basis for earned value in performance measurement.

6.2.4 Milestone Log

The milestone log is a description and record of all project deliverable milestones on the subproject schedule. It shows the planned schedule date and the forecast and actual date of completion of each milestone. If the planned milestone dates change, the reason for the change is entered on the log. The progress in achieving subproject milestone dates are reported in the monthly progress report as a percentage of completion.

6.3 Schedule Management

Schedule Management is a routine aspect of management of the EG&G Idaho ER Program. Changes to the baseline schedules are controlled in accordance with the change control process described in Section 10 and the Configuration Management Plan.

7. PERFORMANCE CRITERIA

Regulatory standards, agreements, applicable DOE Orders, EPA directives, and guidance documents establish the technical, cost, and schedule performance criteria for conducting the ER Program in its remediation of waste sites, which will eventually allow the INEL to be removed from the National Priorities List, 40 CFR Part 300 Appendix B. EG&G Idaho will conduct the ER Program according to a policy of risk-based compliance with these criteria, against which performance and progress can be measured. The performance measurement baseline is the basis for measuring performance against the objectives established in the technical, cost, and schedule baselines.

The EG&G Idaho ER Program will be conducted according to the performance criteria described in Section 7 of DOE-ID's MSA Project Management Plan (DOE/ID-10306).

(The reverse of this page is blank)

8. COST AND STAFFING SCHEDULE

Life-cycle cost estimates for each element of the CWBS are developed by creating cost models for all activities of the EG&G Idaho ER Program. EG&G Idaho follows the estimating practices in DOE Order 5700.2C, DOE/MA-0045, DOE/MA-0063, DOE Order 4700.1, and the Environmental Restoration MSA Cost Estimating Handbook for FY 93 Lifecycle Planning (June 15, 1992, Final).

The cost models are based on technical information, the cost objectives, and historical cost data for each CWBS element. The cost models are applied to each CWBS element and summed to arrive at the cost baseline for the ER Program. The cost estimates are input to the Activity Data Sheets, which DOE puts in the Five-Year Plan.

Funding requests/cost estimates for current year work are detailed to the work package level. Cost estimates for the Operating year (current FY), Budget year (next FY), and Planning year (two years past the current FY) receive detailed planning emphasis. For outyear work, cost estimates will be preliminary and represent "rough-order-of-magnitude" (ROM) estimates, which will become progressively more refined as assessment and cleanup work becomes more defined and as experience is gained. Because much of the work is still in the preliminary assessment phase, the magnitude of work required for particular OUs may not be known until more information is obtained.

EG&G Idaho ER Program estimates are summarized, evaluated, validated, and approved by the ER Program Manager and submitted for approval to DOE-ID before becoming part of the approved budget. A more detailed description of baseline development is presented in Section 10.2.2.

Summary Cost and Staffing Estimate. Summary cost and staffing estimates, along with the appropriate schedule and scope description, are compiled in the ER Program MSA Baseline document. The budget year estimates are reviewed and evaluated through the DOE priority system before they are approved as the operating year funds. The ER Program MSA Baseline documentation is updated annually to account for any changes due to differences in the budget requests and the approved funds. Also, life-cycle costs are re-estimated annually to account for any changes in the program scope and to provide a more accurate estimate as the scope is better defined.

(The reverse of this page is blank)

9. PROGRAM FUNCTIONAL SUPPORT REQUIREMENTS

This section describes the functional support provided to the EG&G Idaho ER Program, both internal and external, during the conduct of the ER Program. The relationships between the participating organizations are shown in the DOE-ID MSA Project Management Plan.

9.1 EG&G Idaho Support

The EG&G Idaho ER Program organization, lines of authority, operating interfaces, and areas of responsibility are discussed in Section 3 and shown in Figure 3-1. Functional support to the EG&G Idaho ER Program comes from the following departments within EG&G Idaho. These departments and their support functions are listed below.

- **Environment, Safety, and Quality** ensures that the ER Program organization has and is using policies, procedures, and processes to carry out all operations in full compliance with DOE Orders and Federal and State laws; ensures that effective programs are established that protect the environment; ensures that the ER Program organization has aggressive programs to protect the health of employees, reduce chemical, nuclear, and industrial safety risks, and the cost of nonconformances to requirements; and supports the DOE in related areas

- **Administration** provides financial, procurement, human resources, fleet management, medical, security, and other administrative and logistical support services

- **Facilities and Maintenance** provides craft services, manufacturing, and electric power to the INEL and provides facility maintenance, space planning and acquisition of all EG&G Idaho-controlled facilities

- **Engineering Research and Application** produces, verifies, documents, delivers, and implements innovative designs that support the mission of the ER Program and DOE.

9.2 WINCO Support

WINCO, also an INEL M&O contractor, is responsible for conducting environmental restoration of WAG 3 at the INEL.

9.3 MK-FIC Support

MK-Ferguson of Idaho Company (MK-FIC) is the designated contractor for construction management services at the INEL. MK-FIC provides the labor and supervision for construction services and cleanup activities. The MK-Environmental Services Group (MK-ES) supports MK-FIC in the performance of remedial design activities and preparation of detailed design drawings and specifications to implement the ROD requirements for remediation.

9.4 Subcontractor Support

Subcontractors, through the Master Task Subcontract (Basic Ordering Agreement), provide services to EG&G Idaho in the performance of ER Program activities.

10. PROGRAM MANAGEMENT, MEASUREMENT, AND PLANNING AND CONTROL SYSTEMS

The program management, measurement, and planning and control systems used for managing cost, schedule, and technical performance make up the EG&G Idaho Project Management System (PMS). The PMS consists of separate but integrated management control processes for planning and controlling all EG&G Idaho ER Program work. The PMS complies with the management control principles in DOE Order 4700.1, "Project Management System."

The processes include systems and procedures for baselining, planning and budgeting, estimating, cost and schedule control, change control, performance measurement, funds management, and work authorization. The processes of the EG&G Idaho PMS are shown in Figure 10-1.

The PMS description is identical to the EG&G Idaho Project Management System Description (PMSD) contained in Volume III of the EG&G Idaho Company Procedures Manual. Application of the EG&G Idaho company standard PMSD to the ER Program requires only minor changes to managerial titles, change board, and change classification, which are discussed in the following subsections.

10.1 Program Management Philosophy and Objectives

The EG&G Idaho ER Program is managed in accordance with the project management philosophy embodied in DOE Order 4700.1. Sound, effective, and comprehensive program management plans, procedures, and systems are implemented in all aspects of the EG&G Idaho ER Program. This ER Program IPMP reflects the DOE-ID approach and guidance for all EG&G Idaho ER Program participants.

10.1.1 Program Management Objectives

The primary objective for the PMS is to ensure that planning and execution of the EG&G Idaho ER Program is technically sound, timely, cost-effective, and in conformance with quality and safety requirements. In addition, the PMS is easy to use and is within existing program management system technology. Specific management objectives are outlined in Section 2 of the DOE-ID PMP.

10.1.2 Program Management Systems Integration

An important objective of the PMS is to provide for the integration of cost, schedule, performance measurement, and other management techniques that make up the PMS. Such integration is provided by the selection of program management software, the development of system usage and integration procedures, and the use of the CWBS.

All EG&G Idaho ER Program plans and status reports will be developed and issued in specific formats and will use the CWBS described in Section 5. The consistent use of the CWBS provides for the integration of costs, schedules, progress, and other information at both the detailed and

summary levels of the program. The use of the CWBS framework to define management reporting requirements allows for cost, schedule, and performance summaries at appropriate levels of the program for both EG&G Idaho and DOE management.

10.2 Program Planning and Budgeting

The EG&G Idaho ER Program planning will be performed by the ER&WM Department Manager with support from the Program Support Manager. All program level planning complies with the direction and guidance provided by DOE-ID, DOE-HQ, and applicable DOE-ID orders, plans, and procedures. Program level planning includes the development, issuance, and maintenance of the IPMP, Quality Program Plan (QPP), Health and Safety Plan (H&SP), and other program level documents. These documents provide direction and guidance to the WAG/unit/project managers and the Cost Account Managers (CAMs) responsible for the ER Program implementation.

The planning and budgeting activities required to develop cost and schedule performance measurement baselines to measure project status and forecasting future performance are prepared by the CAMs. These activities are addressed in ER PD 2.2 through 2.12 that describe when replanning and reprogramming of the baseline schedules and budgets are allowed and implemented.

10.2.1 Work Definition

Initial work definition is provided in the ADSs with further development in the CWBS dictionary. The CWBS is further broken down to define cost accounts and work packages within the WBS (DOE-ID PMP).

Detailed planning is initiated annually by the issue of guidance letters from DOE-ID. The primary emphasis of these planning cycles is to provide DOE with greater detail for use in evaluation and control, to establish a logical method for defining changes resulting from fiscal planning and funding levels, and to provide a basis for measuring progress against baselines (DOE-ID PMP). DOE identifies broad assumptions to be used in the planning process. EG&G Idaho management clarifies where necessary and instructs WAG Managers to proceed with planning.

10.2.2 Baseline Development

DOE-ID provides a target funding level to EG&G Idaho for the next fiscal year. Their funding level is then prioritized based on planned scope at the cost account level by the WAG Managers. Unit and WAG managers use the planned scope, a target funding level, and time duration including subproject milestones as input to the cost account authorization for cost account managers to begin detailed planning and budgeting. The planned scope of the cost account is further subdivided into work packages, which are divided into work activities.

Work activities are organized into logic network diagrams that define relationships between network activities and the sequence in which work activities may be logically performed. The activities are then assigned estimated durations and subsequently scheduled by the critical path method (CPM). Estimates of the costs and other resources required to perform tasks at the cost

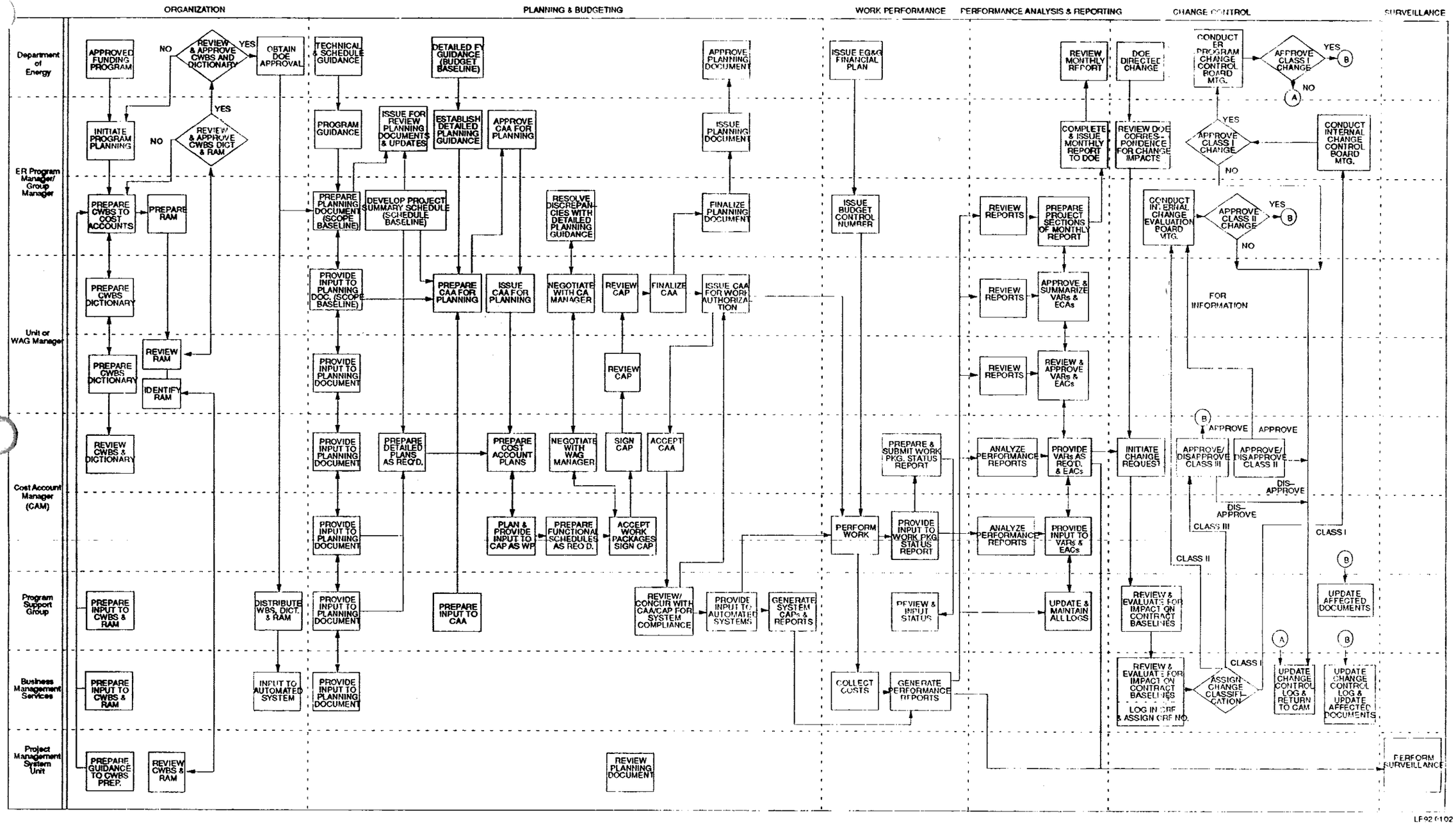


Figure 10-1. EG&G Idaho ER Program's Project Management System flowchart.

account level are developed and allocated over time. If planned scope requires more dollars than available, low-priority work is shifted to the outyears.

The resulting work scope is reviewed and approved by the ER Program Manager and DOE-ID. This then becomes the basis for defining ER Program cost and schedule baselines.

10.2.2.1 Work Breakdown Structure. Use of the ER Program CWBS for planning and budgeting ensures that all work is identified and included in the baseline development processes. The CWBS (Section 5) numbering system is the integrating mechanism for baseline development and ER Program management.

10.2.2.2 Budget Development. For the INEL ER Program, annual budget cycles are initiated by the issue of DOE-HQ ER Program FY program guidance letters, followed by the issue of ER Program planning guidance letters from the DOE-ID ER Manager to the EG&G Idaho ER Program Manager. This guidance is used to revise existing plans and schedules.

10.2.2.3 Cost Baseline Development. The EG&G Idaho ER Program cost baselines are developed and maintained by identification of approved budgets (and approved budget changes) corresponding to approved schedules at various levels of the CWBS. Identification of the budget at the cost account and task level establishes the EG&G Idaho ER Program cost baselines. Budgets at the cost account level are developed by the cost account managers (see Figure 15-1) and define the ER Program cost baseline for the cost account. The cost baseline is also known as the performance measurement baseline, used for measuring and statusing work performance.

10.2.2.4 Schedule Baseline Development. Initial EG&G Idaho ER Program schedules are developed as part of the planning process by assigning restraints and estimated durations to tasks and activities. Logic diagrams are developed and the work is scheduled using CPM scheduling techniques. Assignment of activity durations and definition of the EG&G Idaho ER Program schedule baselines is performed at the cost account and work package levels.

The EG&G Idaho ER Program Manager is responsible for developing, controlling, and maintaining the subproject, cost account, and work package schedules for the EG&G Idaho ER Program. EG&G Idaho integrates the Subproject Schedules for all INEL subprojects (WAG, D&D, UST, Program Support) into an INEL-wide ER Program summary subproject schedule. The schedule baseline hierarchy is further defined in Section 6 of this IPMP.

10.2.2.5 Management Reserve Planning. Some of the Operable Units currently identified in the FFA/CO have not been investigated to the extent needed to fully quantify uncertainties or risk. As a result, uncertainty associated with cost and schedule may be high for the work scope. Consequently, the current estimates of the EG&G Idaho ER Program costs and schedule, based on the present technical information and assumptions, are preliminary. The process of evaluating and allowing for the uncertainties during the various phases of the EG&G Idaho ER Program includes the use of management reserve and risk planning.

Management Reserve (MR) is an allocation of funds by DOE-ID to provide flexibility in accomplishing current fiscal year work scope. The source of MR is funds not allocated for a specific scope of work. MR is not part of the cost baseline.

10.2.2.6 Risk Planning. Various risk factors may increase costs and affect the schedule. As site investigations proceed, remedial action alternatives can be selected, and detailed design can be initiated. Cost and schedule estimates can then become more accurate. As release site investigations proceed, cost, schedule, and technical risks are minimized through a variety of risk planning actions, including:

- **Thorough Characterizations** - Each potential release site is examined/characterized to provide a basis for estimating remediation requirements

- **Modeling** - Models of actual EG&G Idaho ER remedial action projects may be used for testing procedures, technologies, and designs, in order to support planning and implementation decisions

- **Treatability Studies** - The need for treatability studies should be identified during project scoping to avoid delays in the RI/FS schedule. Treatability testing may be required if candidate technologies have not been sufficiently demonstrated or cannot be adequately evaluated

- **Demonstrations** - Alternative remedial action technologies may be demonstrated before implementing remedial actions to avoid delays during field work

- **Annual Planning** - Annual planning and reprioritization of EG&G Idaho ER Program tasks promote better forecasting and incorporation of lessons learned into the planning and development efforts

- **Waste Disposal** - Long-range planning ensures that disposal options are available when needed or that the concern is identified early in the process.

- **Waste Minimization** - Activities and processes that generate waste are analyzed to determine source reduction or recycling options, which will ultimately reduce the amount of waste generated.

Ultimately, the scope and pace of the EG&G Idaho ER Program activities will be determined by the amount of funds available. Funding needs may change as the work progresses.

10.3 Performance Measurement and Control

Performance measurement and control implements the Cost and Schedule Control Systems Criteria (CSCSC) defined by DOE Notice N 4700.5 as described in the PMSD. The following paragraphs describe the cost/schedule control system and the progress measurement and reporting processes that will be used to comply with DOE Notice N 4700.5.

10.3.1 Cost and Schedule Control System

The cost and schedule performance measurement and control are integrated in the EG&G Idaho Project Management System.

10.3.1.1 Cost Control Process. The cost control process includes detailed cost estimating, accounting, and control systems and supports the development and processing of all normal cost management information, including budgets (cost baseline), actual costs, committed costs, estimated costs at completion, and estimated costs to complete. The cost control process uses the CWBS as part of the cost account code so that costs can be captured and reported at any CWBS level. The performance measurement baseline maintains a record of all baseline changes to the budget. The cost control process makes possible integration of the budget and actual cost files with the schedule control system.

10.3.1.2 Scheduling Process. The scheduling process to be used on the EG&G Idaho ER Program ensures that all work is properly scheduled and integrated and all activities are assigned to organizational elements.

The schedule control process performs all normal CPM-based functions and is capable of producing logic diagrams and bar chart schedules and is also capable of allocating dollar and staffing resources to scheduled activities for integrated cost and schedule baseline control. The system is based on the ER Program PSWBS so that schedule performance can be evaluated and reported at any WBS level.

A hierarchy of schedules will be developed at various levels of the EG&G Idaho ER Program CWBS as discussed in Section 6. Schedule development is also discussed in Section 6.

Changes to the EG&G Idaho ER Program cost and schedule baselines are initiated and controlled by the change control procedures defined in the EG&G Idaho ER Program Configuration Management Plan and EG&G Idaho applicable procedures.

10.3.2 Progress Measurement and Control

Cost and schedule performance is monitored and controlled by the implementation of an earned-value-based performance measurement system. The system provides for the identification of budgets to individual cost accounts, work packages, and work activities.

The system includes a reporting capability that provides for a comparison of the time-phased budget [Budgeted Cost for Work Scheduled (BCWS), Earned Value, Budgeted Cost for Work Performed (BCWP)] and actual expenditures [Actual Cost for Work Performed (ACWP)] collected at the cost account. System capabilities satisfy reporting requirements of DOE Order 1332.1A, "Uniform Reporting System" (DOE-ID PMP).

Under the EG&G Idaho ER Program PMS, the ER Program Manager will:

- Use and maintain internal cost and schedule performance measurement information that provides DOE-ID with timely and objective performance data

- Track actual EG&G Idaho ER Program progress against cost and schedule baselines and schedule milestones on a routine basis. Cost and schedule performance is monitored using earned value techniques and Gantt chart schedules to monitor work progress

- Perform cost and schedule variance monitoring to provide early identification of potentially unfavorable trends and development and implementation of corrective action plans

- Provide monthly cost and schedule performance reports and integrate and summarize information by cost account for routine submittal. Earned value cost and schedule data, budgets at completion (BAC), and estimates at completion (EAC) are included in the reports

- Thresholds are established at the ADS level for variance analysis reporting. Variance analysis is the analysis of incremental and cumulative data which includes a statement of the problem, recommended correction, and the action taken to date, if appropriate. The variance thresholds, in terms of percent of total budgeted value for the element and dollars, established for the ER Program are:

  - Current period 20% and $50,000
  - Cumulative 10% or $500,000
  - At completion 10% or $500,000.

10.3.3 Performance Measurement Baseline

The PMS provides for identification of the performance measurement baseline to all program work at the lowest appropriate level of detail and a level at which work can be measured. The performance measurement baseline includes the sum of the time-phased cost account budgets for the performance period and does not include MR. The performance measurement baseline is established on a current fiscal year basis and is the baseline against which cost and schedule performance is measured. During work performance, a performance value may be earned using one of four different earning techniques as follows:

- **Milestone Type** is used when work can be measured by discrete events. This earns the total budgeted value of a milestone defining an activity, or the budgeted values assigned to multiple milestones defining the activity, on completion of the milestone(s)

- **Estimate of Percent Complete** is used where discrete milestones cannot be identified for each reporting period but progress toward completion of a piece of work can be identified. This earns the percentage of the milestone completed

- **Modified Milestone/Percent Complete** is used when there are one or more months between milestones. This earns a portion of an activity's budgeted value based on the

percent complete of the activity as calculated by physical measurement or as estimated by the performing manager

- **Level of Effort** (LOE) earns a portion of an activity's budgeted value based on the percentage of time expended or the amount of budgeted value allocated through the period of time being measured.

10.3.4 Problem Identification and Corrective Action Control

EG&G Idaho ER Program is controlled through the PMS, which reveals emerging problems and allows timely corrective action to be taken.

10.4 Change Control and Baseline Management

Proposed changes to the ER Program technical, cost, and schedule baselines are documented, tracked, and reported to provide visibility to management and allow baseline control. The change control process is outlined in Figure 10-2 and implemented by ER PDs 2.11 and 2.12.

The ER Program approach to managing program changes is to be based on maintaining an accurate description of the baselines and methodically controlling changes to those baselines. Such changes may originate within EG&G Idaho or may result from changes to the DOE-ID baseline documents. Changes to the documents that define the ER Program technical, cost, or schedule baselines are regulated through the formal baseline configuration management process described in the ER Program Configuration Management Plan (CMP).

10.5 Institutional Interactions

The ER Program requires significant interaction between MK-FIC, WINCO, subcontractors, the DOE-ID ER Program Manager, the EG&G Idaho ER Program Manager, EPA Region 10, United States Geological Survey (USGS), the State of Idaho, the public, and others. Significant interaction involves documentation of the implementation of requirements, coordination meetings, status reporting and accounting, and support of the DOE objectives.

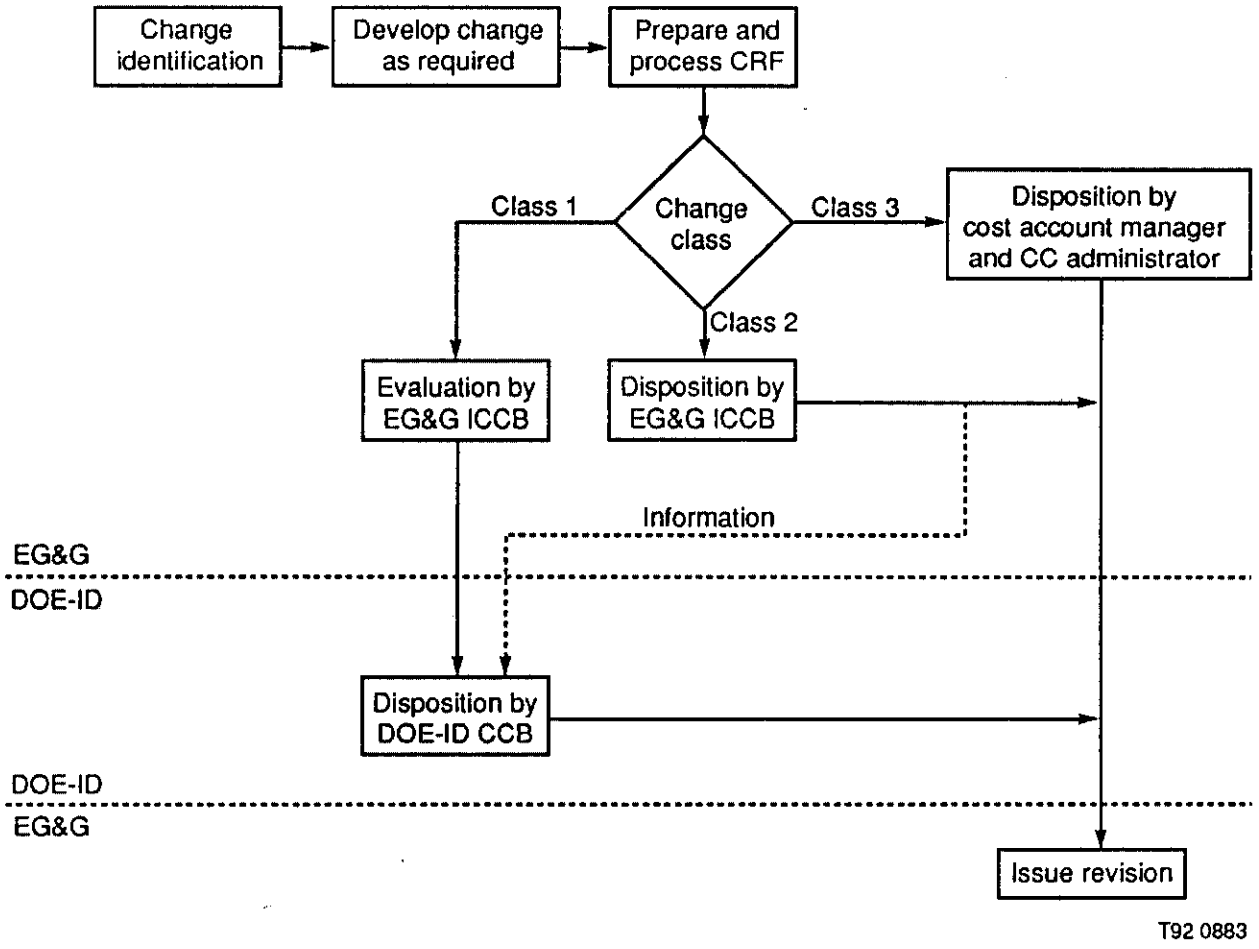


Figure 10-2. EG&G ER Program Performance Management Control System change process.

(The reverse of this page is blank)

11. INFORMATION AND REPORTING

Communication between EG&G Idaho and DOE-ID management personnel is necessary to keep DOE-ID apprised of program status and to keep EG&G Idaho ER Program managers aware of current DOE directions. The EG&G Idaho ER Program Manager is responsible for ensuring that all communications with DOE-ID are conducted in a timely manner with minimal impact to ongoing technical work. Information and reporting functions will be performed in compliance with Section 11 of DOE-ID's MSA Project Management Plan and according to the EG&G Idaho ER Program's internal requirements as stated in the Environmental Restoration Program Directives Manual.

All EG&G Idaho ER Program documents that will be transmitted to persons or organizations other than DOE-ID or HQ, or that will be retransmitted by them to persons outside EG&G Idaho ER Program or DOE, must be reviewed and approved by a representative of the EG&G Idaho Legal Department before it is transmitted. This applies to interoffice correspondence, letters, and reports of all kinds. See the ER PD Manual for guidance.

EG&G Idaho ER Program management personnel are encouraged to communicate with DOE-ID ER Program management personnel to discuss day-to-day issues, problems, solutions, and to convey information needed or requested to promote program progress. These discussions will be held on an as-needed basis or as requested by DOE-ID. All relevant items communicated verbally, including DOE directions, will be documented and a copy maintained in Administrative Record and Document Control (ARDC) and/or in the appropriate Project File (see the ER PD Manual for guidance).

11.1 Weekly and Monthly Reports

The EG&G Idaho ER Program Manager or the designated representative will issue weekly and monthly reports to DOE-ID consistent with the requirements in DOE-ID's MSA PMP (format and content of these reports are shown in the ER PD Manual).

Status of budget and schedule will be reported in the monthly report for each cost account using earned value techniques. A variance analysis report will be prepared for cost account, cost, or schedule variances that exceed the thresholds stated in Section 10. A written description will be provided of causes, problems, corrective actions, and impacts on other cost or schedule elements (see the ER PD Manual for guidance). Other variances considered to be significant by the EG&G Idaho ER Program Manager will be analyzed and reported. Management reports and reporting frequency are identified in Figure 11-1.

11.2 Public Communications

EG&G Idaho ER Program personnel will prepare technical reports, journal articles, papers, presentations, fact sheets, brochures, etc. as requested by DOE-ID, DOE-HQ, or the EG&G Idaho ER Program Manager. These documents/presentations support briefings, program reviews, hearings,

1. PROGRAM PROJECT TITLE

2. IDENTIFICATION NUMBER

3. PARTICIPANT NAME AND ADDRESS

4. PLANNING AND REPORTING REQUIREMENTS

	FREQUENCY
A. GENERAL MANAGEMENT	
[X] MANAGEMENT PLAN	A, C, X
[X] STATUS REPORT	M
[X] SUMMARY REPORT	S
B. SCHEDULE/LABOR/COST	A, C, X, Y
[X] MILESTONE SCHEDULE/PLAN	
[ ] LABOR PLAN	
[ ] FACILITIES CAPITAL COST OF MONEY FACTORS	
[ ] COMPUTATION	
[ ] CONTRACT FACILITIES CAPITAL AND COST OF MONEY	
[ ] COST PLAN	
[X] MILESTONE SCHEDULE/STATUS	
[ ] LABOR MANAGEMENT REPORT	M
[ ] COST MANAGEMENT REPORT	
C. EXCEPTION REPORTS	
[X] CONFERENCE RECORD	A
[X] HOTLINE REPORT	A
D. PERFORMANCE MEASUREMENT	
[X] MANAGEMENT CONTROL SYSTEM DESCRIPTION	X
[X] WBS DICTIONARY	Y
[X] INDEX	A, C, X
[X] ELEMENT DEFINITION	A, C, X
[X] COST PERFORMANCE REPORTS	
[X] FORMAT 1 - WBS	M
[ ] FORMAT 2 - FUNCTION	
[X] FORMAT 3 - BASELINE	M

	FREQUENCY
E. FINANCIAL INCENTIVES	
[ ] STATEMENT OF INCOME AND EXPENSE	
[ ] BALANCE SHEET	
[ ] CASH FLOW STATEMENT	
[ ] STATEMENT OF CHANGES IN FINANCIAL POSITION	
[ ] LOAN DRAWDOWN REPORT	
[ ] OPERATING BUDGET	
[ ] SUPPLEMENTARY INFORMATION	
F. TECHNICAL	
[ ] NOTICE OF ENERGY RD&D PROJECT (REQUIRED WITH ANY OF THE FOLLOWING)	
[ ] TECHNICAL PROGRESS REPORT	
[ ] DRAFT FOR REVIEW	
[ ] FINAL FOR APPROVAL	
[ ] TOPICAL REPORT	
[ ] FINAL TECHNICAL REPORT	
[ ] DRAFT FOR REVIEW	
[ ] FINAL FOR APPROVAL	
[ ] SOFTWARE	
[X] OTHER (SPECIFY) PROGRAM MANAGER STATUS REPORT	M

5. FREQUENCY CODES

A - AS REQUIRED	M - MONTHLY	S - SEMI-ANNUALLY
C - CHANGE TO CONTRACTUAL AGREEMENT	O - ONCE AFTER AWARD	X - WITH PROPOSAL/BIDS/APPLICATION OR WITH SIGNIFICANT CHANGES
F - FINAL (END OF EFFORT)	Q - QUARTERLY	Y - YEARLY OR UPON RENEWAL OF CONTRACTUAL AGREEMENT

6. SPECIAL INSTRUCTIONS (ATTACHMENTS)

- [X] REPORT DISTRIBUTION LIST/ADDRESSES
- [X] REPORTING ELEMENTS
- [X] DUE DATES
- [X] ANALYSIS THRESHOLDS
- [X] WORK BREAKDOWN STRUCTURE
- [ ] OTHER

7. PREPARED BY (SIGNATURE AND DATE)

7. REVIEWED BY (SIGNATURE AND DATE)

T92 0767

Figure 11-1. EG&G Idaho ER Program Reporting Requirements Checklist.

Congressional inquiries, community relations, and technology transfer activities. All outside communications must first be approved for release by an EG&G Idaho Legal representative. Informal reports classed as external communications must also be cleared for release through the EG&G Idaho Publications Processing office as required by the EG&G Idaho Resource Manual, Section 10 (this clearance includes review and approval by DOE-ID), and must have internal review and approval according to the document approval requirements specified in the ER PD Manual.

(The reverse of this page is blank)

12. SYSTEMS ENGINEERING

The systems engineering process is a sequence of activities and decisions that transform a mission need into a description of system performance parameters and preferred system configuration. The process is applied to ensure that a project's end result meets the defined need (all physical and functional interfaces are fulfilled in a technically acceptable and cost-effective manner). The systems engineering process also includes the planning and control of technical tasks, integration of the engineering specialties, and the management of a totally integrated design effort to meet the cost, schedule, and technical objectives of the process.

EG&G Idaho applies the systems engineering process during conduct of the ER Program. EG&G Idaho's approach to systems engineering is described in the Systems Engineering and Integration Management Plan (SEMP), document number EGG-WM-9741.

(The reverse of this page is blank)

13. CONFIGURATION MANAGEMENT

Configuration management (CM) is the process of identifying, controlling, verifying, and defining the status of the ER Program's configuration at any time. This process uses baseline management to ensure that the technical, cost, and schedule requirements of the ER Program are clearly defined and that proper baselines are established for configuration management.

The EG&G Idaho configuration management process consists of the following four elements:

- **Configuration Identification.** The process and methods of identifying baseline documentation that forms the technical, cost, and schedule baselines. Baseline documentation represents the functional and physical requirements necessary to accomplish mission requirements. Supporting documentation provides further definition and details of the baseline documentation.

- **Configuration Control.** The process of managing proposed changes to the baseline documentation, which ensures that proposed changes to the technical, cost, and schedule baselines are accurately described, systematically reviewed and evaluated for impact, properly implemented upon approval, and completely closed out.

- **Configuration Status Accounting.** The process of recording and reporting the current status of baseline and supporting documentation and all proposed and approved changes throughout EG&G Idaho ER Program activities.

- **Configuration Verification.** The process of ensuring that (a) the technical, cost, and schedule baselines satisfy the requirements, (b) the physical and functional characteristics of ER Program activities and work products conform to the technical, cost, and schedule baselines, (c) approved changes have been properly incorporated into the technical, cost, and schedule baselines, and (d) the entire configuration management process functions in accordance with approved plans and procedures.

The EG&G Idaho ER Program Configuration Management Plan (CMP), EGG-WM-9413, describes how EG&G Idaho manages and conducts configuration management.

Records Management Plan. The Records Management Plan (RMP), EGG-WM-9742, is directly related to the Configuration Management Plan in that it establishes a document numbering, storage, retrieval, and disposal system used in configuration management and managing the Administrative Record files and Project Files.

(The reverse of this page is blank)

14. QUALITY ASSURANCE

To achieve the objective of continuous improvement in the quality of work, the approach to management methods and human resources to control all procedures is stressed through the application of "Total Quality Management" (TQM).

14.1 Requirements

The ER Program will follow the basic QA standards and requirements as directed by the DOE-ID MSA PMP and the following requirement and guidance documents:

- DOE Order 5700.6C, "Quality Assurance"
- DOE-ID Order 5700.6D, "Quality Assurance"
- Environmental Protection Agency "Quality Assurance Management Staff (QAMS-005/80, Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans," (EPA-600-4-83-004), February 1983
- American Society of Mechanical Engineers (ASME) "Quality Assurance Program Requirements for Nuclear Facilities," (ASME NQA-1, 1989 edition)
- DOE Order 5820.2A, "Radioactive Waste Management."

The ER Program's quality requirements are fully described in the "Quality Program Plan (QPP) for the Environmental Restoration Program," QPP-149, which is submitted to DOE-ID for review and approval.

Characterization plans for each potential release site establish the detailed laboratory protocol to be used on the samples. Each laboratory is responsible for its own QA program to ensure the accuracy of analytical results. EG&G Idaho ensures the selection of qualified analytical laboratories that meet all requirements through implementing procedures is ER PDs 5.5 and 5.6.

14.2 Training

A program to provide QA indoctrination and training ensures that ER Program personnel that perform or manage activities affecting quality, safety, and health are proficient in complying with all QA rules and regulations.

The ER Program Manager is responsible for the training program to satisfy the qualification requirements of individuals performing surveillance tasks. Training is performed in accordance with EG&G Idaho Company Procedure 1.11 and ER PD 1.3.

14.3 Self Assessment

The ER Program verifies compliance with overall program requirements by performing self assessments according to EG&G Idaho requirements and according to self-imposed requirements. The EG&G Idaho Company Self Assessment Program consists of management by walking around (MBWA), surveillances, audits, and appraisals as described below.

- **MBWA** is conducted by managers through one-on-one meetings with each directly reporting employee on a regular basis

- **Surveillance** programs are established by the ER Program Manager to self-evaluate applicable environmental, safety, health, and quality assurance (ESH&QA) compliance, performance, management and organization requirements

- **Audits,** both scheduled and unscheduled—of organization and facility compliance based on specific requirements in DOE orders, federal and state regulations, and Company internal requirements—are conducted by Performance Oversight and Assessment

- **Appraisals** of ER Program activities are conducted by Performance Oversight and Assessment, based on the requirements of the DOE Technical Safety Appraisal Criteria.

The ER Program's internal requirements for self assessment are implemented in ER PD 1.10, "ER Program Self Assessment."

15. RESPONSIBILITY MATRIX

The work elements of the ER Program are defined and organized by the CWBS, which identifies ER Program tasks and services required at the cost account level. The CWBS refines and further details the lowest level of the PSWBS until the responsibility for a specific element can be assigned to an organization. This element of work is called a Cost Account.

The manager of the organization at the cost account level designates an individual, called a Cost Account Manager, to manage the cost account. The EG&G Idaho ER Program's cost accounts and designated Cost Account Manager are shown in Figure 15-1, "EG&G Idaho ER Program Responsibility Assignment Matrix."

CWBS ELEMENT		WAG 1; CAM - 1	WAG 1; CAM - 2	WAG 1; CAM - 3	WAG 2; CAM - 1	WAG 2; CAM - 2	WAG 2; CAM - 3	WAG 2; CAM - 4	WAG 2; CAM - 5	WAG 4; CAM - 1	WAG 5; CAM - 1	WAG 5; CAM - 2	WAG 6; CAM - 1	WAG 7; CAM - 1	WAG 7; CAM - 2	WAG 7; CAM - 3	WAG 7; CAM - 4	WAG 7; CAM - 5	WAG 7; CAM - 6	WAG 10; CAM - 1	USTs; CAM - 1	D&D; CAM - 1	D&D; CAM - 2	D&D; CAM - 3	D&D; CAM - 4	D&D; CAM - 5	D&D; CAM - 6	OA; CAM - 1	PS; CAM - 1	PS; CAM - 2	PS; CAM - 3	PS; CAM - 4	PS; CAM - 5
CODE	TITLE																															
1.4.9.1.1.1.1.1.1	TAN WAG 1, Activities	X																														
1.4.9.1.1.1.1.1.2	TAN , Track 2 OUs		X																													
1.4.9.1.1.1.1.1.3	TAN, OU 1-07, GW RI/FS			X																												
1.4.9.1.1.1.1.1.4	TAN, OU 1-10 RI/FS			X																												
1.4.9.1.1.1.1.1.5	TAN, IA Planning		X																													
1.4.9.1.1.1.1.2.1	TAN, Cleanup Support		X																													
1.4.9.1.1.2.1.1.3	TRA, OU 2-03 Assessmt				X																											
1.4.9.1.1.2.1.1.4	TRA, OU 2-04 Assessmt					X																										
1.4.9.1.1.2.1.1.5	TRA, OU 2-05 Assessmt						X																									
1.4.9.1.1.2.1.1.6	TRA, OU 2-06 Assessmt						X																									
1.4.9.1.1.2.1.1.7	TRA, OU 2-07 Assessmt					X																										
1.4.9.1.1.2.1.1.8	TRA, OU 2-08 Assessmt				X																											
1.4.9.1.1.2.1.1.9	TRA, OU 2-09 Assessmt							X																									
1.4.9.1.1.2.1.1.A	TRA, OU 2-10 Assessmt					X																										
1.4.9.1.1.2.1.1.C	TRA, OU 2-12 Assessmt								X																							
1.4.9.1.1.2.1.1.D	TRA, OU 2-13 Assessmt								X																							
1.4.9.1.1.2.1.1.E	TRA, Planning & Control				X																											
1.4.9.1.1.2.2.1.1	TRA, OU 2-10 Cleanup					X																										
1.4.9.1.1.2.2.1.2	TRA, OU 2-12 Cleanup								X																							
1.4.9.1.1.2.2.1.3	TRA, OU 2-09 Cleanup							X																									
1.4.9.1.1.2.2.1.4	TRA, OU 2-07 Cleanup					X																										
1.4.9.1.1.4.1.1.1	CFA, Assessment									X																						
1.4.9.1.1.5.1.1.1	PBF/ARA, Assess Activ.										X																					
1.4.9.1.1.5.1.1.2	PBF/ARA, Track 2's											X																				
1.4.9.1.1.5.1.1.3	PBF/ARA, Comp RI/FS										X																					
1.4.9.1.1.5.1.1.5	PBF/ARA, OU 5-10 RI & PP										X																					
1.4.9.1.1.5.2.1.1	PBF/ARA, Outyear Cleanup										X																					
1.4.9.1.1.6.1.1.1	EBR-1 BORAX Assessmnt												X																			
1.4.9.1.1.7.1.1.1	RWMC, PAD A ROD													X																		
1.4.9.1.1.7.1.2.1	RWMC, OCVZ ROD														X																	
1.4.9.1.1.7.1.3.1	RWMC, TRU Cont, P&T ROD															X																
1.4.9.1.1.7.1.3.2	RWMC, Pit 9 Project Office																X															
1.4.9.1.1.7.1.4.1	RWMC, Comprehen ROD																	X														
1.4.9.1.1.7.1.4.2	RWMC, Groundwtr Pathway															X																
1.4.9.1.1.7.1.4.3	RWMC, Acid Pit																	X														

Figure 15-1. EG&G Idaho ER Program Responsibility Assignment Matrix (Sheet 1 of 2).

CWBS ELEMENT		WAG 1; CAM - 1	WAG 1; CAM - 2	WAG 1; CAM - 3	WAG 2; CAM - 1	WAG 2; CAM - 2	WAG 2; CAM - 3	WAG 2; CAM - 4	WAG 2; CAM - 5	WAG 4; CAM - 1	WAG 5; CAM - 1	WAG 5; CAM - 2	WAG 6; CAM - 1	WAG 7; CAM - 1	WAG 7; CAM - 2	WAG 7; CAM - 3	WAG 7; CAM - 4	WAG 7; CAM - 5	WAG 7; CAM - 6	WAG 10; CAM - 1	USTs; CAM - 1	D&D; CAM - 1	D&D; CAM - 2	D&D; CAM - 3	D&D; CAM - 4	D&D; CAM - 5	D&D; CAM - 6	QA; CAM - 1	PS; CAM - 1	PS; CAM - 2	PS; CAM - 3	PS; CAM - 4	PS; CAM - 5
CODE	TITLE																																
1.4.9.1.1.7.1.5.1	RWMC, BWP Sup Services																		X														
1.4.9.1.1.7.2.2.1	RWMC, OCVZ Cleanup														X																		
1.4.9.1.1.7.1.3.2	RWMC, Pit 9 Admin AWC/L																X																
1.4.9.1.1.7.1.3.3	RWMC, Pit 9 Admin WMES																X																
1.4.9.1.1.7.1.3.4	RWMC, Pit 9 LPT & RA																X																
1.4.9.1.1.0.1.1.1	WAG 10, Assessment																			X													
1.4.9.1.1.0.1.1.2	WAG 10, Cleanup																			X													
1.4.9.1.1.0.1.1.3	WAG 10, Site Char/Integra																			X													
1.4.9.1.1.16.1.1.1	USTs Tank Removal																				X												
1.4.9.1.1.16.1.1.2	UST Program Compliance																				X												
1.4.9.1.1.16.1.1.3	UST Site Remediation																				X												
1.4.9.1.1.16.1.1.4	UST TAN/WRRTF 753 Remov																				X												
1.4.9.1.2.1.1.1.1	D&D, ARA I Decon Assess																					X											
1.4.9.1.2.1.2.1.1	D&D, ARA I Decon Remed																					X											
1.4.9.1.2.2.2.1.1	D&D, ARA II, Decon Remed																					X											
1.4.9.1.2.3.2.1.1	D&D, ARA III Decon Remed																					X											
1.4.9.1.2.7.2.1.1	CFA-669, Hot Laund Cleanup																						X										
1.4.9.2.2.9.2.1.1	LOFT Ancil Eq Cleanup																						X										
1.4.9.1.2.13.2.1.1	ARVS/NaK Project																							X									
1.4.9.1.2.14.2.1.1	SPERT IV Tank Cleanup																								X								
1.4.9.1.2.15.2.1.1	BORAX-V Cleanup																									X							
1.4.9.1.3.1.1.1.1	Quality & Compl Assurance																										X						
1.4.9.1.3.1.1.2.1	Sys Planning and Control																											X					
1.4.9.1.3.1.1.2.2	Roadmapping																												X				
1.4.9.1.3.1.1.2.3	Community Relations																													X			
1.4.9.1.3.1.1.2.4	Waste Strm Tracking Prog																												X				
1.4.9.1.3.1.1.3.1	Config Managmnt & Control																															X	
1.4.9.1.3.1.1.3.2	Data Management																																X
1.4.9.1.3.1.1.4.1	D&D Program Support																									X							
1.4.9.1.4.2.1.1.1	D&D Surveil & Maintenance																								X								

Figure 15-1. EG&G Idaho ER Program Responsibility Assignment Matrix (Sheet 2 of 2).

(The reverse of this page is blank)

16. REFERENCES

Government and industry standard documents applicable to the EG&G Idaho ER Program management process are listed below by number and title.

ASME NQA-1-1989	Quality Assurance Program Requirements for Nuclear Facilities
DOE-ID ER CCC	DOE-ID Environmental Restoration Program Change Control Charter (attached to the DOE-ID MSA PMP)
FFA/CO	Federal Facility Agreement and Consent Order
DOE/MA-0045	Cost Estimating Manual (Jan. 1982)
DOE/MA-0063	DOE Cost Guides, Volumes 1 through 6
DOE/MA-0295	Work Breakdown Structure Guide
DOE Order 1332.1A	Uniform Reporting System
DOE Notice N 4700.5	Project Control System Guidelines
DOE/ID-10306	DOE-ID MSA Project Management Plan
DOE Order 4700.1	Project Management System
DOE ORDER 5400.1	Chg. 1, General Environmental Protection Program
DOE Order 5700.2C	Cost Estimating, Analysis, and Standardization
DOE Order 5820.2A	Radioactive Waste Management
DOE Order 5700.6C	Quality Assurance
DOE Order ID 5700.6D	Quality Assurance
EG&G	Company Procedures Manual
EG&G	Environmental Restoration Program Directives Manual
EGG-ERD-10227	Data Management Plan for the EG&G Idaho Environmental Restoration Program
EGG-WM-8771	Health and Safety Plan for Operations Performed for the Environmental Restoration Program

EGG-WM-9413	Configuration Management Plan for the EG&G Idaho Environmental Restoration Program
EGG-WM-9739	Test and Evaluation Plan for the EG&G Idaho Environmental Restoration Program
EGG-WM-9741	Systems Engineering and Integration Management Plan for the EG&G Idaho Environmental Restoration Program
EGG-WM-9742	Idaho National Engineering Laboratory Environmental Restoration Program Records Management Plan for EG&G Idaho
EPA 540 G-89 004	Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA
EPA OSWER 9902.3	RCRA Corrective Action Plan
QAMS-005/80	Quality Assurance Management Staff - Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans
QPP-149	Quality Program Plan for the Environmental Restoration Program

ANNEX I

ENVIRONMENTAL, SAFETY, AND HEALTH PROTECTION IMPLEMENTATION PLAN FOR THE EG&G IDAHO ENVIRONMENTAL RESTORATION PROGRAM

(The reverse of this page is blank)

CONTENTS

FIGURE

(The reverse of this page is blank)

ANNEX I
ENVIRONMENTAL, SAFETY, AND HEALTH PROTECTION IMPLEMENTATION PLAN FOR THE EG&G IDAHO ENVIRONMENTAL RESTORATION PROGRAM

1. INTRODUCTION

1.1 Policy

The policy of EG&G Idaho, Inc., is to conduct all activities in such a manner that EG&G Idaho is recognized by all customers as the leader among U.S. Department of Energy (DOE) contractors in environmental, safety, and health. The aim of EG&G Idaho is not only to comply with legal and customer requirements but to reduce the risk of operations to the lowest reasonable level for employees, the public, and the environment. Additional EG&G Idaho policies are contained in the EG&G Idaho manuals as discussed in Section 1.3.

This document defines specific actions being taken by the EG&G Idaho Environmental Restoration (ER) Program to comply with existing federal, State of Idaho, and U.S. DOE requirements on environment, safety, and health issues. These actions are being performed in the following areas:

- Environmental, Safety, and Health Policy (Table 1)
- Organization (Table 2)
- Training (Table 3)
- Preparation of Safety Analyses (Table 4)
- National Environmental Policy Act Documentation (Table 5)
- Reviews and Audits (Table 6)
- Reporting of Unusual Occurrences (Table 7)
- Procedures to Protect the Health and Safety of Employees and the Public (Table 8)
- Procedures to Minimize Risk from Hazards to Life and Property (Table 9).
- Phased and integrated compliance (Table 10 and Figure 1).

Tables 1 through 10 are included at the end of this Annex.

Environmental permitting information is addressed in Section 4, "Permits."

1.2 The Environmental, Safety, and Health Requirements Matrix

Included at the end of this Annex are Environmental, Safety, and Health (ES&H) Requirements tables that identify where EG&G Idaho has addressed the areas of concern that are identified by DOE Order 4700.1. (See Tables 1 through 9 at the end of this Annex.) DOE Order requirements, along with an Other category, are listed along the vertical axis of the matrix and EG&G Idaho manuals are listed along the horizontal axis. As stated in DOE Order 4700.1, when comparable documents exist that meet the requirements of the Environment, Safety, and Health Program Plan

Annex I, those documents may be referenced as part of the Implementation Program Management Plan (IPMP).

1.3 EG&G Idaho Manuals

The manuals that contain EG&G Idaho plans to implement ES&H include the Resource Manual, Emergency Preparedness Manual, Industrial Hygiene Manual, Radiological Controls Manual, Safety Manual, Environmental Manual, EG&G Idaho Company Procedures Manual, and EG&G Idaho's Conduct of Operations Manual. The following is a brief description of each manual.

- EG&G Idaho Resource Manual contains general policies and procedures to support the EG&G Idaho, Inc. mission and policies.

- The Emergency Preparedness Manual identifies the requirements to be satisfied by all emergency preparedness programs at EG&G Idaho. The policies and requirements of the manual are applicable to all EG&G Idaho operations at the Idaho National Engineering Laboratory (INEL). Site specific plan requirements are contained in the Health and Safety Plan (see Section 1.4).

- The EG&G Idaho policy to provide and maintain a work place free of occupational health hazards is discussed in the Industrial Hygiene Manual, which contains a description of the industrial hygiene program established to identify, evaluate, and control potential health hazards arising from chemical and physical agents in the work place. In addition, the manual details applicable regulatory provisions necessary for program specifications to control employee exposure to occupational health hazards.

- The Radiological Controls Manual describes the radiological safety program for controlling ionizing radiation and handling of radioactive materials. This manual contains the requirements that are fundamental to EG&G Idaho's policy of taking every precaution to control radiation exposure in the performance of work. These requirements are: to limit exposures as far as feasible below the requirements established by the DOE; to prevent unnecessary radiation exposure to employees and the public; and to prevent harm to the environment.

- Adherence to the EG&G Idaho, Inc., Safety Program policy documented in the Resource Manual will ensure a safe working environment while maintaining compliance with the DOE and Idaho Field Office requirements. The Safety Manual further details DOE- and Company-prescribed standards that must be met to fulfill Company goals and policies. EG&G Idaho is committed to conducting all operations safely and establishing procedures and practices to prevent the inadvertent or uncontrolled release of pollutants to the environment. In conducting these activities, first priority is given to worker safety, environmental health, and protection of the public.

- EG&G Idaho is fully committed to a policy of total compliance with all applicable federal, state, and local environmental regulations. EG&G Idaho and its employees have mutual corporate and personal responsibilities to ensure that operations at the INEL are conducted in strict conformance with all applicable regulations. The Environmental

Manual contains a description of applicable environmental laws, regulations, and concerns and the commitment of EG&G Idaho to abide by these laws.

- EG&G Idaho Company Procedures Manual contains procedures for use throughout EG&G Idaho where uniform process control is needed for continuity, efficiency, and regulatory compliance. The manual requires centralized control at the Company level only where necessary, thus fostering maximum flexibility in the achievement of compliance with requirements.

- Conduct of operations denotes a philosophy of, and procedures for, conducting operations that involve risk to personnel and/or the environment. EG&G Idaho implements DOE Order 5480.19, "Conduct of Operations," as a way of doing business using a graded approach in the application; the rigor of the application is dependent on the potential risk to personnel, the environment, facilities, and equipment. The EG&G Conduct of Operations Manual provides policy, requirements, and procedures that define EG&G Idaho's conduct of operations program.

1.4 DOE Order Requirements

In addition to the areas of emphasis listed on the first page of this Annex, DOE has specific ES&H program requirements for all operations. Although the attached tables address several DOE Orders that are complied with in the EG&G Manuals, the most significant DOE Orders applicable to the ER Program are listed below.

DOE/EV 1032	Environmental Compliance Guide
DOE 5000.3A	Occurrence Reporting and Processing of Operations Information
DOE 5400.1	General Environmental Protection Program
DOE 5400.4	Comprehensive Environmental Response, Compensation, and Liability Act Requirements
DOE 5440.1D	National Environmental Policy Act Compliance Program
DOE 5480.19	Conduct of Operations
DOE 5480.1B & DOE-ID 5480.1A	Environmental, Safety and Health Protection Program for DOE Operations
DOE 5481.1B & DOE-ID 5481.1A	Safety Analysis and Review System
DOE 5482.1B & DOE-ID 5482.1A	Environmental, Safety and Health Appraisal Program

DOE 5484.1 & Environmental Protection, Safety and Health

DOE-ID 5484.1A Protection Information Reporting Requirements

The intent of Tables 1 through 10 is to verify that EG&G Idaho, Inc. has fulfilled the required ES&H statutory, regulatory, and directive requirements necessary to develop these milestones as required in the Implementing Project Management Plan.

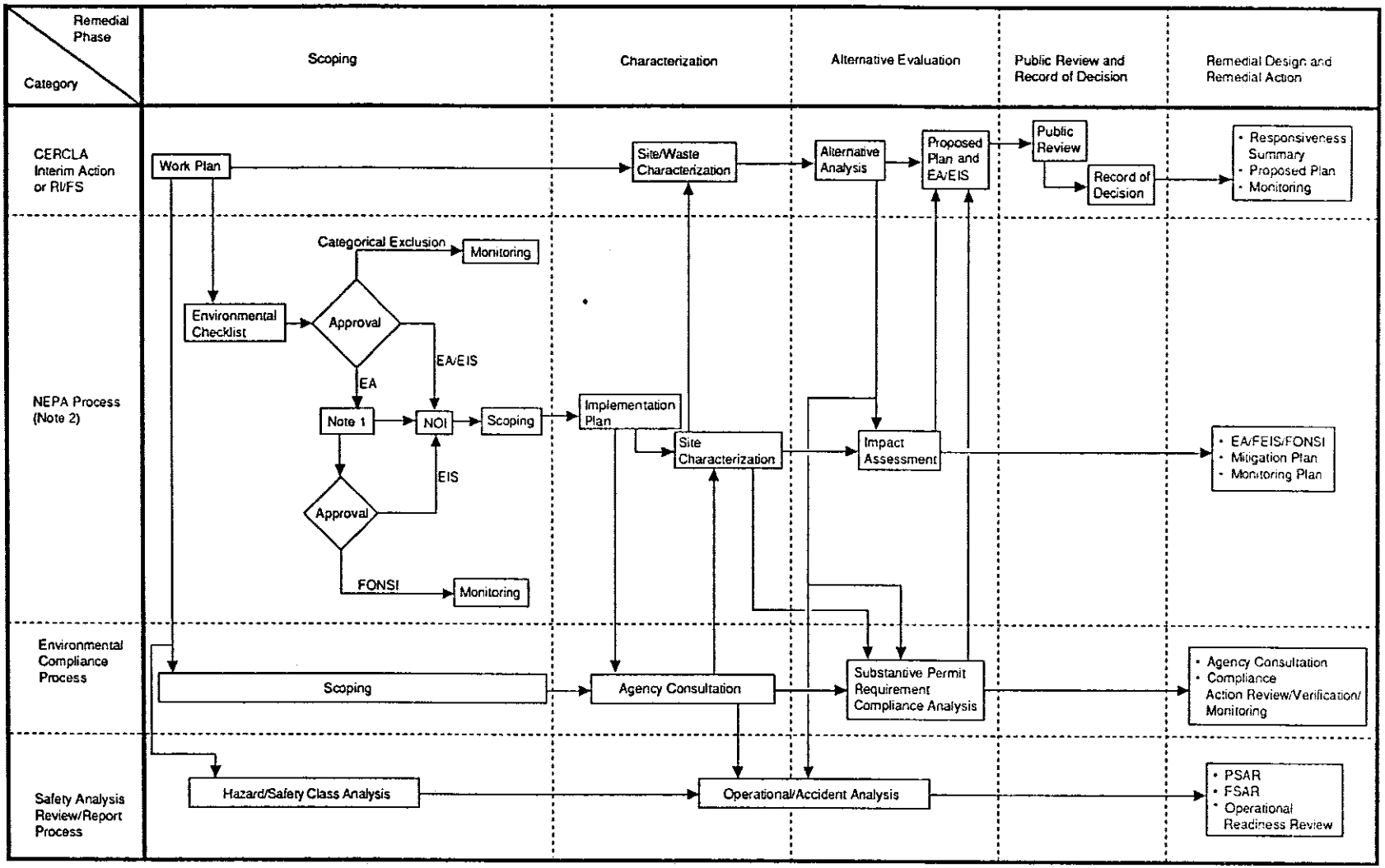
1.5 Compliance Strategy

Table 11 shows the Phased Compliance strategy for ER actions at INEL. The table depicts four concurrent processes and the actions associated with each process by project phase. The table depicts the process for those restoration activities that are RI/FS track or IA track projects. It is expected that restoration activities on Track 1 or 2 will either require no further action, or be categorical exclusions. Projects on the IA track would likely either require additional action and move to the RI/FS track or be deemed to need no further action.

As noted in the table and discussed in Section 4 of this Annex, acquisition of permits would be required only for non-CERCLA-driven restoration activities (such as D&D or USTs). Nonetheless, the criteria and requirements of federal and state regulations will be met in restoration activities; consequently, initial activities associated with this process (through the evaluation phase of the project) would be undertaken for both CERCLA- and non-CERCLA-driven projects.

DOE-HQ is preparing a Programmatic EIS, and DOE-ID is preparing a site-wide EIS for ER and WM programs at the INEL. The NEPA compliance process for each OU will be tiered to these environmental documents when they are available.

It should be noted that while the table depicts a separate NEPA process, it is intended that the CERCLA and NEPA processes will be integrated to avoid duplication, and streamline compliance as described in "Integrating CERCLA and NEPA Requirements for Environmental Restoration Activities at INEL." Figure AI-1 shows these same four processes along a timeline and depicts the relationships between the processes, and how information and analyses relate between them. The time necessary for permit application and review is dependent upon the permits that may be required for a specific project/action.



Notes
(1) An environmental assessment (EA) may be conducted in the initial stage of the CERCLA process. This EA may result in a finding of no significant impact (FONSI) or require an environmental impact assessment (EIA). Action Description Memorandum (ADM) is the authorizing document to prepare EA or EIS.
(2) For more details see "Integrating CERCLA and NEPA Requirements for Environmental Restoration Activities at INEL", DOE-ID ERD1-012-91

Figure AI-1. Integrated compliance.

2. FEDERAL ENVIRONMENTAL REGULATORY COMPLIANCE

EG&G Idaho is committed to complying with all applicable federal, State, and local environmental regulations. The following paragraphs discuss federal environmental regulations that impact ER Program activities.

Each ER Program project may have differing requirements. EG&G Idaho reviews each project during the initial planning process to ensure that applicable regulations and permitting requirements are met. The following discussion on environmental regulations pertinent to the ER Program is not meant to be exhaustive; it covers only the most significant federal regulations.

2.1 Issued Regulatory Compliance

EG&G Idaho's Environmental Manual discusses compliance with the following laws:

- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
- National Environmental Policy Act (NEPA)
- Resource Conservation and Recovery Act (RCRA)
- Superfund Amendments and Reauthorization Act (SARA)
- Toxic Substances Control Act (TSCA).

The National Environmental Policy Act (NEPA) of 1970 declared a national policy of greater environmental awareness by requiring a systematic, interdisciplinary review of any proposed federal action. NEPA requires the assessment of environmental impacts of the action proposed, assesses alternatives to the action if any, and requires a statement of any irreversible and irretrievable commitments of resources involved in the proposed action should it be implemented.

The vehicle for ensuring compliance with NEPA is the environmental impact review process, resulting in either (a) a Categorical Exclusion (CX), (b) an Environmental Assessment (EA) and Finding of No Significant Impact (FONSI), or (c) an Environmental Impact Statement (EIS) for a project. These documents are used to assist agency decision-makers in making informed decisions about the environmental consequences of a proposed project.

An EA is a concise public document that briefly analyzes potential impacts from a proposed project upon components of the environment and reaches a conclusion as to the significance of those impacts. The EA is the supporting documentation for either (1) a Finding of No Significant Impact (FONSI), or (2) a finding that a significant adverse impact could occur and therefore an EIS is recommended. An EA is generally used where a proposed action does not qualify for a categorical exclusion and the environmental impact is either unknown or anticipated to be insignificant.

An EIS is a detailed, in-depth assessment document, which is prepared in cases where the impacts of an action are known to be significant or are shown by an EA to be significant. It

addresses potential significant adverse environmental impacts that may occur as a result of implementing a proposed project or its alternatives. The EIS requires formal public involvement and has a structured agency review process.

Public involvement is initiated early in the EIS process through scoping to help define significant issues. A draft EIS is distributed for public and agency review and comment, and formal public hearings are held to receive public input during the decision process. Comments on the draft EIS must be addressed in the final EIS. The EIS process leads to development of a Record of Decision (ROD) and a notice of ROD availability in the Federal Register. NEPA is integrated with the CERCLA process as indicated elsewhere in this Annex.

CERCLA provides for liability, compensation, cleanup, and emergency response for hazardous substances released into the environment and for the cleanup of inactive hazardous waste disposal sites. With respect to hazardous waste, CERCLA joins the RCRA to provide "wraparound" coverage; it establishes a comprehensive response program for past hazardous waste activities. CERCLA covers all environmental media—air, surface water, groundwater, and soil. Moreover, CERCLA can apply directly to any type of industrial, commercial, or even noncommercial facility regardless of whether any specific regulations affect that type of facility and regardless of how that facility might impact the environment. Events that may trigger CERCLA response or liability would be the release or threat of a release into the environment of a hazardous substance, pollutant, or contaminant. CERCLA defines each of these terms very broadly.

Subsection 121 (e) of CERCLA provides that no "Federal, State or local permit" shall be required for any portion of a CERCLA remedial action that is conducted on the site of the facility being cleaned up. Nonetheless, these actions shall satisfy, to the extent authorized by the law, all applicable or relevant and appropriate federal and state standards, requirements, criteria, or limitations which would have been included in such a permit.

The Resource Conservation and Recovery Act (RCRA) is a regulatory statute designed to provide "cradle-to-grave" control of hazardous waste by imposing management requirements on generators and transporters of hazardous wastes and upon owners and operators of treatment, storage, and disposal (TSD) facilities. The primary objective of RCRA is to protect human health and the environment. To achieve this objective, the Environmental Protection Agency (EPA) established regulations to prohibit open dumping; regulate the management of hazardous wastes; encourage recycling, reuse, and treatment of hazardous wastes; provide guidelines for solid waste management; and promote beneficial solid waste management, resource recovery, and resource conservation systems. RCRA applies primarily to active facilities, but also addresses corrective action for releases to the environment.

The Superfund Amendment and Reauthorization Act (SARA) established the Emergency Planning and Community Right-To-Know Act of 1986 (EPCRA) that requires routine reporting and notification by industries involved with manufacturing, storage, processing, or use of hazardous chemicals and substances.

The purpose of the Toxic Substances Control Act (TSCA) is to protect human health and the environment by requiring testing, record keeping, reporting, limitations on production and use, labeling, and regulated disposal of specific chemicals.

2.2 Other Regulatory Compliance

In addition, EG&G Idaho complies with the following federal environmental regulations:

- Clean Air Act (CAA)
- Clean Water Act (CWA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)
- Safe Drinking Water Act (SDWA).

The Clean Air Act (CAA) was enacted in 1970 and has been extensively amended since. The objectives of the CAA are to protect and enhance the quality of the nation's air resource and to protect public health and welfare while fostering a beneficial productive capacity. The sections of the Act most relevant to DOE deal with requirements for obtaining preconstruction permits for new or modified major stationary facilities or operations. The following activities may be involved:

- Ensuring that air emissions will meet state emission limitations on certain pollutants as set forth in the State Implementation Plan (SIP).
- Ensuring that air emissions will comply with any federal New Source Performance Standards (NSPS).
- Ensuring that facility emissions do not interfere with the attainment or maintenance of the National Ambient Air Quality Standards (NAAQS).
- Ensuring that any emissions of listed hazardous air pollutants (i.e. radionuclides) comply with the National Emissions Standards for Hazardous Air Pollutants (NESHAP).

The Clean Water Act (CWA) has the regulatory focus of rigorously controlling toxic water pollutants. The objectives of the Act include prohibition of toxic discharges, zero discharge by 1985 (i.e., elimination of pollutant discharge to navigable waters), protection of fish and wildlife, and availability of federal funds for public waste treatment works. The requirements of the Act most relevant for DOE to deal with include

- Permits under the National Pollutant Discharge Elimination System (NPDES)
- Technology-based effluent limitations
- Water quality-based effluent limitations
- New source performance standards
- Regulation of toxins and indirect discharges

- Federal facilities' pollution control
- Implementation of a control program for nonpoint-source pollution
- Thermal discharges
- Permits for the discharge of dredged or fill materials into navigable waters
- Individual control strategies for toxic pollutants.

All DOE facilities that discharge waste waters to either a surface water body or a publicly owned treatment system must ensure compliance with the CWA. Facilities that directly discharge waste waters must obtain a NPDES permit, which is administered by the EPA or an authorized state. This permit specifies the discharge standards and monitoring and reporting requirements that the facility must achieve for each point source or outfall. All NPDES permits require compliance with technology-based standards, which are promulgated for specific industrial categories or on a case-by-case basis, as occurs for DOE facilities. For industrial facilities that existed prior to July 1, 1977, best conventional technology must be applied to the discharge stream for conventional pollutants. For facilities built after July 1, 1977, so-called new facilities, the National Standards of Performance would apply. When toxic pollutants are to be discharged, either from an existing or new facility, more stringent controls would be required. The regulations for toxins are based on best available technology economically achievable. In all cases, NPDES permits can be made even more stringent than the above standards if the specific body of water in question requires lower discharges of pollutants to meet water quality standards.

Facilities that discharge to a municipal or publicly owned waste water system do not have to obtain a NPDES permit, but they do have to follow the pretreatment regulations. These pretreatment regulations require that industrial discharges remove or treat all pollutants that could pass through the municipal system untreated or could adversely affect the performance of the municipal system. Toxic pollutants are the primary concern of these regulations.

The Safe Drinking Water Act (SDWA) required the EPA to set national standards for levels of contaminants in drinking water, created a program for states to regulate underground injection wells, and protected sole source aquifers. EPA's implementation of the Act has been extremely rigorous, in part because the 1984 amendments to RCRA have also required substantial changes in the underground injection control program. Under SARA, drinking water standards and goals set under the SDWA became ground water standards for CERCLA cleanups. Additionally, some states are adopting SDWA drinking water standards for ground water quality in other contexts.

The SDWA requires the EPA to establish primary drinking water regulations for contaminants which may cause adverse public health effects. The regulations include both mandatory levels (Maximum Contaminant Levels - MCLs) and nonenforceable health goals (Maximum Contaminant Level Goals - MCLGs) for each contaminant. MCLGs have extra significance because under CERCLA, as amended by SARA, they are specifically referenced as applicable or relevant and appropriate requirements in National Priorities List (NPL) cleanups.

2.3 Additional Environmental Compliance

CERCLA/NEPA Integration

EG&G Idaho shall comply with the policy of the ER Program to integrate the NEPA substantive and procedural requirements into the CERCLA process whenever appropriate as specified in the memo dated February 26, 1991, from J. L. Lyle of the DOE to S. G. Stiger of EG&G Idaho. Three keys to integrating the Acts are: (1) maximize public involvement in programmatic planning and in identifying and evaluating alternatives, (2) expand the CERCLA definition of environment to satisfy the broader analysis required by NEPA, and (3) integrate procedural differences between the two Acts and their implementing regulations.

EG&G Idaho was directed by DOE to immediately implement the requirements of a plan prepared by EG&G and Westinghouse Idaho Nuclear Company (WINCO) titled "Integrating CERCLA and NEPA Requirements for Environmental Restoration Activities at INEL." The framework for implementation of CERCLA at INEL, as described in the Federal Facilities Agreement and associated Action Plan, will accommodate requirements of NEPA and will result in the production of a single set of CERCLA/NEPA documents that fulfill the goals of both Acts.

Because the CERCLA process addresses the majority of NEPA concerns, only minimal extra effort is needed to produce a single set of documents into one cohesive set of documents complying with both Acts.

The integration plan is based on the assumption that CERCLA is the regulatory driver for restoration activities and that the flexibility allowed by NEPA will be exercised within the CERCLA framework. For additional information regarding the specific integration of NEPA at INEL see "Integrating CERCLA and NEPA Requirements for Environmental Restoration Activities at INEL" prepared by CN-GEOTECH, July 1992, pages 14 through 28.

3. STATE ENVIRONMENTAL REGULATORY COMPLIANCE

In addition to complying with the applicable federal environmental regulations, EG&G Idaho is committed to complying with all applicable state and local environmental regulations.

Because each ER Program may have differing requirements, EG&G Idaho will review each project during the initial planning process to ensure that applicable regulations and permitting requirements are met. The following is a synopsis of state environmental regulations pertinent to the ER Program.

The following discussion of State environmental regulations pertinent to the ER Program is not meant to be exhaustive; it covers only the most significant State regulations.

3.1 Idaho State Solid Waste Land Use Regulations

The purpose of the Idaho Hazardous Waste Management Act is to protect the public health and safety, the health of living organisms, and the environment from the effects of the improper, inadequate, or unsound management of hazardous waste. In addition, the act establishes a program to track and control hazardous wastes from the time they are generated through transportation, treatment, storage, and disposal to ensure the safe and adequate management of hazardous wastes within the State. The Idaho Department of Health and Welfare is directed, through this Act, to promulgate rules and regulations which are, in substance, consistent with RCRA and the federal regulations adopted by the administrator of the United States EPA to implement RCRA.

The provisions of the Idaho Hazardous Waste Facility Siting Act include an effective method of establishing waste disposal facility sites. The legislature of the State of Idaho has found that adverse public health and environmental impacts can result from improper land disposal of hazardous waste and that the need for establishing safe sites with adequate capacity for disposing of hazardous waste is a matter of state-wide concern.

The intent of the legislature is to encourage generators of hazardous waste to use on-site and off-site alternative treatment methods to reduce the amount of hazardous waste that must be discharged into the environment and to reduce associated hazards to the health and welfare of the citizens of the State. Alternative management technology is available to detoxify, stabilize, and reduce the amount of hazardous waste that must be buried. The provisions of the Act allow the development of safe alternative methods for treating hazardous waste and provide a means for designating hazardous waste disposal sites when such methods are unable to obviate the need for hazardous waste disposal on land. Whereas the State of Idaho may be responsible for the perpetual care of hazardous waste land disposal facilities, alternative technologies such as incineration, resource recovery, or physical, chemical, or biological degradation should be implemented to the maximum extent possible.

3.2 Idaho State Air Laws

The intent of the Idaho Air Pollution Control Regulations is to comply with the amended Federal Law, the Clean Air Act administered by the EPA. Under federal law, each state is required to submit to the Administrator of the EPA a plan which provides for implementation, maintenance, and enforcement of national ambient air quality standards within each air quality control region of the state.

3.3 Idaho State Water Laws

The purpose of the Idaho Water Pollution Control Law is to enhance and preserve the quality and value of the water resources of the State and to assist in the prevention, control, abatement, and monitoring of water pollution.

The purpose of the Idaho Wastewater-Land Application Permit Regulations is to establish procedures and requirements for the issuance and maintenance of pollution source permits for the treatment of municipal and industrial waste waters by application to land.

The purpose of the Idaho Water Quality Standards and Wastewater Treatment Requirements is to establish standards of water quality protection. Restrictions are placed on the discharge of waste waters and on human activities which may adversely affect water quality in the waters of the State.

The intent of the Idaho Environmental Protection and Health Act is to provide for the protection of the environment and the promotion of personal health and to thereby protect and promote the health, safety, and general welfare of the people of the State. The goal in enacting the Ground Water Quality Protection Act of 1989 shall be to maintain the existing high quality of the State's groundwater and satisfy existing and projected future beneficial uses including drinking water and industrial and agricultural water supplies. The legislature intends to prevent contamination of groundwater from point and nonpoint sources of contamination to the maximum extent possible.

4. PERMITS

As stated in Section 2.2 of this Annex, Subsection 121 (e) of CERCLA provides that no "Federal, State or local permit" shall be required for any portion of a CERCLA remedial action that is conducted on the site of the facility being cleaned up. Nonetheless, these actions shall satisfy, to the extent authorized by the law, all applicable or relevant and appropriate federal and state standards, requirements, criteria, or limitations which would have been included in such a permit.

EG&G Idaho's policy is to comply with all substantive requirements of the applicable or relevant and appropriate regulations throughout the ER Program. EG&G Idaho will review each project during the initial planning process to ensure that applicable or relevant and appropriate regulations and substantive permitting requirements are met.

If additional projects that may not be driven by CERCLA, i.e., the Decontamination and Decommissioning (D&D) and the Underground Storage Tanks (USTs) projects are included in the Program, EG&G will comply with all of the applicable or relevant and appropriate permitting requirements.

(The reverse of this page is blank)

TABLES

(The reverse of this page is blank)

Table 1. Environment, safety, and health policy.

Environment, Safety and Health (ES&H) Policy	Resource Manual	Emergency Preparedness Manual	Industrial Hygiene Manual	Radiological Controls Manual	Safety Manual	Environmental Manual	EG&G Idaho Company Procedures Manual
ES&H Policy	Section 5						
DOE 5480.4 Chg 3 DOE-ID 5480.4A Environmental Protection, Safety & Health Protection Standards			Section 2	Chapter 1			
DOE 5480.10 Contractor Industrial Hygiene Program			Section 2				
DOE 5480.11 Chg 3 Radiation Protection for Occupational Workers				Chapter 1			
DOE 5483.1A DOE-ID 5483.1B Occupational Safety and Health Program for DOE Contractor Employees at Government Owned Contractor Operated Facilities			Section 2				
DOE 5484.1 Chg 7 Environmental Protection, Safety and Health Protection Information Reporting Requirements				Chapter 1			
DOE-ID 5484.1B Environmental protection, Safety and Health Protection Information Reporting Requirements							

Table 2. Organization.

Organization	Resource Manual	Emergency Preparedness Manual	Industrial Hygiene Manual	Radiological Controls Manual	Safety Manual	Environmental Manual	EG&G Idaho Company Procedures Manual
Organization	Section 5	Section 1					
DOE-ID 5480.1B Chg 4 Ch IX Construction Safety and Health Program					Section 5		
DOE-ID 5480.1B Chg 4 Ch XII Prevention, Control and Abatement of Environmental Pollution		Section 2					
DOE 5480.5 Safety of Nuclear Facilities							Section 4.5
DOE-ID 5480.5A Safety of Nuclear Facilities							
DOE 5480.10 Contractor Industrial Hygiene Program			Section 4				
DOE-ID 5481.1B Chg 1 Safety Analysis and Review System							Section 4.5
DOE 5484.1 Chg 7 Environmental Protection, Safety and Health Protection Information Reporting Requirements					Section 5		
DOE-ID 5484.1 Chg 7 Environmental Protection, Safety and Health Protection Information Reporting Requirements		Section 2					
40 CFR 112 Oil Pollution Prevention		Section 2					
40 CFR 264 and 265 Solid Wastes		Sections 2, 3, 4, 6, 15					
29 CFR 1910 Occupational Safety and Health		Sections 2, 3			Section 5		
29 CFR 1926 Safety and Health Regulations for Construction					Section 5		

Table 3. Training.

Training	Resource Manual	Emergency Preparedness Manual	Industrial Hygiene Manual	Radiological Controls Manual	Safety Manual	Environmental Manual	EG&G Idaho Company Procedures Manual
							Section 1.11
Training	Section 5	Section 12					
DOE-ID 5480.1B Chg 4 Ch XI Requirements for Radiation Protection							Section 10.2
DOE-ID 5480.1B Chg 4 Environmental, Safety and Health Protection Program for DOE Operations					Section 8		
DOE 5480.1B Chg 4 Environmental, Safety and Health Program for DOE Operations					Section 8		
DOE 5480.7 Fire Protection							Section 6.1
DOE 5480.10 Contractor Industrial Hygiene Program							Section 11.5
DOE 5480.11 Chg 3 Radiation Protection for Occupational Workers				Chapter 10			Section 10.2
DOE 5480.19 Chg 1 Conduct of Operations Requirements for DOE Facilities[a]							Sections 2.3, 2.8, 2.9
40 CFR 260-265 Solid Wastes		Section 12					Section 8.3
29 CFR 1910 Occupational Safety and Health		Section 12			Section 8		Section 11.1 Section 1.11
49 CFR 173.1 Transportation					Section 8		

a. Addressed by the EG&G Corporate Conduct of Operation Manual.

Table 4. Preparation of safety analyses.

Preparation of Safety Analyses	Resource Manual	Emergency Preparedness Manual	Industrial Hygiene Manual	Radiological Controls Manual	Safety Manual	Environmental Manual	EG&G Idaho Company Procedures Manual
Preparation of Safety Analyses	Section 5				Section 3		
DOE 5480.5 Safety of Nuclear Facilities			Section 1	Section 10 & 11	Section 3		
DOE-ID 5480.5A Safety of Nuclear Facilities					Section 3		
DOE 5480.23 Nuclear Safety Analysis Reports							Section 7
DOE 5480.11 Chg 3 Radiation Protection for Occupational Workers							Sections 10.3, 10.6, 10.7, 10.12
DOE 5481.1B Chg 1 Safety Analysis and Review System					Section 3		

Table 5. National Environmental Policy Act (NEPA) documentation.

NEPA Documentation	Resource Manual	Emergency Preparedness Manual	Industrial Hygiene Manual	Radiological Controls Manual	Safety Manual	Environmental Manual	EG&G Idaho Company Procedures Manual
NEPA Documentation	Section 5						
DOE 5400.1 Chg 1 General Environmental Protection Program						Section A-6	Section 8.5
DOE 5440.1D National Environmental Policy Act Compliance Program					Section 2	Section A-6	Section 8.5
42 USC 4321-4347 National Environmental Policy Act						Section A-6	Section 8.5
40 CFR 1500-1508 Council on Environmental Quality Regulations						Section A-6	Section 8.5

Table 6. Reviews and audits.

Reviews and Audits	Resource Manual	Emergency Preparedness Manual	Industrial Hygiene Manual	Radiological Controls Manual	Safety Manual	Environmental Manual	EG&G Idaho Company Procedures Manual
Reviews and Audits	Section 5						
DOE 5400.1 General Environmental Protection Program					Section 2	Sections EM-A1 through EM-B14	
DOE 5400.5 Radiation Protection of the Public and Environment							Section 2.2
DOE 5480.1B Chg 1 Environment, Safety and Health Program for DOE Operations			Section 2		Section 2		Section 4.3
DOE 5480.3 Hazardous and Radioactive Mixed Waste Program							Section 14.2
DOE 5480.5 Safety of Nuclear Facilities					Section 2		Sections 1.7, 2.2, 4.3, 4.5, 7.1
DOE-ID 5480.5A Safety of Nuclear Facilities					Section 2		Section 4.3
DOE 5480.7 Fire Protection					Section 11		Section 4.3
DOE 5480.10.9e Contractor Industrial Hygiene Program							Section 11.4
DOE 5480.11 Radiation Protection for Occupational Workers				Chapters 8, 12	Section 2		Section 2.2
DOE 5481.1B Chg 1 Safety Analysis and Review System					Section 2		Section 1.3, 7.1
DOE-ID 5481.1B Safety Analysis and Review System					Section 2		Section 4.5
DOE 5482.1B Chg 1 Environmental, Safety and Health Appraisal Program				Chapter 12	Section 2		Section 1.7

Table 6. (continued).

Reviews and Audits	Resource Manual	Emergency Preparedness Manual	Industrial Hygiene Manual	Radiological Controls Manual	Safety Manual	Environmental Manual	EG&G Idaho Company Procedures Manual
DOE-ID 5483.1A Occupational Safety and Health Program for DOE Contractor Employees at Government Owned Contractor Operated Facilities			Section 2		Section 2		
DOE-ID 5483.1B Occupational Safety and Health Program for DOE Contractor Employees at Government-Owned Contractor-Operated Facilities							
29 CFR 1910 Occupational Safety and Health			Section 2		Section 2		
29 CFR 1926 Safety and Health Regulations for Construction			Section 2		Sections 2, 5		Section 4.3

Table 7. Reporting of unusual occurrences.

Reporting of Unusual Occurrences	Resource Manual	Emergency Preparedness Manual	Industrial Hygiene Manual	Radiological Controls Manual	Safety Manual	Environmental Manual	EG&G Idaho Company Procedures Manual
Reporting of Unusual Occurrences	Section 5						
DOE 5000.3A Chg 1 Occurrence Reporting and Processing of Operations Information					Section 3		
DOE-ID 5000.3B Chg 1 Occurrence Reporting and Processing of Operations Information							
DOE 5480.1B Environment, Safety and Health Program for DOE Operations					Section 3		
DOE 5480.19 Chg 1 Conduct of Operations Requirements for DOE Facilities[a]					Section 3		
DOE 5484.1 Chg 7 Environmental Protection, Safety and Health Protection Information Reporting Requirements							
DOE-ID 5484.1A Environmental Protection, Safety and Health Protection Information Reporting Requirements					Section 3		
29 CFR 1904 Recording and Reporting Occupational Injuries and Illnesses					Section 3		

a. Addressed by the EG&G Corporate Conduct of Operation Manual.

Table 8. Procedures to protect the health and safety of emp. , and the public.

Procedures to Protect the Health & Safety of Employees and the Public	Resource Manual	Emergency Preparedness Manual	Industrial Hygiene Manual	Radiological Controls Manual	Safety Manual	Environmental Manual	EG&G Idaho Company Procedures Manual
Procedures to Protect the Health & Safety of Employees and the Public	Section 5	Section 11					
DOE 5400.1 Chg 1 General Environmental Protection Program							Section 8.1
DOE 5400.3 Hazardous and Radioactive Mixed Waste Program							Section 8.1
DOE 5400.5 Chg 1 Radiation Protection of the Public and the Environment				Chapters 3, 4			Section 10.11
DOE-ID 5480.1B Chg 4 Ch VIII Occupational Medical Program					Section 4		
DOE-ID 5480.1B Chg 4 Ch XI Requirements for Radiation Protection				Chapter 11			Section 10.10
DOE-ID 5480.1B Chg 4 Ch XV Motor Vehicle Safety Program					Section 13		
DOE 5480.1B Chg 4 Environment, Safety and Health Program for DOE Operations					Section 4		
DOE 5480.3 Safety Requirements for the Packaging & Transportation of Hazardous Materials, Hazardous Substances, & Hazardous Wastes				Chapter 5			Section 8.1
DOE 5480.4 Chg 3 Environmental Protection, Safety and Health Protection Standards							
DOE-ID 5480.4 Environmental Protection, Safety & Health Protection Standards			Sections 4, 7		Sections 10, 16.4, 25		Sections 8.1, 11.1, 11.8, 11.10, 11.11, 11.12
DOE 5480.5 Safety of Nuclear Facilities							
DOE-ID 5480.5A Safety of Nuclear Facilities					Section 25		

Table 8. (continued).

Procedures to Protect the Health & Safety of Employees and the Public	Resource Manual	Emergency Preparedness Manual	Industrial Hygiene Manual	Radiological Controls Manual	Safety Manual	Environmental Manual	EG&G Idaho Company Procedures Manual
DOE 5480.7 Fire Protection				Chapter 5	Section 11		Section 6.1
DOE 5480.8A Occupational Medical Program			Section 8		Section 4		Section 11.8
DOE 5480.10 Contractor Industrial Hygiene Program							
DOE-ID 5480.10 Contractor Industrial Hygiene Program			Sections 4, 5, 7, 28				Sections 11.1, 11.2, 11.6, 11.7, 11.8, 11.9, 11.10, 11.11, 11.12, 11.13
DOE 5480.11 Radiation Protection for Occupational Workers		Section 8		Chapters 3, 4, 5, 11	Section 12		Sections 10.1, 10.10, 10.11, 11.1
DOE 5480.19 Conduct of Operations Requirements for DOE Facilities[a]							
DOE 5481.1B Chg 1 Safety Analysis and Review System							
DOE-ID 5481.1A Safety Analysis & Review System					Section 25		
DOE 5482.1B Chg 1 Environmental, Safety and Health Appraisal Program				Chapter 11			
DOE 5483.1A Occupational Safety and Health Program for DOE Contractor Employees at Government Owned Contractor Operated Facilities							
DOE-ID 5483.1B Occupational Safety and Health Program for DOE Contractor Employees at Government Owned Contractor Operated Facilities			Section 4				Section 1.2
DOE 5484.1 Chg 7 Environmental Protection, Safety and Health Protection Information Reporting Requirements				Chapters 3, 5			

Table 8. (continued).

Procedures to Protect the Health & Safety of Employees and the Public	Resource Manual	Emergency Preparedness Manual	Industrial Hygiene Manual	Radiological Controls Manual	Safety Manual	Environmental Manual	EG&G Idaho Company Procedures Manual
DOE-ID 5484.1B Environmental Protection, Safety and Health Protection Information Reporting Requirements				Chapter 3			
42 USC 6901 et seq RCRA							Section 8.1
40 CFR 61 Air Programs-National Emission Standards for Hazardous Air Pollutants							Section 11.8
40 CFR 100-177 Transportation					Section 9		
40 CFR 260-268 Solid Wastes							Section 8.1
49 CFR 171-178 Hazardous Materials Regulations					Section 9		Sections 8.1, 11.8
29 CFR 1910 Occupational Safety and Health		Section 16	Sections 5, 6, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 21, 22, 23, 26, 28		Sections 4, 7, 9, 10, 12, 16, 16.4, 20		Sections 11.1, 11.2, 11.3, 11.6, 11.7, 11.8, 11.12, 11.13
29 CFR 1926 Safety and Health Regulations for Construction			Sections 13, 22		Sections 4, 10, 12, 16, 16.4, 20		Section 11.8

a. Addressed by the EG&G Corporate Conduct of Operation Manual.

Table 9. Procedures to minimize risk from hazards to life and property.

Procedures to Minimize Risks from Hazards to Life & Property	Resource Manual	Emergency Preparedness Manual	Industrial Hygiene Manual	Radiological Controls Manual	Safety Manual	Environmental Manual	EG&G Idaho Company Procedures Manual
Procedures to Minimize Risks from Hazards to Life & Property	Section 5						
DOE 5400.1 Chg 1 General Environmental Protection Program					Section 15		Section 8.3
DOE 5400.3 Hazardous and Radioactive Mixed Waste Program					Section 15		Section 8.3
DOE 5400.5 Chg 1 Radiation Protection of the Public and the Environment				Chapters 2, 7			
DOE-ID 5480.1B Environmental, Safety and Health Protection Program For DOE Operations					Section 15		
DOE 5480.1B Environment, Safety and Health Program for DOE Operations				Chapter 9			
DOE-ID 5480.1B Ch XI Requirements for Radiation Protection					Section 15		
DOE-ID 5480.1B Ch XII Prevention, Control & Abatement of Environmental Pollution				Chapter 7	Section 15		
DOE 5480.3 Hazardous and Radiation Mixed Waste Program							
DOE-ID 5480.3 Hazardous and Radioactive Mixed Waste Program							Section 14.1
DOE 5480.4 Chg 3 Environmental Protection, Safety & Health Protection Standards				Chapter 7	Section 15, 2		Sections 8.2, 8.3
DOE 5480.5 Safety of Nuclear Fac					Section 25		

Table 9. (continued).

Procedures to Minimize Risks from Hazards to Life & Property	Resource Manual	Emergency Preparedness Manual	Industrial Hygiene Manual	Radiological Controls Manual	Safety Manual	Environmental Manual	EG&G Idaho Company Procedures Manual
DOE-ID 5480.5A Safety of Nuclear Facilities					Section 25		
DOE 5480.11 Radiation Protection for Occupational Workers				Chapter 2			
DOE 5480.15 DOE Laboratory Accreditation Program for Personnel Dosimetry				Chapter 2			
DOE 5481.1B Chg 1 Safety Analysis and Review System					Section 25		
DOE 5484.1 Chg 7 Environmental Protection, Safety & Health Protection Information Reporting Requirements				Chapters 2, 7			
DOE-ID 5484.1B Environmental Protection, Safety & Health Protection Information Reporting Requirements				Chapter 2, 7	Sections 15, 25		
40 CFR 260-270 Solid Wastes					Section 15		Sections 8.2, 8.3
49 CFR 100-177 Transportation							Section 14.1
49 CFR 171-178 Hazardous Materials Regulations							Sections 8.2, 8.3
29 CFR 1910 Occupational Safety and Health					Sections 6, 15		Section 8.3

Table 10. Other relevant environmental laws.

Other Relevant Environmental Laws	Resource Manual	Emergency Preparedness Manual	Industrial Hygiene Manual	Radiological Controls Manual	Safety Manual	Environmental Manual	EG&G Idaho Company Procedures Manual
Comprehensive Environmental Response, Compensation, and Liability Act(CERCLA)	Section 5				Section 17		
DOE 5400.4 DOE-ID 5400.4 Comprehensive Environmental Response, Compensation, and Liability Act Requirements					Section 15	Section A-6	Section 8.5
Resource Conservation And Recovery Act (RCRA)	Section 5			Chapters 5, 6	Section 17		
DOE 5400.1 Chg 1 General Environmental Protection Program						Section A-7	
DOE-ID 5480.1B Environmental, Safety & Health Protection Program for DOE Operations						Section A-7	
DOE 5480.4 Chg 3 Environmental Protection, Safety and Health Protection Standards							
DOE-ID 5480.4A Environmental Protection, Safety, & Health Protection Standards						Section A-7	
DOE 5484.1 Chg 7 DOE-ID 5484.1A Environmental Protection, Safety & Health Protection Information Reporting Requirements						Section A-7	
42 USC 6901 et seq Resource Conservation and Recovery Act						Section A-7	
29 CFR 1910 Occupational Safety and Health						Section A-7	
40 CFR 240-280 Solid Wastes						Section A-7	Sections 8.9, 8.10
Superfund Amendments and Reauthorization Act (SARA) Title II pliance	Section 5				Section 17		

Other Relevant Environmental Laws	Resource Manual	Emergency Preparedness Manual	Industrial Hygiene Manual	Radiological Controls Manual	Safety Manual	Environmental Manual	EG&G Idaho Company Procedures Manual
DOE 5000.3A Occurrence Reporting & Processing of Operations Information						Section A-9	
DOE 5480.1B Environment, Safety & Health Program for DOE Operations						Section A-9	
Superfund Amendments and Reauthorization Act (SARA) Title III Compliance, Continued							
29 CFR 1910 Occupational Safety and Health Standards						Section A-9	Section 8.6
40 CFR 302 Designation, Reportable Quantities & Notification						Section A-9	
40 CFR 355 Emergency Planning & Notification						Section A-9	Section 8.6
40 CFR 370 Hazardous Chemical Reporting: Community Right-To-Know						Section A-9	Section 8.6
40 CFR 372 Toxic Chemical Release Reporting: Community Right-To-Know							Section 8.6
Toxic Substance Control Act (TSCA)	Section 5			Chapters 5, 6	Section 17		
DOE 5400.1 Chg 1 General Environmental Protection Program						Section A-10	
DOE 5480.4 Environmental Protection, Safety & Health Protection Standards						Section A-10	
15 USC 2661-2669 Toxic Substances Control Act					Section 15	Section A-10	

Table 10. (continued).

Other Relevant Environmental Laws	Resource Manual	Emergency Preparedness Manual	Industrial Hygiene Manual	Radiological Controls Manual	Safety Manual	Environmental Manual	EG&G Idaho Company Procedures Manual
29 CFR 1910 Occupational Safety and Health Standards						Section A-10	
29 CFR 1926 Safety and Health Regulations for Construction						Section A-10	
40 CFR 700 Toxic Substances Control Act						Section A-10	
40 CFR 61 National Emission Standards for Hazardous Air Pollutants						Section A-10	
Air Programs	Section 5						
40 CFR 52 Air Programs-Approval and Promulgation of Implementation Plans							Section 8.4
40 CFR 61 Air Programs-National Emission Standards for Hazardous Air Pollutants							Section 8.4

Table 11. Phased compliance.

Category	Scoping	Characterization	Alternative Evaluation	Remedial Design	Remedial Action
CERCLA Interim Action on RI/FS Compliance	• Evaluate existing data • Identify preliminary ARARs • Identify preliminary alternatives • Prepare: Work Plan HSP SAP CRP	• Field investigations • Laboratory analysis • Characterize hazard/contamination • Characterize technologies • Baseline risk assessment • Identify/screen alternatives • Re-evaluate ARARs	• Treatability investigations • Alternative analysis • Draft RI/FS Report (if needed) • Proposed Plan • Finalize ARARs	• Responsiveness summary • Proposed Plan • Monitoring	Monitoring
NEPA Compliance (1)	• Environmental Checklist • Prepare a summary EA or pursue following if detailed EA/EIS is needed - Notice of Intent - Evaluate existing data - Identify issues - Public scoping - Prepare Implementation Plan	• Field environmental studies	• Assess impacts • Draft EA/EIS	• EA/FEIS/FONSI • Mitigation Plans • Monitoring Plan	• Environmental Monitoring
Environmental Compliance	• Identify federal/state regulatory criteria and requirements per ARAR process - CAA - CWA/ID water laws - RCRA/ID solid waste regulations	• Agency consultations (2) • Determine applicability of requirements • Obtain data for regulatory compliance	• Agency consultations (2) • Prepare preliminary data to meet substantive requirements of permits	• Agency consultation • Compliance Action Review • Compliance verification	• Compliance Monitoring
Safety Analysis Report/Review for Characterization (if needed)	• Prepare SAR Chapters • Determine Hazards/Safety Class	• Conduct Operational/Accident Analysis • Issue PSAR and FSAR			
Safety Analysis Report/Review for Cleanup	• Determine Hazard class • Determine Safety class	• Code compliance assessment • Draft description chapters	• Operations analysis • Accident analysis • Operational Safety Requirements	PSAR FSAR	SAR Maintenance Procedures
			Record of Decision	Operational Readiness Review	

Notes
(1) For more details see " Integrating CERCLA and NEPA Requirements for Environmental Restoration Activities at INEL", DOE-ID ERD 1-012-91
(2) Submit documentation (such as Technical Memorandums) on compliance with substantive requirements of the permits

T91 0547

December 1992
EGG-WM-8676, Rev. 2