

AR TARGET SHEET

The following document was too large to scan as one unit, therefore it has been broken down into sections.

DOCUMENT # NA

EDMC # 38 559

SECTION 4 OF 4

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6680 ADS SUF: 10 SUBACTIVITY: AA

SUBACTIVITY TITLE: 92-L-047, 300 AREA ELEC DISTR CONVER & SAFETY IMPROVE, PH I

INSTALLATION: HANFORD

CATEGORY: FT DEFENSE/NON-DEFENSE: VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: 92-D-187 TPC: 13447 TEC: 13100

DESCRIPTION: LANDLORD

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996 TOTAL
OE EW7030000		0
LI 39EW70300		0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R	RL	BUD	LEGAL	ESH	TOTAL				
OE EW7030000	42	31		0	0	0	0	0	0
LI 39EW70300	10276	0		0	0	0	0	0	0
TOTAL	10318	31	0	0	0	0	0	0	0
DIRECT FTE	0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R	RL	BUD	LEGAL	ESH	TOTAL				
OE EW7030000	42	31		0	0	0	0	0	0
LI 39EW70300	10276	0		0	0	0	0	0	0
TOTAL	10318	31	0	0	0	0	0	0	0
DIRECT FTE	0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-10-0005	AWARD FIXED PRICE CONSTRUCTION CONTRACT (92-L-047)	11/04/93	11/04/93
6680-10-0010	START PHYSICAL CONSTRUCTION (92-L-047)	12/08/93	12/08/93

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-10-0015	COMPLETE CONSTRUCTION (92-L-047)	3/19/95	3/19/95
6680-10-0020	COMPLETE PROJECT (92-L-047)	6/19/95	6/19/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6680 ADS SUF: 11 SUBACTIVITY: AA

SUBACTIVITY TITLE: 95-D-424, 324 FACILITY COMPLIANCE/RENOVATION

INSTALLATION: HANFORD

CATEGORY: FT DEFENSE/NON-DEFENSE: VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: 95-D-XXX TPC: 6400 TEC: 5800

DESCRIPTION: LANDLORD

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996 TOTAL
OE EW7030000		38
LI 39EW70300		3500
TOTAL		3538
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R	RL	BUD	LEGAL	ESH	TOTAL				
OE EW7030000	0	60	38		38	64	35	0	0
LI 39EW70300	0	1500	3500		3500	800	0	0	0
TOTAL	0	1560	3538	0	3538	864	35	0	0
DIRECT FTE	0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R	RL	BUD	LEGAL	ESH	TOTAL				
OE EW7030000	0	60	38		38	64	35	0	0
LI 39EW70300	0	1500	3500		3500	800	0	0	0
TOTAL	0	1560	3538	0	3538	864	35	0	0
DIRECT FTE	0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

6680-11-0005 DEFINITIVE DESIGN COMPLETION (D-424)

2/28/96

2/28/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

6680-11-0010 COMPLETE CONSTRUCTION (D-424)
OUTYEAR (FY 1997-2000) TASK NARRATIVE:

9/30/97

9/30/97

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6680 ADS SUF: 12 SUBACTIVITY: AA

SUBACTIVITY TITLE: 93-D-391, 325 FACILITY COMPLIANCE/RENOVATION

INSTALLATION: HANFORD

CATEGORY: FT DEFENSE/NON-DEFENSE: VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: 93-D-184 TPC: 6410 TEC: 6000

DESCRIPTION: LANDLORD

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
B&R		TOTAL
OE	EW7030000	36
LI	39EW70300	0
TOTAL		36
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW7030000	0	34	36		36	0	0	0	0
LI	39EW70300	3500	1000	0		0	0	0	0	0
TOTAL		3500	1034	36	0	36	0	0	0	0
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW7030000	0	34	36		36	0	0	0	0
LI	39EW70300	3500	1000	0		0	0	0	0	0
TOTAL		3500	1034	36	0	36	0	0	0	0
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-12-0015	COMPLETE DEFINITIVE DESIGN, 325 FACILITY COMP/REN 93-D-391	11/30/93	11/30/93
6680-12-0020	START CONSTRUCTION, 325 FAC. COMPLIANCE/RENOVATION (93-D-391)	1/03/94	1/03/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-12-0005	COMPLETE CONSTRUCTION (93-D-391)	6/30/95	6/30/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-12-0010	PREPARE OTP'S	4/30/96	4/30/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6680 ADS SUF: 13 SUBACTIVITY: AA

SUBACTIVITY TITLE: 96-L-116, 200 AREA SANITARY SEWER SYSTEM

INSTALLATION: HANFORD

CATEGORY: FT DEFENSE/NON-DEFENSE: VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: 96-D-XXX TPC: 34400 TEC: 33400

DESCRIPTION: LANDLORD

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
B&R		TOTAL
OE	EW7030000	71
LI	39EW70300	1800
TOTAL		1871
DIRECT FTE		1

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R			RL BUD	LEGAL	ESH	TOTAL				
OE	EW7030000	270	95	71		71	55	92	85	50
LI	39EW70300	0	0	1800		1800	4000	14200	13400	0
TOTAL		270	95	1871	0	1871	4055	14292	13485	50
DIRECT FTE		0	0	1	0	1	0	1	1	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R			RL BUD	LEGAL	ESH	TOTAL				
OE	EW7030000	270	95	71		71	55	92	85	50
LI	39EW70300	0	0	1800		1800	4000	14200	13400	0
TOTAL		270	95	1871	0	1871	4055	14292	13485	50
DIRECT FTE		0	0	1	0	1	0	1	1	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-13-0030	COMPLETE CONCEPTUAL DESIGN, 200A SANITARY SEWER SYS. (96-L-116)	12/31/93	12/31/93

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-13-0020	START DEFINITIVE DESIGN, 200 AREA SANITARY SEWER SYSTEM	1/15/96	1/15/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-13-0005	COMPLETE DEFINITIVE DESIGN, 200 AREA SANITARY SEWER SYSTEM	5/15/97	5/15/97
6680-13-0010	START CONSTRUCTION, 200 AREA SANITARY SEWER SYSTEM	6/15/97	6/15/97
6680-13-0025	START FIELD CONSTRUCTION, 200 AREA SANITARY SEWER SYSTEM	11/15/97	11/15/97
6680-13-0015	COMPLETE CONSTRUCTION, 200 AREA SANITARY SEWER SYSTEM	3/31/00	3/31/00

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6680 ADS SUF: 14 SUBACTIVITY: AA

SUBACTIVITY TITLE: 96-L-094, HANFORD FIRE DEPARTMENT FACILITIES

INSTALLATION: HANFORD

CATEGORY: FT DEFENSE/NON-DEFENSE: VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: 96-D-XXX TPC: 30800 TEC: 29700

DESCRIPTION: LANDLORD

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
		TOTAL
OE	EW7030000	80
LI	39EW70300	1900
TOTAL		1980
DIRECT FTE		1

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW7030000	339	80		80	80	80	200	65	0
LI	39EW70300	0	0		1900	1900	11600	10100	6100	0
TOTAL		339	80	0	1980	1980	11680	10300	6165	0
DIRECT FTE		0	1	0	1	1	1	2	1	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW7030000	339	80		80	80	80	200	65	0
LI	39EW70300	0	0		1900	1900	11600	10100	6100	0
TOTAL		339	80	0	1980	1980	11680	10300	6165	0
DIRECT FTE		0	1	0	1	1	1	2	1	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-14-0020	COMPLETE CONCEPTUAL DESIGN 96-L-094	2/28/94	2/28/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-14-0015	START DEFINITIVE DESIGN, FIRE STATION & FIRE/GROUND FACILITY	1/15/96	1/15/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-14-0005	START CONSTRUCTION, FIRE STATION & FIRE/GROUND FACILITY	1/31/97	1/31/97
6680-14-0010	COMPLETE CONSTRUCTION, FIRE STATION & FIRE/GROUND FACILITY	5/31/00	5/31/00

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6680 ADS SUF: 15 SUBACTIVITY: AA

SUBACTIVITY TITLE: 96-D-420, BUILDINGS UTILITY REPLACEMENT

INSTALLATION: HANFORD

CATEGORY: FT DEFENSE/NON-DEFENSE: VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: 96-D-XXX TPC: 4300 TEC: 3800

DESCRIPTION: LANDLORD

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
B&R		TOTAL
OE	EW7030000	150
LI	39EW70300	1000
TOTAL		1150
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW7030000	109	72	150		150	38	64	78	0
LI	39EW70300	0	0	1000		1000	2800	0	0	0
TOTAL		109	72	1150	0	1150	2838	64	78	0
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW7030000	109	72	150		150	38	64	78	0
LI	39EW70300	0	0	1000		1000	2800	0	0	0
TOTAL		109	72	1150	0	1150	2838	64	78	0
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

relate to safe facility configurations.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

The engineering study was completed in July 1992. The Project was submitted as a candidate FY 1996 Line Item in November 1992 and was deferred due to funding constraints. The project has been submitted as a FY 1997 line item and is awaiting Key Decision Zero.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-00-0025	START CONCEPTUAL DESIGN, 97-L-113, ELEC. DIST. & CONV., 200 AREA	4/30/94	4/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

In FY 1994, the Functional Design Criteria will be completed in May.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Conceptual design will be completed in December 1994 and the project presented for validation in May, assuming receipt of Key Decision Zero in FY 1994.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

NEPA documentation will be completed during 1996 on a schedule to be determined. The Architect/Engineer selection will be initiated in the third quarter of 1996. In September 1996, the Project Management Plan will be approved and the Request for Project Authorization made.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Definitive Design will be started in January 1997 and completed in February 1998. Construction will be started in June 1998 and completed in November 1999.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

The existing overhead multiple voltage system does not meet the National Electrical Safety code (NESC) ANSI C2, Section 23 for safe working clearances, separation of cables, and shock prevention. DOE 5480.4 (Item 5) requires compliance with NESC.

REGULATORY KEY ISSUES:

Existing utility poles are crowded with cables. The large number of main feeder circuits make the existing system complex and difficult to operate safely, noncompliance with NESC requirements pose safety problems and make the system unreliable. Protection from electrical shock cannot always be ensured with the present system. Future load increases cannot be economically accommodated by the present system configuration. Replacement parts and equipment are becoming more difficult to obtain.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Funding at the Planning level would allow elimination of safety risks, compliance with codes and standards, and correction of deficiencies related to the 200 Areas electrical distribution circuits.

CONCERNS AT PLANNING LEVEL:

There are no concerns at the Planning level as the requirements are fully funded.

REQUIRED TECHNICAL DEVELOPMENT:

No requirements of EM-50 are needed for the accomplishment of the work identified in this BUD.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6680 ADS SUF: 0 SUBACTIVITY: AC

SUBACTIVITY TITLE: 97-L-186, HANFORD ENTRY CONTROL CENTER

INSTALLATION: HANFORD

CATEGORY: FT DEFENSE/NON-DEFENSE: VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: TPC: TEC:

DESCRIPTION: LANDLORD

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996 TOTAL
LI 39EW70300		0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
TOTAL		0	0	0	0	0	0	0	0	0
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
OE EW7030000		0	0		63	63	33	34	37	0
LI 39EW70300		0	0		0	0	7000	0	0	0
TOTAL		0	0	0	63	63	7033	34	37	0
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

The change in the Hanford Site mission and operations from defense production to environmental restoration has afforded the opportunity to significantly reduce the level of security operations. This reduction has taken many forms including reducing guard forces and changing some guard functions to local governments, drastically reducing security clearances and the costs associated with maintaining them, eliminating physical security barriers, and concentrating security functions in smaller areas where needed. The Hanford security operation in the past provided a public and worker health and safety function due to its very presence. Access control is required in a more expanded role for the current mission. The drastic reduction of security operations presents challenges to continuing the same or greater health and safety protection measures in a cost efficient manner while not hindering the cleanup of the site.

This project will provide a new facility to assure workers and visitors are trained and have adequate directions before proceeding on site. The entry control center will consolidate security clearance processing, access control badging, safety and security training, and personnel dosimetry in a complete and efficient manner.

By consolidating access control in one facility, centrally located to the main entrance to the site, the critical health and safety functions will be maintained and enhanced, cost savings of \$20 to \$50 million dollars will be realized over the next 15 years, and processing time for site access will be greatly reduced making the cleanup work less expensive. The facility will also provide the most efficient and safe way for stakeholders to access the site in order to review and participate in the cleanup process. The new facility is projected to pay for itself in annual operating savings within five years of construction completion. This facility is a key part of the reengineering effort for site security and will serve as a catalyst for implementing better ways to providing site services and reinventing government.

RELATED ACTIVITIES NARRATIVE:

Computer systems will be developed for the site use and then transferred to permanent facility. This system may require capital equipment funding.

KEY ASSUMPTIONS:

The capital requirements of this back-up document (BUD) are based on a parametric estimate. The estimate is intended for planning purposes only. Studies are presently being conducted to obtain more detail but will not be completed until late in FY 1993.

It is assumed that the project will have received Key Decision Zero in May of FY 1994 and will have a validated cost estimate in FY 1995 and will be funded as a FY 1997 Line Item. Operating expense funds included in this BUD are based on historical costs for similar activities at Hanford and current liquidation rates. Expense funding to support project development through FY 1994 is from the Safeguards and Security (S&S) function of the

site. Savings resulting from the reduction of security activities are applied to other security transition functions such as development of this project.

ACTIVITY BY PRIORITY:

All activities on this project are at the same priority, 3. This project is necessary to reduce risk and costs, and prevent disruption of the mission.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

Preliminary studies have been conducted. The Project Short Form Data Sheet was completed on January 14, 1993 and submitted with a request for consideration as a FY 1997 Line Item. This has since been changed to a request for Key Decision 0, permission to conduct conceptual design, in preparation for a FY 1997 Line Item.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

CURRENT YEAR (FY 1994) TASK NARRATIVE:

A project planning schedule has been prepared.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Conceptual design will be completed in December 1994. These activities are not included in the scope of this BUD because they are funded by S&S savings. Project validation is scheduled for May, assuming receipt of Key Decision Zero.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:

The Architect/Engineer selection will be initiated in the third quarter of FY 1996. In September 1996, the Project Management Plan will be approved and the Request for Project Authorization made.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Definitive design will be started in January 1997, and completed later in the year on a schedule to be determined. Construction will be completed approximately 30 months after initiation of design.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

The Hanford Site Entry Control Center is an integral part of the Security Transition of the Hanford Site and its Environmental Mission. The transition is important to DOE-RL as a cost savings and work enhancement activity. The center will provide a cost effective way to assure site employees and visitors are properly authorized and trained to enter the site. The training requirements are defined by OSHA (29CFR1910.120(e)(3)(ii)), the Hanford Site Radiological Control Manual (HSRCM), and Security Education Briefing and Awareness, DOE 5631.1B.

REGULATORY KEY ISSUES:

The public is generally very concerned about the hazards existing on the site and the effect of current and future activities on public health and safety. In order to provide more open access to the site by contractors and the public in support of the mission while still providing suitable barriers to potential harm, methods of control and inform need to be established. This project will provide a suitable solution to protect public and employee health, protect government property, and obtain an easily accessible site.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Funding at the Planning level will enable moving into the permanent facilities two years sooner thus avoiding the extra lease costs and enabling starting savings from consolidation of more than \$1M annually.

CONCERNS AT PLANNING LEVEL:

None.

REQUIRED TECHNICAL DEVELOPMENT:

No requirements of EM-50 are needed for the accomplishment of the work identified in this BUD.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6680 ADS SUF: 0 SUBACTIVITY: AD

SUBACTIVITY TITLE: 97-L-196, HANFORD INFRASTRUCTURE FIBER OPTIC LOOP

INSTALLATION: HANFORD

CATEGORY: FT DEFENSE/NON-DEFENSE: VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: TPC: TEC:

DESCRIPTION: LANDLORD

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996 TOTAL
LI 39EW70300		0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
OE EW7030000		231	245		80	80	59	46	67	68
LI 39EW70300		0	0		0	0	6200	0	0	0
TOTAL		231	245	0	80	80	6259	46	67	68
DIRECT FTE		0	1	0	0	0	0	1	0	0

PLANNING CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
OE EW7030000		231	245		80	80	59	46	67	0
LI 39EW70300		0	0		0	0	6200	0	0	0
TOTAL		231	245	0	80	80	6259	46	67	0
DIRECT FTE		0	1	0	0	0	0	1	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

A microwave communication system was installed on the Hanford Site in 1982 and currently provides critical emergency and operational data transmission requirements. This microwave system has become obsolete and transmission requirements. The system provides the only means of complying with the physical communications redundancy requirements of DOE 5500.3A, 'Planning and Preparedness for Operational Emergencies.'

This project will provide a means of assuring that emergency and critical operations communications are available when needed and provide for future data and communications needs. The microwave systems will be replaced by a fiber-optic system. This new system will provide a backup path to the current single mode fiber-optic system.

Single mode fiber-optic cable has become an established standard for inter-area connectivity on the Hanford Site. However, the present inter-area fiber-optic configuration does not provide the physical redundancy required by fire, safety, and other emergency telecommunications systems. This redundancy is being fulfilled on an interim basis using obsolete, inadequate microwave radio systems, which provide the only backup to the fiber-optic link. The microwave systems are projected to be completely ineffective as the backup telecommunications path in less than five years due to equipment age and increasing data rates.

The microwave systems require the use of locations on Gable and Rattlesnake mountains which cultural reviews have determined are no longer acceptable. The removal of all microwave and radio equipment on Gable and Rattlesnake mountains is currently being confronted in accordance with DOE 1230.2, 'American Indian Tribal Government Policy.'

When microwave equipment fails there will be no means to provide physical redundancy requirements. The entire inter-area telecommunications connectivity will be constrained to a single physical path subject to disruptions which would cause a catastrophic failure in all telecommunications (voice, data, networks, video) and instrumentation control systems (ICS) media. This disruption would compromise or disable critical systems including 911 emergency system, fire reporting systems, crash alarm systems, evacuation alarm systems, and the National Alert and Warning System (NAWAS). The implementation of this project will ensure an acceptable level of reliability for all inter-area connectivity requirements, which is critical to the protection of onsite and offsite health and safety. Loss of the present single fiber-optic link would likely result in suspension of operations.

RELATED ACTIVITIES NARRATIVE:

None.

KEY ASSUMPTIONS:

The activities planned in the 200 Areas to support Environmental Restoration (ER) and Waste Management (WM) goals for the Hanford Site are

expected to proceed as described in the Multi-Year Program Plan and the Hanford Mission Plan. Telecommunication connectivity will be required for at least the next 40 years.

The capital requirements of this project are based on a study estimate intended for planning purposes only. It is assumed that the project will have a validated cost estimate in Fiscal Year (FY) 1995 and will be funded as a FY 1997 line item. Operating expense funds included in this activity are derived from historical costs for similar activities at Hanford and current liquidation rates.

The use of railroad right-of-way is assumed to be acceptable for the installation of fiber cable along proposed routes.

ACTIVITY BY PRIORITY:
TBD

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

An engineering study has been completed which recommends replacement of the obsolete microwave systems with a fiber-optic cable link in order to continue to provide required telecommunications redundancy.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-00-0030	START CONCEPTUAL DESIGN, 97-L-196, HANFORD INFRA. FIBER OPTIC LP	4/30/94	4/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

In FY 1994, the Functional Design Criteria will be completed in June. The conceptual design will be started in July.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

In FY 1995, the conceptual design will be completed in January and the project presented for validation in May.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

In FY 1996, NEPA documentation will be completed during the year on a schedule to be determined. The Project Management Plan will be approved and the Request for Project Authorization made in September.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Definitive design will be started in January 1997 and completed in January 1998. Construction will be started in May 1998 and completed in July 2002 including removal of obsolete equipment and facilities.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

DOE 5500.3A, 'Planning and Preparedness for Operational Emergencies,' requires primary and backup communications facilities and equipment adequate to support emergency response.

REGULATORY KEY ISSUES:

There are no key issues identified.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Funding at the Planning level allows such projects as a fiber optic communications cable to replace aging microwave systems and a central operations facility for site services replacing old and inefficient facilities to start in FY 1997.

CONCERNS AT PLANNING LEVEL:

There are no concerns at the planning level as the current ability to implement and manage line item projects are ideal.

REQUIRED TECHNICAL DEVELOPMENT:

Not applicable.

**THIS PAGE INTENTIONALLY
LEFT BLANK**

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6680 ADS SUF: 0 SUBACTIVITY: AE

SUBACTIVITY TITLE: 97-D-457, HANFORD PERSONNEL DOSIMETRY FACILITY

INSTALLATION: HANFORD

CATEGORY: FT DEFENSE/NON-DEFENSE: VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: TPC: TEC:

DESCRIPTION: LANDLORD

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996 TOTAL
OE EW7030000		0
LI 39EW70300		0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	RL	BUD	LEGAL	ESH	TOTAL				
OE EW7030000	0	196		0	0	124	114	116	32
LI 39EW70300	0	0		0	0	0	4050	4200	0
TOTAL	0	196	0	0	0	124	4164	4316	32
DIRECT FTE	0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	RL	BUD	LEGAL	ESH	TOTAL				
OE EW7030000	0	196		114	114	101	100	27	28
LI 39EW70300	0	0		0	0	4050	4200	0	0
TOTAL	0	196	0	114	114	4151	4300	27	28
DIRECT FTE	0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

This project provides a facility having 25,000 square feet. The total estimated construction cost is \$9.0M: laboratories, operating areas, shielded in-vivo counting cells, electronic maintenance shop, and office space. Constructs a facility to house four programs that measure, assess, document, record, and report workers' and visitors' radiological exposures under four Hanford programs: In-Vivo Measurement, Hanford Internal Dosimetry, Hanford External Dosimetry, and Hanford Radiological Records.

Description of Existing Conditions:

The capability and location of existing facilities no longer support the current or the projected programs. The 747A is the original facility for the 44-year program. The capacity is no longer adequate and cannot meet current demand. Storage space is inadequate for the research materials. Staff visits have increased from a few hundred visits per year to more than 15,000 today. Expansion of 747A by the size of its city lot is not possible. Physical separation of In Vivo Measurement exams in 747A from the Internal Dosimetry and Radiological Records programs in the Federal Building is inefficient for dosimetry staff who conduct frequent team reviews. Radiological work is conducted in a downtown environment rather than on DOE property prepared for such operations.

Consequences of Not Being Supported:

There are no existing surplus facilities that would be an appropriate alternative. Current operations of a key radiological safety program will be constrained by overloaded facilities. Radiological work will be conducted in a downtown environment rather than on DOE property designated for such operations.

RELATED ACTIVITIES NARRATIVE:

None.

KEY ASSUMPTIONS:

The Key Assumptions are that Internal Dosimetry, In-Vivo Radioassay, and Radiological records will be required for workers that are required to support meeting the Tri-Party agreements at the Hanford reservation and accomplish the strategic programs at the Pacific Northwest Laboratory.

There are no existing surplus facilities that are an appropriate alternative. Current operations of a key radiological safety program will be constrained by overloaded facilities. Radiological work will be conducted in a downtown environment rather than on DOE property designated for such operations.

ACTIVITY BY PRIORITY:

Programming Document (FDC)	10/93	9/94
Conceptual Design	10/94	4/95
Value Engineering Study	4/96	9/96
Definitive Design	11/96	1/98

Construction
Operation

3/98
10/99

8/99

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

The Hanford Personnel Dosimetry Facility (HPDF) facility design program document has been completed (specification No. D00694-EDP00-SPCD1R0. Site Selection has been completed.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:
Finalize the ADS information for the budget process.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:
Conceptual Design start 10/94 and be complete to support the validation process 4/95.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:
Decrement: If this activity is funded at the Decrement level, this project will be required to be delayed as a FY 1998 line item. Current operations of key radiological safety programs will continue to be constrained.

Target: If this activity is funded at the Target level, this project will be forced to be a FY 1998 line item. Current operations of key radiological safety programs will continue to be constrained.

Planning: Complete Value Engineering process. Prepare the Project Management Plan for approval by RL. Prepare and have approved all permitting required for the project.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Tentative Schedule

	Start	End
Definitive Design	11/96	1/98
Construction	8/98	8/99
Operation	10/99	

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

None

REGULATORY KEY ISSUES:

The Internal Dosimetry, In-Vivo Radioassay, and Radiological records will be required for workers that are required to support meeting the Tri-Party agreements at the Hanford reservation and accomplish the strategic programs at the Pacific Northwest Laboratory.

COMP/PROG BENEFITS AT PLANNING LEVEL:

There are no existing surplus facilities that would be an appropriate alternative. Current operations of a key radiological safety program will be constrained by overloaded facilities. Radiological work will be conducted in a downtown environment rather than on DOE property designated for such operations.

CONCERNS AT PLANNING LEVEL:

There are no existing surplus facilities that would be an appropriate alternative. Current operations of a key radiological safety program will be constrained by overloaded facilities. Radiological work will be conducted in a downtown environment rather than on DOE property designated for such operations.

REQUIRED TECHNICAL DEVELOPMENT:

There are no existing surplus facilities that would be an appropriate alternative. Current operations of a key radiological safety program will be constrained by overloaded facilities. Radiological work will be conducted in a downtown environment rather than on DOE property designated for such operations.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

None

REGULATORY KEY ISSUES:

The Internal Dosimetry, In-Vivo Radiology, and Radiological Records will be required for workers that are required to support meeting the TPL party agreements at the Hanford reservation and accomplish the strategic programs at the Pacific Northwest Laboratory.

COMPROG BENEFITS AT PLANNING LEVEL:

There are no existing surplus facilities that would be an appropriate alternative. Current operations of a key radiological safety program will be constrained by overloaded facilities. Radiological work will be conducted in a downtown environment rather than on DOE property designated for such operations.

THIS PAGE INTENTIONALLY LEFT BLANK

REQUIRED TECHNICAL DEVELOPMENT:

There are no existing surplus facilities that would be an appropriate alternative. Current operations of a key radiological safety program will be constrained by overloaded facilities. Radiological work will be conducted in a downtown environment rather than on DOE property designated for such operations.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6680 ADS SUF: 1 SUBACTIVITY: AA

SUBACTIVITY TITLE: 93-K-003, FABRICATION SHOP FACILITIES

INSTALLATION: HANFORD

CATEGORY: FT

DEFENSE/NON-DEFENSE:

VERSION DATE:

PROGRAM: EM

PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: 93-D-186

TPC: 6000

TEC: 5500

DESCRIPTION: LANDLORD

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
B&R		TOTAL
OE	EW7030000	165
LI	39EW70300	0
TOTAL		165
DIRECT FTE		1

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW7030000	28	59		200	200	41	0	0	0
LI	39EW70300	0	4000		500	500	0	0	0	0
TOTAL		28	4059	0	700	700	41	0	0	0
DIRECT FTE		0	1	0	2	2	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW7030000	28	59		200	200	41	0	0	0
LI	39EW70300	0	4000		500	500	0	0	0	0
TOTAL		28	4059	0	700	700	41	0	0	0
DIRECT FTE		0	1	0	2	2	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-01-0005	START DEFINITIVE DESIGN, MULTI-PURPOSE FACILITY	6/01/94	6/01/94
6680-01-0010	COMPLETE DEFINITIVE DESIGN, MULTI-PURPOSE FACILITY	9/30/94	9/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-01-0015	START CONSTRUCTION, MULTI-PURPOSE FACILITY	10/01/94	10/01/94
6680-01-0025	START DEMOLITION OF EXISTING STRUCTURES, MULTI-PURPOSE FACILITY	8/15/95	8/15/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-01-0020	CONSTRUCTION COMPLETE, MULTI-PURPOSE FACILITY	4/15/96	4/15/96
6680-01-0030	COMPLETE DEMO OF EXISTING STRUCTURES, MULTI-PURPOSE FACILITY	8/01/96	8/01/96
6680-01-0035	PROJECT COMPLETE, MULTI-PURPOSE FACILITY	8/30/96	8/30/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6680 ADS SUF: 2 SUBACTIVITY: AA

SUBACTIVITY TITLE: 92-L-017, 200 EAST STEAM SYSTEM REHAB., PH II

INSTALLATION: HANFORD

CATEGORY: FT DEFENSE/NON-DEFENSE: VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: 92-D-186 TPC: 3400 TEC: 3300

DESCRIPTION: LANDLORD

DECREMENT CASE (\$ IN THOUSANDS)

B&R		FY1996 TOTAL
OE	EW7030000	0
LI	39EW70300	0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

B&R		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW7030000	77	31		0	0	0	0	0	0
LI	39EW70300	2300	600		0	0	0	0	0	0
TOTAL		2377	631	0	0	0	0	0	0	0
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

B&R		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW7030000	77	31		0	0	0	0	0	0
LI	39EW70300	2300	600		0	0	0	0	0	0
TOTAL		2377	631	0	0	0	0	0	0	0
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-02-0005	START CONSTRUCTION, 200 EAST STEAM SYSTEM REHAB, PHASE II	3/31/94	3/31/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6680 ADS SUF: 3 SUBACTIVITY: AA

SUBACTIVITY TITLE: 90-L-035, LANDLORD PROGRAM SAFETY COMPLIANCE, PH I

INSTALLATION: HANFORD

CATEGORY: FT DEFENSE/NON-DEFENSE: VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: 90-D-175 TPC: 31195 TEC: 30193

DESCRIPTION: LANDLORD

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
B&R		TOTAL
OE	EW7030000	0
LI	39EW70300	0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW7030000	94	31		0	0	0	0	0	0
LI	39EW70300	1800	0		0	0	0	0	0	0
TOTAL		1894	31	0	0	0	0	0	0	0
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW7030000	94	31		0	0	0	0	0	0
LI	39EW70300	1800	0		0	0	0	0	0	0
TOTAL		1894	31	0	0	0	0	0	0	0
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-03-0005	START DEFINITIVE RE-DESIGN FOR PROJECT B-604	10/31/93	10/31/93
6680-03-0020	COMPLETE CONSTRUCTION, 90-L-001, FIRE WATER DIST. & STOR. UPGRADE	3/31/94	3/31/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-03-0010	COMPLETE DEFINITIVE RE-DESIGN FOR PROJECT B-604	6/28/95	6/28/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-03-0015	COMPLETE CONSTRUCTION FOR PROJECT B-604	2/28/97	2/28/97

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-04-0005	INITIATE DEFINITIVE DESIGN, 300A PROCESS SEWER PIPING SYS. UPGR.	1/31/94	1/31/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-04-0015	COMPLETE DEFINITIVE DESIGN, 300A PROCESS SEWER PIPING SYS. UPGR.	2/01/95	2/01/95
6680-04-0010	START CONSTRUCTION (94-L-070)	2/28/95	2/28/95
6680-04-0020	SUBMIT DESIGN DOCUMENTATION FOR PROCESS SEWER REPLACEMENT	4/30/95	4/30/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-04-0030	COMPLETE CONSTRUCTION, 300A PROCESS SEWER PIPING SYSTEM UPGRADE	9/30/96	9/30/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-04-0035	PROJECT CLOSEOUT (94-L-070)	12/31/96	12/31/96
6680-04-0025	REPLACE PROCESS SEWER PIPING	6/30/97	6/30/97

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-15-0020	START CONCEPTUAL DESIGN, 96-D-420, BUILDING UTILITY REPLACEMENT	4/15/94	4/15/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-15-0015	START DEFINITIVE DESIGN (96-D-420)	2/28/96	2/28/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
6680-15-0005	START CONSTRUCTION (96-D-420)	12/31/96	12/31/96
6680-15-0010	COMPLETE CONSTRUCTION (96-D-420)	5/31/98	5/31/98

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6680 ADS SUF: 5 SUBACTIVITY: AA

SUBACTIVITY TITLE: 92-L-044, HANFORD INFRASTRUCTURE, UNDERGROUND STORAGE TANKS

INSTALLATION: HANFORD

CATEGORY: FT DEFENSE/NON-DEFENSE: VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: 92-D-184 TPC: 4702 TEC: 4300

DESCRIPTION: LANDLORD

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996 TOTAL
OE EW7030000		0
LI 39EW70300		0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW7030000	43	31	0		0	0	0	0	0
LI 39EW70300	300	0	0		0	0	0	0	0
TOTAL	343	31	0	0	0	0	0	0	0
DIRECT FTE	0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW7030000	43	31	0		0	0	0	0	0
LI 39EW70300	300	0	0		0	0	0	0	0
TOTAL	343	31	0	0	0	0	0	0	0
DIRECT FTE	0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6690 ADS SUF: 0 SUBACTIVITY: AA

SUBACTIVITY TITLE: YAKIMA INDIANS

INSTALLATION: RICHLAND OPERATIONS OFFICE

CATEGORY: FT DEFENSE/NON-DEFENSE: D VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: TPC: TEC:

DESCRIPTION: PROGRAM SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW7020000		TOTAL
TOTAL		1800
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
OE EW7020000		673	1600			1800	1854	1910	1967	2026
TOTAL		673	1600	0	0	1800	1854	1910	1967	2026
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
OE EW7020000		673	1600			1800	1854	1910	1967	2026
TOTAL		673	1600	0	0	1800	1854	1910	1967	2026
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6691 ADS SUF: 0 SUBACTIVITY: AA

SUBACTIVITY TITLE: NEZ PERCE INDIANS

INSTALLATION: RICHLAND OPERATIONS OFFICE

CATEGORY: FT DEFENSE/NON-DEFENSE: D VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: TPC: TEC:

DESCRIPTION: PROGRAM SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW7020000		TOTAL
TOTAL		1400
DIRECT FTE		1400
		0

TARGET CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
			RL BUD	LEGAL	ESH	TOTAL				
OE EW7020000		337	1200			1400	1442	1485	1530	1576
TOTAL		337	1200	0	0	1400	1442	1485	1530	1576
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
			RL BUD	LEGAL	ESH	TOTAL				
OE EW7020000		337	1200			1400	1442	1485	1530	1576
TOTAL		337	1200	0	0	1400	1442	1485	1530	1576
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6692 ADS SUF: 0 SUBACTIVITY: AA

SUBACTIVITY TITLE: UMATILLA INDIANS

INSTALLATION: RICHLAND OPERATIONS OFFICE

CATEGORY: FT DEFENSE/NON-DEFENSE: D VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: TPC: TEC:

DESCRIPTION: PROGRAM SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW7020000		TOTAL
TOTAL		1600
DIRECT FTE		1600
		0

TARGET CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
OE EW7020000		505	1400			1600	1648	1697	1748	1801
TOTAL		505	1400	0	0	1600	1648	1697	1748	1801
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
OE EW7020000		505	1400			1600	1648	1697	1748	1801
TOTAL		505	1400	0	0	1600	1648	1697	1748	1801
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6693 ADS SUF: 0 SUBACTIVITY: AA

SUBACTIVITY TITLE: STATE OF OREGON HANFORD OVERSIGHT

INSTALLATION: HANFORD

CATEGORY: FT DEFENSE/NON-DEFENSE: D VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: TPC: TEC:

DESCRIPTION: PROGRAM SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE	EW7020000	559
TOTAL		559
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW7020000	421	543			559	576	593	611	629
TOTAL		421	543	0	0	559	576	593	611	629
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW7020000	421	543			794	671	693	711	729
TOTAL		421	543	0	0	794	671	693	711	729
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6694 ADS SUF: 0 SUBACTIVITY: AA

SUBACTIVITY TITLE: RCRA/MIXED WASTE FEE

INSTALLATION: RICHLAND OPERATIONS OFFICE

CATEGORY: FT DEFENSE/NON-DEFENSE: D VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: TPC: TEC:

DESCRIPTION: PROGRAM SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW7020000		TOTAL
TOTAL		5039
DIRECT FTE		5039
		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW7020000		4787	4897	5039		5039	5190	5346	5506	5671
TOTAL		4787	4897	5039	0	5039	5190	5346	5506	5671
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW7020000		4787	4897	5039		5039	5190	5346	5506	5671
TOTAL		4787	4897	5039	0	5039	5190	5346	5506	5671
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6695 ADS SUF: 0 SUBACTIVITY: AA

SUBACTIVITY TITLE: ENV. SUPPORT - MISC.

INSTALLATION:

CATEGORY: FT DEFENSE/NON-DEFENSE: D VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: TPC: TEC:

DESCRIPTION: PROGRAM SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996 TOTAL
	B&R	
OE	EW7020000	475
CE	35EW70200	0
TOTAL		475
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW7020000	343	462			475	489	504	519	535
CE	35EW70200	25	0			0	0	0	0	0
TOTAL		368	462	0	0	475	489	504	519	535
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW7020000	343	462			475	489	504	519	535
CE	35EW70200	25	0			0	0	0	0	0
TOTAL		368	462	0	0	475	489	504	519	535
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

The Hanford Filter Test Facility (HFTF) provides quality assurance testing and inspection of all High Efficiency Particulate Air (HEPA) filters, HEPA filtered respirator cartridges, and HEPA filtered air movers used by Hanford contractors, other DOE contractors, and non DOE contractors whether on or offsite. Testing of these filters and cartridges assures environmental compliance and personnel protection for all contractors for whom the service is being provided.

RELATED ACTIVITIES NARRATIVE:

This workscope is related to all other ADSs which require quality assurance testing and inspection services of HEPA filters, HEPA filtered respirator cartridges, and HEPA filtered air movers.

KEY ASSUMPTIONS:

Environmental laws and regulations will continue to change. Operation of the HFTF is expected to continue until site closure. Workscope, workload and personnel are expected to remain constant.

ACTIVITY BY PRIORITY:

The HFTF workscope is RL Priority A2 (HQ Priority 1) since it specifically supports maintaining safety related safety equipment.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

With a constant workscope, no unique tasks are associated with this ADS. However, to ensure adequate availability of qualified/certified filter testing personnel, two Quality Assurance Technicians are being trained at the Filter Test Facility. In August, they will attend the required In-Place Filter Testing class offered by Harvard University.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

CURRENT YEAR (FY 1994) TASK NARRATIVE:

The HFTF will support all WHC, PNL, and KEH organizations that depend upon HEPA filters and respirator cartridges to conduct day-to-day operations at Hanford. This function supports the Hanford cleanup mission through regulatory compliance with emission and safety standards.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:

The HFTF will continue to support all WHC, PNL, and KEH organizations that depend upon HEPA filters and respirator cartridges to conduct day-to-day operations at Hanford. This function supports the Hanford cleanup mission through regulatory compliance with emission and safety standards. The HFTF will also continue to support other DOE and non DOE on or offsite facility to achieve regulatory compliance with emission and safety standards.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:

The HFTF will continue to support all WHC, PNL, and KEH organizations that depend on HEPA filters and respirator cartridges to conduct day-to-day operations at Hanford. This function supports the Hanford cleanup mission through regulatory compliance with emission and safety standards.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Same as Planning Year

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

The regulatory drivers for the HFTF include: National Emissions Standard for Hazardous Air Pollutants, Nuclear Energy Filters Standards NE-F 3-24, 3-43, 3-44, and 3-45, Washington Industrial Health and Safety Administration Standards for Asbestos, WAC 296-62-07751, App. 1 ANSI/ASME N509-1980, Nuclear Power Plant Air Cleaning Units and Components, ANSI/ASME N510-1980, Testing of Nuclear Air-Cleaning Systems, DOE 6430.1, General Design Criteria, DOE RLIP 548-.10, Industrial Hygiene Program, Part F, DOE Filter Test Stations and Filter Test Stations and Filter Testing, The Resource Conservation and Recovery (RCRA) and Amendments, The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Amendments (SARA).

REGULATORY KEY ISSUES:

Mil-Std-F501068 has requirements for the acceptance of filters that are not being met by the suppliers for a limited set of filters (e.g., separator, nipple, round). As a result, acceptance of these filters would require additional testing at Rocky Flats or a waiver of the requirement. A revised DOE Standard, which would provide relief, has been submitted for final review and approval.

COMP/PROG BENEFITS AT PLANNING LEVEL:

None

CONCERNS AT PLANNING LEVEL:

None

REQUIRED TECHNICAL DEVELOPMENT:

None

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6695 ADS SUF: 0 SUBACTIVITY: AB

SUBACTIVITY TITLE: ENV. SUPPORT - MISC.

INSTALLATION:

CATEGORY: FT DEFENSE/NON-DEFENSE: D VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: TPC: TEC:

DESCRIPTION: PROGRAM SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW7020000		TOTAL
TOTAL		580
DIRECT FTE		580
		0

TARGET CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
OE EW7020000		553	564			580	597	615	633	652
TOTAL		553	564	0	0	580	597	615	633	652
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
OE EW7020000		553	564			580	597	615	633	652
TOTAL		553	564	0	0	580	597	615	633	652
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 6695 ADS SUF: 0 SUBACTIVITY: AC

SUBACTIVITY TITLE: ENV. SUPPORT - MISC.

INSTALLATION:

CATEGORY: FT DEFENSE/NON-DEFENSE: D VERSION DATE:

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: TPC: TEC:

DESCRIPTION: PROGRAM SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW7020000		TOTAL
TOTAL		662
DIRECT FTE		662
		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW7020000		710	643			662	683	703	725	746
TOTAL		710	643	0	0	662	683	703	725	746
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW7020000		710	643			662	683	703	725	746
TOTAL		710	643	0	0	662	683	703	725	746
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

Is an additional grant to the State of Washington to fund enhancement of their emergency response capability to respond to a Hanford event.

RELATED ACTIVITIES NARRATIVE:

During FY 1994, RL and the State successfully participated in Hanford's first emergency exercise that dealt with ingestion zone activities. The ability to coordinate activities that would potentially be required within a 50-mile ingestion planning zone was demonstrated and is considered a significant enhancement to the State's emergency management capability.

KEY ASSUMPTIONS:

Funding levels are based on worksopes negotiated between the State of Washington and RL.

ACTIVITY BY PRIORITY:

N/A

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

During FY1994, DOE-RL and the State successfully participated in Hanford's first emergency exercise that dealt with ingestion zone activities. The ability to coordinate activities that would potentially be required within a 50-mile ingestion planning zone was demonstrated and is considered a significant enhancement to the State's emergency management capability.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

The State will continue to enhance their preparedness by finalizing the Washington Hanford Site Emergency Response Plan and Procedures; participating in two of Hanford's major emergency exercises; and implementing the new initiative to maximize resources by conducting joint meetings and training between DOE-RL and the Washington Public Power Supply System, operators of an onsite commercial nuclear reactor.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Same as current year

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Grant funds will allow the State to maintain their emergency response capabilities.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Same as planning year

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

There are no regulatory drivers.

REGULATORY KEY ISSUES:

There are no regulatory drivers.

COMP/PROG BENEFITS AT PLANNING LEVEL:

The ability to coordinate activities that would potentially be required within a 50-mile ingestion planning zone was demonstrated and is considered a significant enhancement to the State's emergency management capability.

CONCERNS AT PLANNING LEVEL:

It is anticipated that a negative reaction by the State of Washington and the media would occur if funding is not forthcoming or is perceived to be less than the State believes is required for the State to be prepared to respond to a Hanford incident and to independently assess the environment. Enhancements to the State's emergency management program related to response to an emergency at Hanford could be delayed, with a potential for negatively impacting the health and safety of the public.

REQUIRED TECHNICAL DEVELOPMENT:

N/A

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7100 ADS SUF: 0 SUBACTIVITY: AA

SUBACTIVITY TITLE: Hanford Analytical Services Program

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SITE SUPPORT-NFP

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW3130030		TOTAL
TOTAL		3344
DIRECT FTE		3344
		26

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3130030		2484	3156		3344	3344	3472	3602	3738	3875
TOTAL		2484	3156	0	3344	3344	3472	3602	3738	3875
DIRECT FTE		26	26	0	26	26	26	26	26	26

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3130030		2484	3156		4574	4574	4830	4853	4999	5149
TOTAL		2484	3156	0	4574	4574	4830	4853	4999	5149
DIRECT FTE		26	26	0	36	36	37	36	36	36

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

Program management Integration - Provides a focus of responsibility and authority for managing Hanford Analytical Services to ensure that credible and timely analytical data and results are achieved and all requirements are met. The responsibilities will encompass all integrated program activities that involve sampling and analysis by RL on-site and off-site laboratories as well as commercial laboratories contracted for analytical support of the Hanford Mission. The funding in this subactivity supports the following:

Technical & Quality Oversight workscope:

- o Performance Assessments
- o Methods Reviews and Development coordination
- o Surveillance/Audit responses
- o Contract Oversight and Compliance
- o Performance Evaluation Program
- o Administration procedures
- o Validation

HASM Business Management:

- o Analytical Services budget planning, monitoring and control of the operating and capital funding
- o Preparing and monitoring the Analytical Services Fiscal Year Work Plan
- o Develop and prepare the Analytical Services Multi-Year Program Plan
- o Preparation of monthly reports for the Site Management System (SMS) and the Progress Tracking System (PTS)
- o Preparation of the Analytical Services Activity Data Sheets (ADS's) for the Environmental Restoration and Waste Management Five Year Plan
- o Budget planning and control of the Processing and Analytical Laboratories (PALS) functional and programmatic budgets.

HASM Program Integration:

- o Long Range Analytical Services requirements
- o Strategic Planning and Scheduling
- o Hanford Analytical Services Work Plan
- o LIMS Program Oversight
- o HASP Documentation
- o Upgrade Project Planning

Sample Data and Laboratory Administration:

- o Data log in, verification, transmittal and archiving
- o Sample Tracking, coordination and authorization
- o LIMS/HEIS Integration
- o Contract Administration
- o Contract Invoicing
- o Procurement Interface

Analytical Laboratory Coordination:

- o Laboratory Interface/problem resolution
- o Statement of Work Preparation
- o Laboratory Coordination
- o Laboratory Forecasting/Selection/Availability
- o Technical support to Assessments

o Laboratory Document Review

Analytical Customer Interface:

- o Customer Interface/problem resolution
- o Project Coordination
- o Project document technical reviews
- o Sample/Analytical forecasting
- o Technical support to assessments

RELATED ACTIVITIES NARRATIVE:

This subactivity is integrated with all laboratory operations and upgrades subactivities in ADS 7100 and 7110 as well as upgrades funded in ADSs 1130 and 3400.

KEY ASSUMPTIONS:

- 1) Reporting and workscope requirements for program management and integration will increase as new laboratory facilities come on-line (i.e. WSCF, 222-S Hot Cell Addition, WAL).
- 2) In FY 1994 management of Analytical Customer Interface and Sample Data Verification and Management will be supported by Analytical Services.
- 3) The final phase in of HASM funding (Sample Tracking Coordination and Analytical Laboratory Coordination) by Analytical Services as workscope shifts from EM-40 to EM-30 will occur in FY 1996.
- 4) ERMC impacts have not been considered.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

N/A

ACTIVITY BY PRIORITY:

This subactivity is a Priority A2.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

- o Issued RFP for Commercial Laboratories 2/93
- o Technical Verification Procedures issued 3/93
- o Six Self Assessments completed
- o Completed the 1993 Fiscal Year Work Plan (FYWP)
- o Completed the draft 1995 MYPP

- o Issued the Comments Business Daily (CBD) for RFP 23900 Commercial Analytical Services 2/93
- o Hanford Analytical Sample Plan in final issuance
- o Hanford Environmental Laboratory Upgrade Plan
- o Implemented weekly Production Status Reporting for on-site Analytical Laboratory
- o Developed computer based model for Laboratory Capacity Planning

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

All activities described in the technical scope description above are supported at the target level for this year.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

All activities described in the technical scope description above are supported at the target level for this year. In addition, phase funding of management of Analytical Customer Interface and Sample Data Verification and Management in FY 1994. Technical and Quality Oversight will be fully funded for the workscope described above.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7100-00-0020	PROVIDE PROCUREMENT OF LOCALLY PROVIDED LAB SERVICES	10/31/95	10/31/95

PLANNING YEAR (FY 1996) TASK NARRATIVE:

All activities described in the technical scope description above are supported at the target level for this year.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

All activities described in the technical scope description above are supported at the target level for these years. In FY 1996, Sample Tracking Coordination and Analytical Laboratory Coordination will be phased into Analytical Services as workscope shifts from EM-40 to EM-30.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

- o 89-10 Rev. 2 Hanford Federal Facility, Agreement & Consent Order, September 1992
- o TPA Milestone M-00-00: Infrastructure issues
- o DOE 4700.1 : Project Management System
- o DOE RL 2100.1B : Administrative Control of Funds
- o DOE ORDER 2100.8 : Cost Accounting, Cost Recovery, and Interagency Sharing of Data Processing Facilities
- o DOE ORDER 2200.4 : Accounting Overview
- o DOE ORDER 2200.5A : Fund Accounting
- o DOE ORDER 2200.6 : Financial Accounting
- o DOE ORDER 2200.7 : Cost Accounting
- o DOE ORDER 2200.8A : Accounting Systems, Organizations, and Reporting
- o DOE ORDER 2200.9A : Miscellaneous Accounting
- o DOE ORDER 2200.10A : Accounts, Codes, and Illustrative Entries
- o DOE ORDER 2200.12 : Financial Managements Systems
- o DOE ORDER 2250.1C : Cost and Schedule Control System Criteria
- o DOE ORDER 2321.1A : Auditing of Programs and Operations
- o RLIP 4220.3C : Productivity Improvement and Cost Effectiveness
- o DOE ORDER 5480.19 : Conduct of Operations Requirements for DOE Facilities
- o DOE ORDER 4700.1 : Project Management
- o DOE ORDER 5700.2C : Cost Estimating, Analysis, and Standardization
- o DOE RL 5700.3 : Cost Estimating, Analysis, and Cost Standardization
- o SEN-29-91 : Performance Indicators and Trending Program DOE Operations

REGULATORY KEY ISSUES:

None

COMP/PROG BENEFITS AT PLANNING LEVEL:

Planning level is the same as the Target level.

CONCERNS AT PLANNING LEVEL:

None

REQUIRED TECHNICAL DEVELOPMENT:

None

THIS PAGE INTENTIONALLY
LEFT BLANK

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7100 ADS SUF: 0 SUBACTIVITY: BB

SUBACTIVITY TITLE: 222-S Facility Operations

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SITE SUPPORT-NFP

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996 TOTAL
OE EW3130030		20119
CE 35EW31303		2100
TOTAL		22219
DIRECT FTE		171

TARGET CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130030		13255	21865		22471	22471	24560	25535	27206	34367
CE 35EW31303		1903	1300		2100	2100	3000	4000	4000	4000
TOTAL		15158	23165	0	24571	24571	27560	29535	31206	38367
DIRECT FTE		167	197	0	194	194	205	207	207	207

PLANNING CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130030		13255	21865		30182	30182	30994	32438	33496	34366
CE 35EW31303		1903	1300		4548	4548	4548	4548	4548	4548
TOTAL		15158	23165	0	34729	34729	35542	36986	38044	38914
DIRECT FTE		168	197	0	221	221	219	225	226	224

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

The 222-S Laboratory Facility Complex is located inside the 200-West Area main gate and is operated by Westinghouse Hanford Company (WHC). The mission of the 222-S Laboratory is to provide analytical services in support of Hanford programmatic missions.

This subactivity provides for the routine operation, maintenance, and repair of all facilities and equipment associated with the 222-S Facility Complex to keep the facility in a ready-to-serve mode. It funds no site analysis work (production analyses). Facility operations workscope includes:

Building operations and maintenance

Equipment maintenance

Service assessments (steam, electricity, laundry, waste disposal, etc.).

Health Physics support, Engineering support, Quality Assurance support, maintenance support and other effort required to provide a safe, efficient, ready-to-serve facility.

Any other activity required for the safe, efficient operation of 222-S in a ready-to-serve mode.

The Laboratory Facility Complex consists of the 222-S main laboratory facility, 222-SA and expanded Hot Cells.

222-S HOT CELL ADDITION - The 222-S Hot Cell expansion supporting TPA Milestone M-11-00 provides additional capacity for analyzing radioactive waste samples in support of the Grout, Vitrification, Waste Receiving and Processing (WRAP) Facility, and Environmental programs.

READY-TO-SERVE - Is defined as having the capability to analyze samples, but not the capacity to provide production scale analyses. Funding for production analyses is provided by the specific program requiring analytical support. The only analyses funded by Subactivity BB are room air samples, performance evaluation (PE) samples, and other samples required to maintain the facility and analytical instrumentation in a safe and efficient manner.

PRODUCTION ANALYSIS - The 222-S Laboratory Facility Complex, along with the 325 Laboratory (Subactivity DD), will provide for the analyses of samples that are >10mR in support of Hanford Missions, driven mainly by the Tri-Party Agreement, and is covered in program-specific ADS's.

TRI-PARTY AGREEMENT MILESTONE - this Subactivity will support the TPA Milestone M-01, Grout, and Milestone M-10-00, Single shell Tanks (SST) which requires the 222-S Laboratory to meet projected sample loads.

LIFE-CYCLE REPLACEMENT OF ANALYTICAL EQUIPMENT as it wears out and/or becomes obsolete is provided for by this subactivity. It is estimated that

ten to twenty percent of the capital assets will need replacement each year (five to ten year life cycle).

RELATED ACTIVITIES NARRATIVE:

WSCF Facility Operations (Subactivity CC); 325 Laboratory Facility Operations (Subactivity DD); Laboratory Upgrades (Subactivity EE); 1706KE Environmental Demonstration Laboratory (Subactivity XX); 2703E Chemical Engineering Laboratory (Subactivity XX); W-001, HVAC/Electrical Upgrade (Suffix 1 of this ADS); W-087, Hot Waste Transfer Lines (Suffix 2 of this ADS); W-178, 219-S Secondary Containment (Suffix 3 of this ADS); Line Item support (ADS 7110); ADS 3400 (EM-40) contains specific items for Laboratory Upgrade Funding; ADS 1130 (Tank Waste Remediation System (TWRS) contains specific items for Laboratory Upgrade Funding.

KEY ASSUMPTIONS:

The costs for readiness-to-serve for the Facility will be direct funded beginning in FY 2000, thus eliminating the user assessment to all EM-30 customers.

The 222-S Laboratory will be required in order to meet projected sample analysis loads for the Hanford Site (e.g. TPA Milestone M-10).

Upgrades to the 222-S Facility Complex are necessary to support sample analysis projections (see Subactivity EE and ADS 7110).

LIMS maintenance will be supported in this subactivity starting in FY 1995. Upgrades enhancements will be funded through Subactivity EE.

CO2 Pellet Cleaning will be supported in this subactivity to fund enhanced minimization and the reduction of radioactive waste.

ACTIVITY BY PRIORITY:

Priority A2: Ready-to-serve operation of the 222-S Laboratory Facility Complex.

Priority B1: Upgrades to the 222-S Laboratory Facility Complex.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

222-S LABORATORY OPERATIONS
222-S LABORATORY OPERATIONS
222-S LABORATORY OPERATIONS

TASKS COMPLETED TO DATE:

Completed 1st quarter 222-S Environmental Compliance Assessments. Submitted PE Samples Analysis to EPA.

Completed 1st quarter Waste Minimization Report.
The Hot Cell Expansion construction was completed at 222-S Facility.
Completed Status of Conduct of Operations (Self Assessment).

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7100-00-0005	INITIATE OPERATIONS OF EXPANDED 222-S LABORATORY HOT CELLS	6/30/94	6/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

The 222-S Laboratory will operate to provide a ready-to-serve facility (capability level) for FY 1994. The activities for readiness-to-serve are the same as those included in the technical description above. The ER and TWRS Programs were assessed facility costs. This subactivity includes life cycle replacement of analytical equipment as it wears out and/or becomes obsolete.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

The 222-S Hot Cell Addition will be in full operation in FY 1995. The 222-S Laboratory Facility Complex will operate to provide ready-to-serve for FY 1995. The activities for readiness-to-serve are the same as those included in the technical description above. The TWRS Program will be assessed for facility costs. The 222-S Laboratory will be operated to support the sample analyses required by Hanford Programs. This subactivity includes life cycle replacement of analytical equipment as it wears out or becomes obsolete.

The Target funding level provides support to 222-S Hot Cell building, maintenance and HPTs. It provides support 222-S LIMS Maintenance and Operations and the funding of the CO2 Pellet Cleaning contract to enhance the minimization and reduction of radioactive wastes. It provides increased support for EPA PE Samples for additional Performance Evaluations, Training Implement Matrix System (TIMS) and Permits/Compliance support including self assessment and environmental reviews.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

The 222-S Laboratory Facility Complex will operate to provide a ready-to-serve facility (capability level) for FY 1996. The TWRS Program will be assessed for facility costs. The activities for readiness-to-serve are the same as those included in the technical scope description above. This subactivity includes life cycle replacement of analytical equipment as it wears out and/or becomes obsolete.

The Target Case funds the Hot Cell support for building, maintenance and

HPT; it provides support to the Training Implement Matrix System (TIMS) and to LIMS maintenance and operations. It also supports the increase for EPA PE Samples for additional Performance Evaluations and Permits/Compliance support including self assessment and environmental reviews.

The Target Case does not support the Standards Laboratory portion of the ready-to-serve mode. It is desirable to consider these areas as part of readiness-to-serve. They are necessary functions that will continue to be funded as analytical costs through program-specific ADSs.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

The 222-S Laboratory Facility Complex will operate to provide a ready-to-serve facility (capability level) for FY 1997 - FY 1999 2000. The TWRS Program will be assessed for facility costs. Beginning in FY 2000 the total cost for readiness-to-serve is direct funded (assessments to customers are eliminated). The activities for readiness-to-serve are the same as those included in the technical scope description above. This subactivity includes life cycle replacement of analytical equipment as it wears out and/or becomes obsolete.

The Target Case funds the Hot Cell support for building, maintenance and HPT; it provides support to the Training Implement Matrix System (TIMS) and to LIMS maintenance and operations. It also supports the increase for EPA PE Samples for additional Performance Evaluations and Permits/Compliance support including self assessment and environmental reviews.

The Target Case does not support the Standards Laboratory portion of the ready-to-serve mode. It is desirable to consider these areas as part of readiness-to-serve. They are necessary functions that will continue to be funded as analytical costs through program-specific ADSs.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

Continuity of operations is a primary driver of this subactivity. Analysis of facility effluent streams (i.e. stack, room air, liquid and solid waste stream) is required to support all operating facilities. The Tri-Party Agreement is also a primary driver of this subactivity. All analyses required by any TPA milestone that are >10mR will be supported by 222-S or the ACL, which is operated by the Pacific Northwest Laboratory (PNL) -- see Subactivity DD.

- TPA Milestone M-01-00: Grout requires 222-S Laboratory to meet projected sample loads.
- TPA Milestone M-10-00: Single Shell Tanks (SST) requires 222-S Laboratory to meet projected sample loads.
- TPA Milestone M-11-00: Operate 222-S Hot Cell Addition; Supports TPA Milestone M-10.
- 29 CFR 1910.120 : Hazardous Waste Operations and Emergency Response.
- 40 CFR 254.13 : General Waste Analyses.
- WAC 173-303-300 : General Waste Analyses.
- DOE Order 4580 : Conduct of Operations (Sub-paragraphs 18,19 & 20).
- DOE Order 5480.2 : Training
- DOE Order 5480.3 : Safety requirements for packaging and transportation of Hazardous Materials

REGULATORY KEY ISSUES:

Responded to the 222-S Laboratory Complex Dangerous Waste Permit application, Revision 0, Notice of Deficiency (NOD) by the State of Washington. Waiting for response from the State of Washington Department of Ecology.

Possible delay of Part B Permit. Waiting for response from the State of Washington Department of Ecology.

COMP/PROG BENEFITS AT PLANNING LEVEL:

The planning level for FY 1995 and beyond will provide full readiness-to-serve capability to support Hanford Missions. Beginning in FY 2000 the total cost for readiness-to-serve is direct funded (assessments to customers are eliminated). This includes maintaining the facility (Waste Handling, maintenance, etc.) to support full 222-S Laboratory capacity, full standards laboratory support, expansion and maintenance of the LIMS system, and TIMS implementation.

The support for Training Implementation matrix (TIMS) to bring 222-S in full compliance with DOE Order 5480.2 will be implemented. The 222-S Laboratory will not be in compliance with DOE Order 5480.2 without this funding.

The Standards Laboratory will become part of ready-to-serve in this Subactivity and Subactivity CC.

Hot Cell support for building, maintenance and HPT will be fully supported to meet the requirements from the Programs for Hot Cell Support. The impact will be to the Programs in not meeting their sample projections.

CONCERNS AT PLANNING LEVEL:

The instability of funding priorities and sample projections within Hanford programs has limited the 222-S Laboratory's ability to prepare for future analytical work loads. The ability of the laboratory to predict adequate resources to carry out the work load is directly linked to the accuracy of the programs' sample projections and to the degree of funding stability. In the absence of confident sample projections, the laboratory has proceeded along a conservative path of capacity and capability increases and has made best efforts to integrate with program needs and program funding levels.

Also, there remains a shortage, on a national scale, of qualified chemists to fill the required staffing levels. Aggressive recruiting activities are underway and will continue.

REQUIRED TECHNICAL DEVELOPMENT:

This laboratory uses state-of-the-art, commercially available analytical instrumentation. Some of this equipment represents the 'cutting edge' of chemical analysis technology. These 'cutting edge' pieces of instrumentation are generally used for the development of new analytical methodology aimed at (1) improving the analytical data obtained, (2) reducing the sample turn around time, (3) reducing sample analysis costs, and (4) developing an analytical capability that did not previously exist. For situations in which methods development activities are directly tied to specific programmatic requirements, the development work is funded by a program-specific ADS. Base funding provides a limited amount of analytical methods that are/will be used by a broad spectrum of Hanford programs and are not uniquely linked to a specific program.

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

The Waste Sampling and Characterization Facility (WSCF) Complex is located in the 600 Area, just east of the 200-West Area main gate, and is operated by Westinghouse Hanford Company (WHC). The mission of the WSCF is to provide general analytical chemistry services for samples <1mR/hr in support of Hanford programmatic missions.

This Task Description Document (TDD) covers the startup, operation, and maintenance of the WSCF Complex in a ready-to-serve state. It funds no site analysis work (production analyses). Facility operations workscope includes:

Building operations and maintenance

Equipment maintenance (including preventive maintenance on building equipment)/calibration/repair

Service assessments (e.g. steam, laundry, utilities, waste disposal)

Process Engineering, Facility Engineering, Health & Safety Engineering, Maintenance Engineering, and Work Planning & Control

Training

Analytical Equipment Readiness activities, including Performance Evaluation (PE) samples, preventive maintenance (analytical equipment only), calibration, etc.

Any other activity required for the safe, efficient operation of WSCF in a ready-to-serve mode

READY-TO-SERVE - is defined as having the capability to analyze samples, but not the capacity to provide production scale analyses. Funding for production analyses is provided by the specific program requiring analytical support. The only analyses funded by Subactivity CC are room air samples, performance evaluation (PE) samples, and other samples required to maintain the facility and analytical instrumentation in a safe and efficient manner.

PRODUCTION ANALYSIS - WSCF is a low-level radioactive laboratory that provides analytical services support for samples that are <1mR/hr. Its three-fold mission is to provide (1) analytical support to the effluent treatment facilities as they come on-line in FY 1995 (TPA Milestone M-17); (2) quality control oversight of off-site laboratories, primarily in support of Environmental Restoration (ER) work on operable units; and (3) counting room analyses in support of facility effluents and waste characterization. These analyses are funded via program-specific ADS's.

FACILITY STARTUP - will be accomplished per the 'PROGRAM PLAN FOR CONSTRUCTION TURNOVER AND STARTUP OF THE WASTE SAMPLING AND CHARACTERIZATION FACILITY', WHC-SD-WM-SUP-006, REV 4 (WSCF Startup Plan). Of key importance in the plan are activities to (1) prepare the Final

Safety Analysis Report (FSAR), (2) conduct the Operational Readiness Review (ORR), (3) complete construction of an office building, (4) purchase and check out analytical equipment, (5) prepare appropriate documentation and procedures, (6) hire and train the operational staff, and (7) start and maintain operation of WSCF Facility systems (i.e. HVAC, Waste Disposal, utilities, etc.) after construction completion.

TRI-PARTY AGREEMENT MILESTONE, M-14 - The startup and operation of the WSCF Complex are driven by two 'HANFORD FACILITY AGREEMENT AND CONSENT ORDER' (Tri-Party Agreement) target milestones: M-14-02 and M-14-03. The M-14 milestone has been revised by a Senior Executive Committee (SEC) Agreement (Reference TPA Change Request No. M-14-92-01). Following is the realignment resulting from the Dispute Resolution.

M-14-00 DOE shall comply with SEC Agreement on Resolution of M-14-00 Change Request Dispute, dated 1/8/92.

M-14-01: Complete Definitive Design (completed 11/90).

M-14-02: Complete construction of the 27-module WSCF Lab in 10/93. Scope provides QA/QC to commercial services and process control support for liquid effluents (completed 10/31/93).

M-14-03: Initiate operations of the 27-module WSCF Lab.

M-14-04: DOE will proceed with procurement actions to provide low-level mixed waste commercial laboratory capacity sufficient to meet TPA compliance requirements. Near-term laboratory capacity will not be specifically constrained to local services. However, to ensure compliance with the intent of the TPA Milestone, RL will provide for procurement of locally-provided laboratory services for the long term designed to handle 80% or more of the low-level analytical requirements for the Environmental Restoration/Waste Management Programs at the Hanford site. The date for commencement of local operations will be October, 1995. Funding for this milestone is included in Subactivity AA and through direct funding by the Environmental Restoration Program.

NOTE: Another TPA Change Request, CIN# M-14-94-??, has been submitted to change the operations start date from April 30, 1994 to August 31, 1994. This is necessary because of difficulties in working off the ATP Punchlist items from construction turnover.

LIFE-CYCLE REPLACEMENT OF ANALYTICAL EQUIPMENT as it wears out and/or becomes obsolete is provided for by this subactivity. It is estimated that ten to twenty percent of the capital assets will need replacement each year (five to ten year life cycle). Minimal funding is included in the target for the first two years to procure equipment for increased capacity as required.

RELATED ACTIVITIES NARRATIVE:

Construction of the WSCF is covered under ADS 2310-01, Hanford Environmental Compliance (HEC), Project 89-D-172, sub-project W-011H.

Subactivity EE of this ADS contains funding for a 10-Wide Mobile Office facility and a General Plant Project (GPP), W-164, SAMPLE EQUIPMENT DECON FACILITY.

ADS 7110-0, Subactivity NB, contains FY 1996 line item funding for a permanent office facility for WSCF (Project W-301), along with expense funding to support conceptual design.

ADS 7110-0, Subactivity NM, contains FY 1997 line item funding for a WSCF Computer Facility, along with expense funding to support conceptual design.

NOTE: Startup activities (staffup, training, procedure development, readiness review, etc.) were covered under Subactivity EE of this ADS in the previous submittal, but are now part of this subactivity.

KEY ASSUMPTIONS:

The WSCF will be required in order to meet projected sample loads in support of TPA Milestones, most notably M-17, Treated Effluents.

Timely resolution of the WSCF Office Space funding issue (expense funding for temporary facilities) to support startup will occur.

The Laboratory Information Management System (LIMS) will be implemented in a timely manner to support WSCF operations.

Site analyses requirements (programmatic funding) will support the technical staff ramp-up once start-up occurs in April (subactivity CC funds all personnel prior to startup).

The TPA Change Request will be approved to move the operational start date from April 30, 1994 to August 31, 1994.

ACTIVITY BY PRIORITY:

PRIORITY B1: All Pre-startup activities, including Operational Readiness Review (ORR), staffup and training, procedure preparation, Resource Identification Document (RIDS) implementation, etc. Most of these activities cease upon startup (April 30, 1994). The Startup Manager and selected staff will continue to facilitate Operability Testing through September 1994.

PRIORITY A2: Operation of the facility, beginning in 1994, will be priority A2. A comprehensive Operational Readiness Review (ORR) will be conducted by WHC prior to WSCF start-up. A readiness review plan is being developed based on a risk tree analysis and will be submitted for DOE approval. A Facility assessment will be conducted on analytical systems to assure capabilities are in place to provide quality analytical services.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

WSCF LAB FACILITY EQUIPMENT
WSCF LAB FACILITY EQUIPMENT
WSCF LAB FACILITY EQUIPMENT

TASKS COMPLETED TO DATE:

Construction was completed on 10/31/93 (ref ADS 2310).

The Startup Team has been formed and is functioning to address startup issues.

The Readiness Review Board has been convened to oversee the Operational Readiness Review (ORR) process.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Pre-startup activities continue per the WSCF Startup Plan. Staff ramp-up will occur to support programmatic requirements. Initially, WSCF will take over a large percentage of the counting room analytical work now being performed in the 222-S Laboratory. Much of the QA oversight of off-site labs and analytical support to the Environmental Restoration Program is contracted to off-site commercial laboratories in FY 1994. These will be phased in at WSCF as commercial contracts expire and as WSCF develops the capacity to perform them. Site Analysis support to treated effluent facilities, will not be required until FY 1995.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7100-00-0015	INITIATE OPERATIONS OF 27 MODULE WSCF	11/30/94	11/30/94

BUDGET YEAR (FY 1995) TASK NARRATIVE:

WSCF ready-to-serve operation will escalate in anticipation of the startup of Liquid Effluent Facilities, most notably Project L-045, 300 Area Treated Effluent Disposal Facility (TEDF), scheduled to be on-line December, 1994, and Project C-018, 200 Area Effluent Treatment Facility (ETF), scheduled to be on-line in June, 1995.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

WSCF Base Operations for ready-to-serve will be ongoing in FY 1996. The Target Case does not fund the Standards Laboratory portion of the ready-to-serve mode, nor does it support LIMS maintenance and expansion. It is desirable to fund both of these areas as part of readiness-to-serve. They are necessary functions that will continue to be funded, as analytical costs, through program-specific ADS's.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

WSCF ready-to-serve operation is supported for the entire term of this ADS submittal. A 1996 Line Item, W-301, WSCF Operations Support Facility, will

be completed in 1997.

The Target Case does not fund the Standards Laboratory portion of the ready-to-serve mode, nor does it support LIMS maintenance and expansion. It is desirable to fund both of these areas as part of readiness-to-serve. They are necessary functions that will continue to be funded as analytical costs through program-specific ADS's.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

The Tri-Party Agreement is the primary driver for this subactivity. Process control analyses for the Effluent Treatment Facilities (TPA Milestone M-17) that are <1mR/hr will be analyzed at WSCF. In addition, QA oversight of all commercial laboratories will be performed and room air samples will be run in the counting room. Specific Drivers are:

TPA Milestone M-14-03: Start up and Operate WSCF

TPA Milestone M-17-00: Treated Effluents

TPA Milestone M-00-00: Infrastructure issues

RCRA

CERCLA

40 CFR 264.13 : General Waste Analysis

WAC 173-303-300 : General Waste Analysis

Clean Air Act

Clean Water Act

Safe Drinking Water Act

DOE Order 4580.18-20 : Conduct of Operations

DOE Order 5480.1 : Training requirements at DOE Facilities

DOE Order 5480.3 : Packaging/transportation of hazardous materials

REGULATORY KEY ISSUES:

NONE

COMP/PROG BENEFITS AT PLANNING LEVEL:

The planning level for FY 1994 and beyond will provide full readiness-to-serve capability to support Hanford Missions. This includes full staffup and training of new hires, full standards laboratory support, and expansion and maintenance of the LIMS system. It is desirable to fund both of these areas as part of readiness-to-serve. They are necessary functions that will continue to be funded as analytical costs through program-specific ADS's.

CONCERNS AT PLANNING LEVEL:

The instability of funding priorities and sample projections within Hanford programs has severely limited the WSCF Laboratory's ability to prepare for future analytical workloads. The ability of the labs to predict adequate resources to carry out the work load is directly linked to the accuracy of the programs' sample projections and to the degree of funding stability. In the absence of confident sample projections, the WSCF has proceeded along a conservative path of capacity and capability increase and has made best efforts to integrate with program needs and program funding levels.

Also, there remains a shortage of qualified chemists to fill the required staffing levels on a national scale. Aggressive recruiting activities are underway and are continuing.

REQUIRED TECHNICAL DEVELOPMENT:

This laboratory uses state-of-the-art, commercially available analytical instrumentation. Some of this equipment represents the 'cutting edge' of chemical analysis technology. These 'cutting edge' pieces of instrumentation are generally used for the development of new analytical methodology aimed at (1) improving the analytical data obtained, (2) reducing the sample turn around time, (3) reducing sample analysis costs, or (4) developing an analytical capability that did not previously exist. After startup, for situations in which methods development activities are directly tied to specific programmatic requirements, the development work is funded by a program-specific ADS. Base funding provides a limited amount of analytical methods that are/will be used by a broad spectrum of Hanford programs and are not uniquely linked to a specific program.

The instability of funding priorities and sample projections within Hartford programs has severely limited the WCF Laboratory's ability to prepare for future analytical workloads. The ability of the labs to predict adequate resources to carry out the work lead is directly linked to the accuracy of the programs' sample projections and to the degree of funding stability. In the absence of confident sample projections, the WCF has proceeded along a conservative path of capacity and capability increase and has made past efforts to integrate with program needs and program funding levels.

Also, there remains a shortage of qualified chemists to fill the required staffing levels on a national scale. Aggressive recruiting activities are underway and are continuing.

REDUCED TECHNICAL DEVELOPMENT

This laboratory uses state-of-the-art analytical instrumentation. Some of the cutting edge of chemical analysis technology. The pieces of instrumentation are generally used to pieces of methodology aimed at (1) improving the analytical data obtained, (2) reducing the sample turn around time, (3) reducing sample analysis costs, or (4) developing an analytical capability that did not previously exist. After startup, for situations in which methods development activities are directly tied to specific programmatic requirements, the development work is funded by a program-specific ADS. Base funding provides a limited amount of analytical methods that are/will be used by a broad spectrum of Hartford programs and are not uniquely linked to a specific program.

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7100 ADS SUF: 0 SUBACTIVITY: DD

SUBACTIVITY TITLE: ACL (325) Facility Operations

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SITE SUPPORT-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
B&R		TOTAL
OE	EW3130030	13400
CE	35EW31303	1400
TOTAL		14800
DIRECT FTE		64

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R			RL BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	11328	15600		14100	14100	14500	14300	14600	15567
CE	35EW31303	2000	1400		1400	1400	2000	2700	2700	3000
TOTAL		13328	17000	0	15500	15500	16500	17000	17300	18567
DIRECT FTE		55	67	0	68	68	68	68	68	68

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R			RL BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	11328	15600	0	16213	16213	16961	17710	18494	19320
CE	35EW31303	2000	1400		3000	3000	3000	3000	3000	3000
TOTAL		13328	17000	0	19213	19213	19961	20710	21494	22320
DIRECT FTE		55	7	0	75	75	76	77	77	77

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

The Analytical Chemistry Laboratory (ACL) is located in several buildings in the 300 Area and is operated by the Pacific Northwest Laboratory (PNL). The mission of the ACL is to provide general analytical chemistry support services and analytical chemistry research and development support to the Hanford programmatic missions.

This subactivity provides funding for routine operation, maintenance, and repair of the ACL facility in a ready-to-serve state for Hanford programs. This funding covers:

ACL administrative costs, some management costs

Selected facility maintenance costs-

- waste disposal staff,
- Radiation protection technologists,
- crafts support,
- limited engineering staff support.

Clean out and restoration of the hot cell in the 325 Building

Life cycle replacement of analytical chemistry instrumentation

In addition, three out-year projects required to maintain the 325 Building in an operating state are covered in ADS 7110-0, 'ANALYTICAL SERVICES NEW CONSTRUCTION FOR FY 1996 AND BEYOND'.

The total ready-to-serve capability will be implemented as a function of available funding. This subactivity will assume an increasing responsibility for ACL operational costs, with the assumption of the total ready-to-serve burden in dependant upon out-year funding.

READY TO SERVE - Hands-on analytical chemistry performed under this subactivity includes performance evaluation samples and other samples and standards that are required to maintain analytical instrumentation in operating, ready-to-serve condition.

PRODUCTION ANALYSIS - Funding for general analytical chemistry support services and for analytical chemistry research and development support is contained in program-specific ADS'.

RELATED ACTIVITIES NARRATIVE:

Laboratory Upgrades to the ACL, including the 325 Hot Cells, are covered in this subactivity as well as in one other ADS: ADS 1130 (Tank Waste Remediation System). An integration team comprised of personnel from each of these programmatic areas has been formed to plan, evaluate and track progress on the upgrades. ADS 7110-0, Analytical Services New Construction', contains three out-year Line Items, along with the expense support to the projects:

- 1) D-450, ACL Operations Support Facility Upgrade and RLWS Replacement (Subactivity NF)
- 2) D-461, 325 Building Renovation of Chemical Process Systems Section Lab (Sub-activity NH)
- 3) D-462, ACL Alternative Radioactive Liquid Waste Disposal System (Subactivity NG)

FY95

Anticipated support from ADS #1130 is in the following areas:

- 1) Hot Cell clean-out
- 2) Radiochemical Analysis Laboratory Upgrades (1275 sq. ft.)
- 3) Standards Laboratory Expansion (368 sq. ft.)

FY96

Anticipated support from ADS #1130 is in the following areas:

- 1) Inorganic Analysis Laboratory Upgrades
- 2) Counting Room Upgrades

KEY ASSUMPTIONS:

Upgrades to the ACL are necessary to support capability and capacity requirements for analyses on the Hanford Site.

The ACL will be required to meet sample projections, most notably those for Single-Shell Tank Characterizations (TPA Milestone M-10) and Operable Units (M-15).

The ACL will be tied into the Laboratory Information Management System (LIMS) in order to meet the capacity demands for data reporting.

Total funding for ready-to-serve configuration will be accomplished over a multi-year period, beginning in FY 1994.

The Analytical Chemistry Laboratory has received no base funding prior to fiscal year 1994. The development of a full 'ready-to-serve' capability is being achieved over a multi-year period, in order to develop the budget that this implementation will require.

- 1) The number of technical staff to maintain analytical instrumentation in a true 'ready-to-serve' capability increases from 7 personnel initially to the final 11 staff that are required to achieve and maintain this capability.
- 2) Support for staff training increases as the projected laboratory technical staffing increases from 50 to 70 personnel, in support of increased analytical capacity.
- 3) Support for HASC participation increases from 1 to 2 FTE's.
- 4) Production Control staff members and Quality Control staff members increase from 5 to 7 FTE's and from 5 to 6 FTE's, respectively.

ACTIVITY BY PRIORITY:

PRIORITY A2: Base funding for operation and maintenance.

PRIORITY B1: Laboratory Upgrades in support of the Tri-Party Agreement,
including Capital Equipment Not Related To Construction
(CENRTC)

325 Hot Cell cleanout

room modifications to accommodate new equipment.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

325 LAB CENRTC

325 LAB CENRTC

325 LAB CENRTC

TASKS COMPLETED TO DATE:

The ACL has achieved RCRA/CERCLA equivalent capability.

The 'C' Hot Cell has been cleaned out, refurbished, and returned to operational status.

The cleanout of the 'A' Hot Cell has begun.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7100-00-0030	COMPLETE CLEANOUT OF 325 HOT CELLS	9/30/94	9/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Cleanout of the 325 Hot Cells and procurement of analytical equipment continue. The ACL will be operated and maintained in a ready-to-serve mode as described in the technical scope section above, costs not covered by base funding will be liquidated through sample analysis costs.

NOTE: Upgrades to the ACL are also contained in ADS's 1130, Tank Waste Remedial System (TWRS), and 3400, Environmental Restoration and Remediation (ER). These upgrades include room modifications and procurement of equipment.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

The ACL will be operated and maintained in base funded, ready-to-serve mode as described in the technical scope section above. Some costs will still be liquidated through sample analysis charges. A smaller percentage of the ACL ready-to-serve activities will be supported, relative to FY 1994 funding.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

The ACL will continue to be operated and maintained in accordance with the base funded, ready-to-serve mode as described in the technical scope section above. Some costs will still be liquidated through sample analysis charges. A smaller percentage of the ACL ready-to-serve activities will be supported, relative to FY 1995 funding.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

The ACL will be operated and maintained in the base funded, ready-to-serve mode as described in the technical scope section above. Some costs will still be liquidated through sample analysis. Due to increasing sample loads, staff additions, and associated support functions, a steadily

diminishing proportion of the ACL ready-to-serve activities will be funded through this ADS.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

The Tri-Party Agreement is the primary driver for this subactivity.
Specific Drivers are:

- o TPA Milestone M-10-00: Single Shell Tanks
- o TPA Milestone M-15-00: Operable Units
- o CERCLA
- o RCRA
- o 40 CFR 264.13 : General Waste Analyses
- o WAC 173-303 : General Waste Analyses
- o DOE Order 4580.18-20 : Conduct of Operations
- o DOE Order 5480.2 : Training requirements at DOE Reactors
- o DOE Order 5480.3 : Safety Requirements for packaging and transportation of hazardous waste.

REGULATORY KEY ISSUES:

Disposal of hazardous waste, both liquid waste (which uses the 340 Facility) and solid waste, at the ACL is a problem. Current procedures for disposal need to be improved to facilitate uninterrupted laboratory operations.

COMP/PROG BENEFITS AT PLANNING LEVEL:

The Planning Level supports ready-to-serve base funding for the duration of this ADS. However the Target Level in FY 1995 does not support full ready-to-serve base funding. As a result, the multi-year plan to fund all ready-to-serve activity though base funding will be delayed until supported by target budget. The ACL will continue to liquidate some of the ready-to-serve costs through sample analysis charges.

Full funding support at the 'Required Case' level is necessary in order to develop and maintain a true 'ready-to-serve' capability. Support for Facility Operations at a lower level will mandate that the additional 'ready-to-serve' costs be liquidated by charges against Hanford Site customers (programs), rather than through Base Funding. At the 'Target' funding level the Analytical Chemistry Laboratory will never achieve the desired 'ready-to-serve' capability.

CENRTC equipment replacement funding is essential (1) to maintain an existing capability and capacity, and (2) to place 'leading edge' technology instrumentation on-line for Site analyses and, thereby, reduce

analytical costs and turn-around-times. Analytical Chemistry Laboratory instrumentation is valued at \$20-\$25M. The requested CENRTC support of \$3M per year for equipment replacement allows for a projected average useful lifetime of 7-8 years for each instrument. This time period is beyond the lifetime of some instrumentation. It is critical to fund CENRTC replacement costs at this level to maintain an existing capability. Support at a lower level will ultimately decrease analytical capacity.

Three out-year projects are presented and discussed in ADS #7110. Support for these projects is essential if the Analytical Chemistry Laboratory is to meet the projected analytical capacities for this laboratory and continue to operate without facility-related interruptions in the future. One of these projects is related to the ability to continue operation of the Shielded Analytical Laboratory (the 'B' Hot Cells) and the ability to comply with DOE radiological control requirements for office occupancy. A second project will provide a solution to the overall problem of disposal of radioactive liquids from hot cell and laboratory facilities within the 300 Area. The third project involves the renovation of additional 325 building laboratories that are directly related to tank waste characterization and to advanced waste treatment process development investigations. These three projects are essential for the 325 Building to continue to provide full support to meeting the TPA milestones relating to tank waste characterization, operable unit characterization, and waste pre-treatment investigations.

CONCERNS AT PLANNING LEVEL:

The instability of funding priorities and sample projections within Hanford programs has severely limited the ACL's ability to prepare for future analytical work loads. The ability of the lab to predict adequate resources to carry out the work load is directly linked to the accuracy of the programs' sample projections and to the degree of programmatic funding stability. In the absence of confident sample projections, the ACL has proceeded along a conservative path of capacity and capability increases.

REQUIRED TECHNICAL DEVELOPMENT:

The laboratory utilizes state-of-the-art, commercially available analytical instrumentation. Some of this equipment represents the 'cutting edge' of chemical analysis technology. These 'cutting edge' pieces of instrumentation are generally used for the development of new analytical methodologies aimed at (1) improving the analytical data obtained, (2) reducing the sample analysis turn around time, (3) reducing sample analysis costs, or (4) developing an analytical capability that did not previously exist. For situations in which methods development activities are directly tied to specific programmatic requirements, the development work is funded by a program-specific ADS. Base funding in this subactivity provides a limited amount of funding that is used for the improvement or development of analytical methods that are/will be used by a broad spectrum of Hanford programs and are not uniquely linked to a specific program.

THIS PAGE INTENTIONALLY
LEFT BLANK

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7100 ADS SUF: 0 SUBACTIVITY: EE

SUBACTIVITY TITLE: Analytical Laboratory Upgrades

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SITE SUPPORT-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996 TOTAL
	B&R	
OE	EW3130030	4797
GP	39EW31303	0
TOTAL		4797
DIRECT FTE		39

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	7175	5243	4797		4797	7553	6956	6564	5529
GP	39EW31303	0	1200	1600		1600	2000	2000	2000	2000
TOTAL		7175	6443	6397	0	6397	9553	8956	8564	7529
DIRECT FTE		37	44	39	0	39	55	39	32	27

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	7175	5243	8208		8208	7920	8156	8700	8614
GP	39EW31303	0	1200	2500		2500	2000	2000	2000	2000
TOTAL		7175	6443	10708	0	10708	9920	10156	10700	10614
DIRECT FTE		37	44	58	0	58	55	54	57	54

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

This subactivity provides for the upgrades to give the Hanford Analytical Laboratories the capability and capacity to respond to the programmatic mission demands for analytical services. These upgrades are consistent with the 'Hanford Environmental Laboratories Upgrade Plan'. The basic assumptions in this plan are: 1) upgrades in current laboratory capacities and capabilities are crucial to the Hanford Mission of environmental remediation and waste management; 2) the milestones set forth by the Tri-Party Agreement (TPA) will be met; 3) funds allocated to laboratory upgrades are indirectly linked to TPA commitments. The proposed laboratory upgrades are divided into two categories - capability and capacity. Capability upgrades are required to insure that the Hanford laboratories have the ability to run a large array of protocol analyses. Capacity upgrades address the throughput requirements in a production-type environment.

The specific workscope for this TDD includes:

222-S Laboratory Room Renovations: The 222-S Laboratory Room Renovation Plan has been developed for systematic room by room upgrades. The renovation plan identifies approximately 40 rooms requiring renovation over a ten-year period with planned completion of four rooms per year. Room renovations include rerouting of some utility services (electrical, gas, and water lines), rearrangement of cabinets and equipment, floor replacements, modernization of lighting, and relocation of non-bearing walls and doorways. This activity is the result of extensive efforts to optimize scarce space in the 222-S Laboratory based on studies which addressed sample and data flow through the laboratory. In addition, multi-shift operations to further enhance production have been planned and will be funded from customer accounts based on workload to support the manpower required for multi-shift operations. To support staffing rampups, two permanent office buildings, (Projects W-170, 222-S Operational Support Facility, and W-301, WSCF Operational Support Facility) are planned as FY 1998 line items (ADS 7110-0).

Laboratory Information Management Systems (LIMS): The LIMS will provide a high capability level of electronic data management for all work done at Hanford laboratories. This will allow information documenting the laboratory state of readiness (i.e. personnel training, instrument calibrations, equipment status, calibration records, sample schedules, sample tracking, sample splits, work assignments, sample status, final reporting, and performance criteria) to be attached to specific sample data (i.e., analysis request, laboratory analysis raw data) to provide summary laboratory reports.

The current Laboratory Information Management System serving the 200 Areas is a network comprised of several computers. The current system uses computers and technology that are at least ten years old. This system is being operated beyond prudent capacity limits and is experiencing frequent malfunctions of electronic and mechanical components. Currently, the 325 Laboratory does not have a LIMS but is implementing a small PC-based system to provide interim support.

LIMS upgrades are required to meet customer and quality requirements. Enhancements to meet the additional requirements imposed by RCRA/CERCLA protocols is also required.

Project Engineering: This provides the necessary project engineering support for ongoing construction projects including initial engineering studies, functional design criteria, and conceptual design reports for outyear projects. In prior years, this activity covered conceptual engineering required for all outyear projects. This activity is now split between ADS's 7100-00 and 7110-0.

Productivity Improvements: The objective of process and productivity improvements are to 1) increase productivity; 2) improve data quality; 3) reduce human exposure to hazardous materials and environments; and 4) eliminate tedious manipulative tasks.

Due to the unique characteristics of Hanford waste (i.e., the presence of radionuclides), most commercial laboratories are not equipped to perform remote analytical processes. The projected workload far exceeds the current capacity of certified DOE and commercial laboratories. Productivity in the analytical laboratories must be increased while the costs of analyses are reduced. In addition, potential worker hazards must be minimized. Many of the EPA-approved protocols are labor intensive, and require frequent and direct manipulations by laboratory personnel.

The Laboratory Process Improvement Program is a grass roots program providing funds and assistance in implementing ideas formulated by Hanford Analytical Services (HAS) personnel to improve their jobs. The goal of the program is to improve the over-all productivity of the laboratory through small improvements in the individual jobs of each HAS member.

RELATED ACTIVITIES NARRATIVE:

A joint Westinghouse/Pacific Northwest Laboratories Upgrade Integration Team was formed to review the overall upgrade plan and to ensure that the workscope was divided appropriately, and without duplication, among three ADS's. Laboratory upgrades are currently split between this ADS (Waste Management), ADS 3400 (Environmental Restoration) and ADS 1130-0, Tank Waste Remediation System).

KEY ASSUMPTIONS:

Laboratory upgrades are necessary to support capability and capacity requirements based on projected sample loads.

The LIMS system is mandatory to meet capacity demands for data reporting.

Analyses supporting site characterization and remediation activities must be performed to RCRA/CERCLA protocols.

The Laboratory upgrades are driven by programmatic requirements of the Tri-Party Agreement.

Costs for analyses must be reduced to support the Hanford environmental mission.

ACTIVITY BY PRIORITY:

All activities in this subactivity is driven by programmatic requests and TPA requirements and is priority B1.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

Definitive Design for Project W-041H, 222-S Hot Cell Addition (TPA Milestone M-11-00), and Project W-001, 222-S HVAC Electrical Upgrade has been completed with construction scheduled to be completed FY 1994 respectively.

Definitive Design is completed and construction activities for Project W-124, 222-S Wastewater Retention Facility, (associated with TPA Milestone M-17-00) are scheduled to be completed in FY 1994.

Conceptual design review for Project W-164, Sample Equipment Cleaning Facility, has been completed.

Manipulator room upgrade has been completed.

Completed placement and occupancy of mobile office I at the WSCF facility.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

 CURRENT YEAR (FY 1994) TASK NARRATIVE:
 FY 1994 Milestones:

Milestone ID	Title	Planning	Target
HAS-93-001	Complete FDC for Project W-XXX, 222-S Capacity Upgrades (split to Projects W-367, 222-S Ancilliary Equipment Addition (ADS 7110-0), and Project W-368, Laboratory Maintenance Annex (ADS 7100-0)		06/01/93
HAS-93-002	Complete CDR for Project W-164 Sample Equipment Cleaning Facility		06/30/93
HAS-94-001	Complete Engineering Study Review Project W-079, 222-S Sample Archiving Facility		12/30/93
HAS-94-002	Complete Construction, Project W-124 Waste Water Retention Facility		12/30/93
HAS-94-008	Complete LABCORE Implementation, Release 1.0		1/31/94
HAS-94-017	Complete FDC for 222-S Septic Tank		6/30/94
HAS-94-018	Complete 222-S Rooms 4M and 4T Renovations		6/30/94

Continue capability and capacity upgrades to support at the ready-to-serve level including renovations to the organic rooms (Room 4M and 4T). The ADS 1130 will provide an additional \$1.8M for organic room upgrades.

Continue procurement of 222-S capital equipment to replace obsolete or acquire required technology.

Continue LIMS development and implementation for 222-S, 325, and WSCF Laboratories. ADS 1130, TWRS Characterization, will provide additional funds for LIMS implementation/development.

Continue implementation of process improvement program.

Continue expense support to ongoing and outyear projects.

Continue pre-startup activities for Project W-041H, 222-S Hot Cell Addition (Reference ADS 2310 for construction).

Complete construction activities for Project W-124, 219-S Wastewater Retention Facility.

Complete small project W-323, Inductively Coupled Plasma (ICP) Spectrometer installation in Room 1J, 222-S Facility.

Complete installation and occupancy of Mobile Office II at the WSCF Facility and the 222-S Mobile Office.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:
FY 1995 Milestones:

Milestone ID	Title	Planning	Target
	Complete Renovation of 2 Rooms in 222-S Laboratory		09/30/95
	Complete Renovation of 4 Rooms in 222-S Laboratory	09/30/95	
	Complete Construction Project W-164, Sample Equipment Cleaning Facility		07/30/95
	Complete Construction Project W-370, 222-S Septic System		09/30/95
	Complete CDR Project W-368, Laboratory Maintenance Annex	06/30/95	

Continue capability and capacity upgrades required to support at the ready-to-serve level. The exact details, as to which upgrades will be supported, have not be finalized, pending review and update of the 222-S Laboratory Renovation Plan. Priority will be given to those rooms where current demands are greater than current capabilities or capacities, and where maintenance costs are excessive.

Project engineering support and definitive design activities for Project W-164, Sample Equipment Cleaning Facility, and Project W-370, 222-S Septic System.

Continued implementation of new features and functionality through systems configuration and development activities for the LIMS system.

Continued identification and implementation of productivity process improvements.

Target level funds will only support portions of the laboratory upgrades, process improvement, LIMS implementation and expense support to project

activities.

Lack of full funding impacts the following areas:

Laboratory Upgrades - delays in completion of 2 of the 4 planned room renovations, and thus impacting the ability to support at the ready to service level.

LIMS - impacts ability to perform implementation upgrades requiring extensive configuration or development activities.

Process improvements - impacts ability to complete ongoing process improvements and delays implementation of newly identified process improvements.

Expense Support to Projects - Project W-368, Laboratory Maintenance Annex, conceptual design reviews will be delayed, which will not allow timely completion of the project.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1996 Milestones:

Milestone ID	Title	Planning	Target
	Complete CDR, Project W-368 Laboratory Maintenance Annex	06/30/95	

Continue capability and capacity upgrades required to support at the ready-to-serve level. The exact details, as to which upgrades will be supported, have not be finalized, pending review and update of the 222-S Laboratory Renovation Plan. Priority will be given to those rooms where current demands are greater than current capabilities or capacities, and where maintenance costs are excessive.

Expense support to projects including support to Project W-370, 222-S Septic System, and planned outyear general plant projects and small projects.

Continued implementation of new features and functionality through systems configuration and development activities for the LIMS system.

Continued identification and implementation of productivity process improvements.

Target level funds will only support portions of the laboratory upgrades, process improvement, LIMS implementation and expense support to project activities.

Lack of full funding impacts the following areas:

Laboratory Upgrades - delays in completion of 2 of the 4 planned room renovations, and thus impacting the ability to support at the ready to service level.

LIMS - impacts ability to perform implementation upgrades requiring extensive configuration or development activities.

Process improvements - impacts ability to complete ongoing process improvements and delays implementation of newly identified process improvements.

Expense Support to Projects - Project W-368, Laboratory Maintenance Annex, conceptual design reviews will be delayed, which will not allow timely completion of the project.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Continue capability and capacity upgrades required to support at the ready-to-serve level. The exact details, as to which upgrades will be supported, have not be finalized, pending review and update of the 222-S Laboratory Renovation Plan. Priority will be given to those rooms where current demands are greater than current capabilities or capacities, and where maintenance costs are excessive.

Expense support to projects including support to Project W-370, 222-S Septic System, and planned outyear general plant projects and small projects.

Continued implementation of new features and functionality through systems configuration and development activities for the LIMS system.

Continued identification and implementation of productivity process improvements.

Target level funds will only support portions of the laboratory upgrades, process improvement, LIMS implementation and expense support to project activities.

Lack of full funding impacts the following areas:

Laboratory Upgrades - delays in completion of 2 of the 4 planned room renovations, and thus impacting the ability to support at the ready to service level.

LIMS - impacts ability to perform implementation upgrades requiring extensive configuration or development activities.

Process improvements - impacts ability to complete ongoing process

improvements and delays implementation of newly identified process improvements.

Expense Support to Projects - Project W-368, Laboratory Maintenance Annex, conceptual design reviews will be delayed, which will not allow timely completion of the project.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

The laboratory upgrades are driven by programmatic requirements of the Tri-Party Agreement. Analyses support site characterization and remediation activities must be processed to the RCRA/CERCLA protocols at sufficient capacity to meet projected sample loads. Specific drivers are:

TPA Milestone M-01-00: Grout

TPA Milestone M-10-00: Single Shell Tanks

TPA Milestone M-14-00: Project W-011H, WSCF Facility (required to meet TPA Milestone M-17)

TPA Milestone M-15-00: Operable Units

TPA Milestone M-17-00: Treated Effluents

29 CFR 1910.120 : Hazardous Waste Operation and Emergency Response o

40 CFR 264.13 : General Waste Analysis

WAC 173-303-300 : General Waste Analysis

WAC 173-303-640 : Tank Systems

REGULATORY KEY ISSUES:

NONE

COMP/PROG BENEFITS AT PLANNING LEVEL:

222-S Laboratory Capacity/Capability Upgrades: The 222-S Laboratory Room Renovation Plan identifies planned renovation of four rooms per year. Room renovations include rerouting of some utility services (electrical, gas, and water lines), rearrangement of cabinets and equipment, floor replacements, modernization of lighting, and relocation of non-bearing walls and doorways. Years of inadequate routine maintenance has left the rooms with corroding hoods and cabinets, crowded and a general dingy appearance. Analytical work is compromised by corrosion products falling from hoods and cabinets, poor lighting and lack of adequate space.

Laboratory Information Management Systems (LIMS): The LIMS will provide a high capability level of electronic data management for all work done at Hanford laboratories. This will allow information documenting the laboratory state of readiness to be attached to specific sample data (i.e., analysis request, laboratory analysis raw data) to provide summary laboratory reports.

LIMS upgrades are required to meet customer and quality requirements. Enhancements to meet the additional requirements imposed by RCRA/CERCLA

protocols is also required.

Project Engineering: This provides the necessary project engineering support for ongoing construction projects including initial engineering studies, and functional design criteria and conceptual design reports for outyear projects.

Productivity Improvements: The objective of process and productivity improvements are to 1) increase productivity; 2) improve data quality; 3) reduce human exposure to hazardous materials and environments; and 4) eliminate tedious manipulative tasks.

The Laboratory Process Improvement Program is a grass roots program providing funds and assistance in implementing ideas formulated by Hanford Analytical Services (HAS) personnel to improve their jobs. The goal of the program is to improve the over-all productivity of the laboratory through small improvements in the individual jobs of each HAS member.

CONCERNS AT PLANNING LEVEL:

None

REQUIRED TECHNICAL DEVELOPMENT:

The laboratories use state-of-the-art, commercially available analytical equipment. Some analytical methods development is necessary on a case-by-case basis. Such effort is covered in program-specific ADS's.

protocols is also required

Project Engineering: This provides the necessary project engineering support for ongoing construction projects including initial engineering studies, and functional design criteria and conceptual design reports for outyear projects.

Productivity Improvements: The objective of process and productivity improvements are to 1) increase productivity; 2) improve data quality; 3) reduce human exposure to hazardous materials and environments; and 4) eliminate tedious manipulative tasks.

The Laboratory Process Improvement Program is a grass roots program providing funds and assistance to implement the ideas formulated by Laboratory Analytical Services. The goal of the program is to improve the quality of work life in the laboratory through small improvements in the work environment.

THIS PAGE INTENTIONALLY LEFT BLANK

CONCERNS AT PLANNING LEVEL

None

REQUIRED TECHNICAL DEVELOPMENT

The laboratories use state-of-the-art commercially available analytical equipment. Some analytical methods development is necessary on a case-by-case basis. Such effort is covered in program-specific ADP.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7100 ADS SUF: 0 SUBACTIVITY: ML

SUBACTIVITY TITLE: FIELD ANALYTICAL SERVICES

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SITE SUPPORT-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE	EW3130030	197
	TOTAL	197
	DIRECT FTE	1

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	0	0		197	197	281	290	299	308
	TOTAL	0	0	0	197	197	281	290	299	308
	DIRECT FTE	0	0	0	1	1	2	2	2	2

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	0	0		2460	2460	2534	2610	2689	2769
	TOTAL	0	0	0	2460	2460	2534	2610	2689	2769
	DIRECT FTE	0	0	0	17	17	17	17	17	17

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

Field Analytical Services (FAS), formerly called Sampling and Mobile Laboratories, is operated by Westinghouse Hanford Company (WHC) to conduct non-routine RCRA/CERCLA protocol sampling throughout the Hanford Site.

Subactivity ML provides for routine activities to operate and maintain the FAS facilities and equipment in a ready-to-serve mode beginning in FY 1996 in the Planning case. Minimal support (\$200K for a manager and some clerical help) is included in the target.

READY-TO-SERVE - Is defined as having the capability to conduct RCRA/CERCLA protocol sampling, but not the capacity to provide production scale sampling. Funding for production sampling is provided by the specific program requiring sampling support. Note that in FY 1994-1995 total funding for FAS operations, including ready-to-serve funding, is provided by the programs. In the Planning Case for FY 1996 the programs will pay only for the sampling costs while base funding for ready-to-serve activities will be provided by this ADS. However, the target contains only minimal support for FY 1996 (\$200K for a manager and some clerical support).

The following workscope is included in ready-to-serve base funding:

Maintain the legal documentation for all sampling activities that FAS conducts.

Coordinate the logistics of sampling between FAS, its programmatic customer base, and other groups as may be required.

Prepare or assist in the preparation of sampling and analysis plans (SAP's) for field and/or facility operations.

Prepare and maintain comprehensive procedures for all aspects of protocol sampling including but not limited to the control of sampling equipment, materials, supplies, sampling procedures, control of documentation, chain of custody, etc.

Provide a comprehensive training program for scientific technicians (samplers) to ensure that all sampling requirements are being met with the utmost integrity.

Maintain an inventory of EPA protocol clean bottles and sampling equipment.

Provide for preventive and repair maintenance of the fleet of sampling trucks and trailers.

PRODUCTION SAMPLING - Sampling services provided by FAS include, but are not limited to, the sampling of soil, water, gas, vapor, oil, sludge, tar, concrete, facility effluents, filters (including HEPA), asbestos, and other such media. Samples are taken from wells, bore holes, (including drilling into cribs, ponds, and ditches), drums (including bulging drums), tanks, and from various sources from within facilities such as water lines, sewer

lines and duct work. These costs will be paid for by the programmatic customers.

FIELD ANALYSES - Some analyses, such as pH, Chlorine, Hydrogen Peroxide, etc., can be performed in the field. These will be paid for by the programs

RELATED ACTIVITIES NARRATIVE:

This subactivity is integrated with all laboratory operations in ADS 7100.

KEY ASSUMPTIONS:

This subactivity will be receive base funding starting in FY 1996 at the Planning level.

ERMC impacts have not been considered.

Field Analytical Services will be required in order to conduct non-routine RCRA/CERCLA protocol sampling throughout the Hanford Site.

ACTIVITY BY PRIORITY:

This subactivity is considered priority A2.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

None.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Unit Costs have been developed for much of FAS activity.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:

None.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Minimal support for the FAS manager, clerical support and supplier are funded at the target level. It is proposed at the Planning Level that FAS ready-to-serve activities become part of the base funding starting in FY 1996. However, given the current target level (escalation growth only), this activity cannot be fully supported.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

All activities described in the technical scope description above are supported in the planning level, but not in the target level, for these years.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

29 CFR 120, 'Hazardous Site Work and Emergency Response'

29 CFR 1910.1200, 'OSHA: Hazard Communication'

40 CFR 61, Subpart H, 'National Emission Standards for Radionuclides Emissions from DOE Facilities'

40 CFR 302, 'EPA Designation, Reportable Quantities, and Notification Requirements for Hazardous Substances Under CERCLA'

40 CFR 370, 'Hazardous Chemical Reporting: community Right to Know'

49 CFR 100-199, 'Transportation'

Comprehensive Environmental Response, Compensation, and Liability Act

Hanford Federal Facility Agreement and Consent Order Tri-party Agreement

DOE 5481.1B Safety Analysis and Review System

REGULATORY KEY ISSUES:

None.

COMP/PROG BENEFITS AT PLANNING LEVEL:

The FAS organization conducts sampling and special analytical services to all major program at the Hanford Site. The support structure existing within the FAS organization is applicable to all programs and jobs conducted. Base funding will support the administration activities associated with FAS.

CONCERNS AT PLANNING LEVEL:

None.

REQUIRED TECHNICAL DEVELOPMENT:

FAS consists of highly trained sampling technicians and sampling scientists. There are very few of these personal resources on the Hanford site. To become a fully trained sampler requires many months of on-the-job training as well as formal classroom training. The lead time to prepare a fully competent sampler to work independently in the field is in excess of 6 months.

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7100 ADS SUF: 0 SUBACTIVITY: PC

SUBACTIVITY TITLE: PRODUCTIVITY CHALLENGE

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SITE SUPPORT-NFP

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW3130030		TOTAL
TOTAL		-5141
DIRECT FTE		-5141
		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3130030		0	-6911		-6435	-6435	-9367	-12757	-6499	-6640
TOTAL		0	-6911	0	-6435	-6435	-9367	-12757	-6499	-6640
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3130030		0	-6911		-6435	-6435	-9367	-12757	-6499	-6640
TOTAL		0	-6911	0	-6435	-6435	-9367	-12757	-6499	-6640
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

The 1706-KE, Environmental Engineering Demonstration Laboratory (EEDL) is located inside the 100K area and is operated by Westinghouse Hanford Company (WHC). The mission of the 1706KE lab is: the C-018 Hot Pilot Plant; General Pilot Plant Lab; and a Research Development & Demonstration Facility for treatability studies under a WAC treatability exclusion for dangerous waste. It will also do major high gradient magnetic separation work to support TWRS.

The 2703E, Chemical Engineering Laboratory (CEL) provides: 1) non-radioactive testing of engineering mockups, 2) pilot scale effluent/waste processing and 'proof-of-concept' development, 3) preparation of non-radioactive surrogate test materials and 4) development/evaluation of proposed waste forms (using surrogate waste materials).

These laboratories are known as the auxiliary laboratories.

This subactivity provides for the routine operation, maintenance, and repair of all facilities and equipment associated with the auxiliary labs in a ready-to-serve mode.

FACILITY WORK SCOPE INCLUDES:

- o Building operations and maintenance
- o Equipment maintenance
- o Health physics support, engineering support, quality assurance support, maintenance support and other effort required to provide a safe, efficient, ready-to-serve facility.
- o Any other activity required for the safe, efficient operation of the auxiliary labs in a ready to serve mode.

The auxiliary labs consist of 1706KE (Environmental Demonstration Laboratory [EEDL]) and M0-907; and the 2703E (Chemical Engineering Laboratory [CEL]) and M0-384, M0-922, M0-387, 2712E, and electrical craft support trailer.

Life cycle replacement of analytical equipment as it wears out and/or becomes obsolete is provided by this subactivity. It is estimated that ten to twenty percent of the capital assets will need replacement each year (five to ten year life cycle).

Related activities narrative: 222's Facility Operation (Subactivity BB); WSCF Facility Operation (Subactivity CC); 325 Laboratory Facility (Subactivity DD); and Laboratory Upgrades (Subactivity EE).

RELATED ACTIVITIES NARRATIVE:

N/A

KEY ASSUMPTIONS:

- 1) Upgrades will be funded through this subactivity will be paid through this subactivity.
- 2) ERC impacts have not been considered.
- 3) Funding level assumes both facilities will be maintained in a state of readiness to support the environmental mission through out the specified planning period.

ACTIVITY BY PRIORITY:

Priority A2: ready-to-serve operation of the auxiliary lab complex.

Priority B1: upgrades to the auxiliary lab complex.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

Annual communications IP chart
ALARA/waste minimization chart

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

The auxiliary labs will operate to provide a ready-to-serve facility for FY 1994. The activities for ready-to-serve are the same as those included in the technical description above. This subactivity includes life cycle replacement of analytical equipment as it wears out and/or becomes.

FY 1994 does not support auxiliary laboratory upgrades.

The auxiliary labs will operate to provide a ready-to-serve facility (capability level) for FY 1994, the activities for ready-to-serve are the same as those included in the technical description above. This subactivity includes life cycle replacement of analytical equipment as it wears out and/or becomes obsolete.

The target level does not fully support upgrades to the auxiliary labs. This impacts on OSHA and WHC safety requirements.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

The auxiliary labs will operate to provide ready-to-serve for FY 1996. This subactivity includes life cycle replacement of analytical equipment as it wears out and/or becomes obsolete.

The target level funding does not fully support upgrades to the auxiliary labs. This impacts on OSHA and WHC safety requirements.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

The auxiliary labs will be in full operation in FY 1997. The auxiliary laboratory will operate to provide a ready-to-serve facility for FY 1997. The activities for ready-to-serve are the same as those included in the technical scope description above. This subactivity includes life cycle replacement of analytical equipment as it wears out and/or becomes obsolete.

The target case does not fully fund the auxiliary lab upgrades.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID TITLE

PLANNING

TARGET

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

The auxiliary lab will operate to provide a ready-to-serve facility for FY 1997-FY 2000. The activities for ready-to-serve are the same as those included in the technical scope description above. This subactivity includes life cycle replacement of analytical equipment as it wears out and/or becomes obsolete.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

Continuity of operation is a primary driver of this subactivity. Analysis of facility effluent streams (i.e.) Is required to support all operating facilities.

29 CFR 1919.120 : Hazardous waste operations and emergency response.

40 CFR 254.13 : General waste analysis.

WAC 173-303-300 : General waste analysis.

DOE Order 4580 : Conduct of operations (sub-paragraphs 18, 19, & 20).

DOE Order 5480.2 : Training

DOE Order 5480.3 : Safety requirements for packaging and transportation of hazardous materials.

REGULATORY KEY ISSUES:

N/A

COMP/PROG BENEFITS AT PLANNING LEVEL:

The planning level for FY 1995 and beyond will provide full ready-to-serve capability to support Hanford missions. This includes maintaining the facility to support laboratory capacity. The subactivity also includes upgrades which will bring the facilities in line with OSHA and safety requirements.

CONCERNS AT PLANNING LEVEL:

CEL: No facility enhancements (e.g., Resurfacing lab floor, and pouring an outdoor lay down pad for empty drum storage, etc. Installing necessary security upgrades to support the emerging changes in security coverage by patrol, no pipe coloring.

EEDL: Insufficient administration staff, insufficient maintenance support for building improvements, insufficient HPT support to cover routine radiological activities (surveys, RWP updates, equipment calibration, equipment procurement).

Auxiliary labs require a sound baseline budget to maintain systems and facilities in a safe and environmentally compliant manner.

The auxiliary labs have routinely submitted specific support staff requirements. Authorized budget has consistently fallen below that required to properly fund staff for a ready-to-serve status (in accordance

with WHC, state and federal requirements.

REQUIRED TECHNICAL DEVELOPMENT:

This laboratory uses state-of-the-art, commercially available analytical instrumentation. Some of this equipment represents the 'cutting edge' of chemical analysis technology. These 'cutting edge' pieces of instrumentation are generally used for the development of new analytical methodology aimed at (1) improving the analytical data obtained, (2) reducing the sample turn around time, (3) reducing sample analysis costs, and (4) developing an analytical capability that did not previously exist. For situations in which methods development activities are directly tied to specific programmatic requirements, the development work is funded by a program-specific ADS. Base funding provides a limited amount of analytical methods that are/will be used by a broad spectrum of Hanford programs and are not uniquely linked to a specific program.

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7100 ADS SUF: 1 SUBACTIVITY: AA

SUBACTIVITY TITLE: 222-S HVAC & ELECTRICAL UPGRADE (90-D-171)

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 9200 TEC: 9200

DESCRIPTION: RICHLAND SITE SUPPORT-NFP

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996 TOTAL
OE EW3130030		0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL BUD	LEGAL	ESH	TOTAL				
OE EW3130030	110	0	0		0	0	0	0	0
TOTAL	110	0	0	0	0	0	0	0	0
DIRECT FTE	1	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL BUD	LEGAL	ESH	TOTAL				
OE EW3130030	110	0	0		0	0	0	0	0
TOTAL	110	0	0	0	0	0	0	0	0
DIRECT FTE	1	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

NO NARRATIVE WAS PREPARED FOR THIS TDD. IT WOULD BE REDUNDANT AS THIS SUFFIX CONTAINS ONLY ONE SUB-ACTIVITY.

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7100-01-0005	Complete 222-S HVAC and Electrical Upgrades (90-D-171)	2/01/94	2/01/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7100 ADS SUF: 2 SUBACTIVITY: AA

SUBACTIVITY TITLE: RADIOACTIVE WASTE TRANSFER LINES (93-D-181)

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: 93-D-181 TPC: 17864 TEC: 17366

DESCRIPTION: RICHLAND SITE SUPPORT-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
B&R		TOTAL
OE	EW3130030	0
LI	39EW31303	0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	190	203	99		99	0	0	0	0
LI	39EW31303	2766	8900	5000		5000	0	0	0	0
TOTAL		2956	9103	5099	0	5099	0	0	0	0
DIRECT FTE		2	2	1	0	1	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	190	203	99		99	0	0	0	0
LI	39EW31303	2766	8900	5000		5000	0	0	0	0
TOTAL		2956	9103	5099	0	5099	0	0	0	0
DIRECT FTE		2	2	1	0	1	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

NO NARRATIVE WAS PREPARED FOR THIS TDD. IT WOULD BE REDUNDANT TO THE GENERAL NARRATIVE OF THIS SUFFIX WHICH CONTAINS ONLY ONE SUBACTIVITY.

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

7100-02-0010 Complete construction of
Radioactive Waste Lines (93-D-181)

2/29/96

2/29/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7100 ADS SUF: 3 SUBACTIVITY: AA

SUBACTIVITY TITLE: 219-S SECONDARY CONTAINMENT UPGRADE (95-D-407)

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: 95-D-407 TPC: 3012 TEC: 2600

DESCRIPTION: RICHLAND SITE SUPPORT-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996 TOTAL
	B&R	
OE	EW3130030	208
LI	39EW31303	600
TOTAL		808
DIRECT FTE		2

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
			RL	BUD	LEGAL	ESH	TOTAL			
	B&R									
OE	EW3130030	37		78	208		208	83	0	0
LI	39EW31303	0		2000	600		600	0	0	0
TOTAL		37		2078	808	0	808	83	0	0
DIRECT FTE		0		1	2	0	2	1	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
			RL	BUD	LEGAL	ESH	TOTAL			
	B&R									
OE	EW3130030	37		78	208		208	83	0	0
LI	39EW31303	0		2000	600		600	0	0	0
TOTAL		37		2078	808	0	808	83	0	0
DIRECT FTE		0		1	2	0	2	1	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

NO NARRATIVE WAS PREPARED FOR THIS TDD. IT WOULD BE REDUNDANT TO THE GENERAL NARRATIVE OF THIS SUFFIX WHICH CONTAINS ONLY ONE SUBACTIVITY.

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7110 ADS SUF: 0 SUBACTIVITY: NA

SUBACTIVITY TITLE: 222-S OPERATIONS SUPPORT FACILITY

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 270653 TEC: 258950

DESCRIPTION: RICHLAND SITE SUPPORT-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996 TOTAL
	B&R	
OE	EW3130030	0
LI	39EW31303	0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
			RL	BUD	LEGAL	ESH	TOTAL			
	B&R									
OE	EW3130030	0	0	0			0	272	110	113
LI	39EW31303	0	0	0			0	2000	6000	7050
TOTAL		0	0	0	0	0	0	272	2110	6113
DIRECT FTE		0	0	0	0	0	0	2	1	1

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
			RL	BUD	LEGAL	ESH	TOTAL			
	B&R									
OE	EW3130030	0	0	166			166	41	110	113
LI	39EW31303	0	0	0			0	2000	8000	5050
TOTAL		0	0	166	0	0	166	41	2110	8113
DIRECT FTE		0	0	1	0	0	1	0	1	1

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

Project W-170, 222-S Operational Support Facility, will (1) provide a 78,000-square-foot (approximate) support facility and a new parking area for the 222-S Laboratory Facility, (2) remove mobile offices, (3) move 200-West Area perimeter fencing, and (4) reroute 10th street to allow placement of the new facility. It will consolidate the support personnel from eight separate, remote facilities into one building. Consolidating support personnel will improve efficiency, enhance personnel interface, reduce energy consumption and maintenance costs, and improve space utilization. The support complex will provide permanent space for personnel who perform administrative, planning, and quality assurance functions and who generate analytical data packages and reports that provide the basis for decisions for the Hanford Site environmental cleanup mission over the next 30 years.

Currently, facilities for support personnel consist of one wood-framed, 48-year-old building (2704-S) and seven temporary mobile office trailers. Most of the temporary facilities were used at other locations before being installed at the 222-S Complex. Conditions are overcrowded and have necessitated the placement of personnel at remote locations until suitable facilities can be found. These temporary facilities and the 48-year-old structure will not provide adequate office space for the 30-plus year duration of the new mission.

RELATED ACTIVITIES NARRATIVE:

ADS 7100-0-BB contains funding for ready-to-serve operation of the 222-S Laboratory.

ADS 7100-0-EE contains upgrades to 222-S and startup of the 222-S Hot Cell Addition.

ADS 2310-1 contains funding for construction of the Hot Cell Addition (W-041H).

KEY ASSUMPTIONS:

The 222-S Laboratory's role in the Hanford cleanup mission continues to increase (primarily support to the Environmental Restoration and Remediation (ER) and to the Tank Waste Remedial System (TWRS) programs).

The staff to support these programs is projected to increase significantly by FY 1997.

ACTIVITY BY PRIORITY:

This activity is priority B1.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

Completed the Engineering Study and the Functional Design Criteria for Project W-170, 222-S Operational Support Facility.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:
 FY 1994 Milestones:

Milestone ID	Title	Planning	Target
--------------	-------	----------	--------

There is no activity in FY 1994 for Project W-170.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:
 FY 1995 Milestones:

Milestone ID	Title	Planning	Target
--------------	-------	----------	--------

	Complete CDR Project W-170, 222-S Operational Support Facility	09/30/95	
--	---	----------	--

Project W-170, 222-S Operational Support Facility, is not supported at the target level.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:
 FY 1996 Milestones:

Milestone ID	Title	Planning	Target
--------------	-------	----------	--------

Project W-170, 222-S Operational Support Facility, is not supported at the target level.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

7110-00-0025	COMPLETE CONSTRUCTION OF 222-S OPERATIONS SUPPORT FACILITY	4/30/00	4/30/00
--------------	---	---------	---------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:
 Outyears Milestones:

Milestone ID	Title	Planning Target
	Complete Definitive Design, Project W-170, 222-S Operational Support Facility	12/30/99
	Complete Construction, Project W-170, 222-S Operational Support Facility	01/30/00

Project W-170, 222-S Operational Support Facility is not supported at the target level.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

TPA Milestone M-10-00: Single Shell Tanks

REGULATORY KEY ISSUES:

NONE

COMP/PROG BENEFITS AT PLANNING LEVEL:

FY 1995 - Complete conceptual design report.

FY 1997 - Project validation

FY 1998 - Begin definitive design and construction

FY 2000 - Complete construction

CONCERNS AT PLANNING LEVEL:

NONE

REQUIRED TECHNICAL DEVELOPMENT:

NONE

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7110 ADS SUF: 0 SUBACTIVITY: NB

SUBACTIVITY TITLE: WSCF OPERATIONS SUPPORT FACILITY

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 270653 TEC: 258950

DESCRIPTION: RICHLAND SITE SUPPORT-NFP

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996 TOTAL
OE EW3130030		0
LI 39EW31303		0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130030		0	0	0		0	0	110	113	117
LI 39EW31303		0	0	0		0	0	1900	2000	0
TOTAL		0	0	0	0	0	0	2010	2113	117
DIRECT FTE		0	0	0	0	0	0	1	1	1

PLANNING CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130030		0	0	166		166	41	110	113	117
LI 39EW31303		0	0	0		0	0	1900	2000	0
TOTAL		0	0	166	0	166	41	2010	2113	117
DIRECT FTE		0	0	1	0	1	0	1	1	1

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

Project W-301, Waste Sampling and Characterization Facility (WSCF) Operational Support Facility, will provide a 24,000-square-foot (approximate) support facility for the WSCF. The support facility will provide permanent space for the staff. The staff provides (1) administration and planning, (2) quality assurance, (3) and the interpretation, validation, data reduction and compilation required to prepare the reports and data packages that are the basis for decisions for the Hanford Site environmental cleanup mission over the next 30 years.

The WSCF Laboratory does not provide sufficient office space for personnel to provide data package preparation, analysis of laboratory data, or administrative and support functions. Personnel will be required to constantly travel between WSCF and the proposed temporary facilities, which will consume productive time. Two 10-wide trailers will provide temporary space until the new permanent facility is operational.

RELATED ACTIVITIES NARRATIVE:

ADS 7100-0-CC contains funding for startup and operations of the WSCF Laboratory.

KEY ASSUMPTIONS:

WSCF will start up as planned on April 30, 1994.

ACTIVITY BY PRIORITY:

This activity is priority B1.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

Completed the Engineering Study and the Functional Design Criteria for Project W-301, WSCF Operational Support Facility.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET

CURRENT YEAR (FY 1994) TASK NARRATIVE:
 FY 1994 Milestones:

Milestone ID	Title	Planning	Target
--------------	-------	----------	--------

There is no activity in FY 1994 for Project W-170.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:
 FY 1995 Milestones:

Milestone ID	Title	Planning	Target
--------------	-------	----------	--------

	Complete CDR Project W-301, WSCF Operational Support Facility	09/30/95	
--	--	----------	--

Project W-301, WSCF Operational Support Facility, is not supported at the target level.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE:
 FY 1996 Milestones:

Milestone ID	Title	Planning	Target
--------------	-------	----------	--------

Project W-301, WSCF Operational Support Facility, is not supported at the target level.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET

7110-00-0030	COMPLETE CONSTRUCTION OF WSCF OPERATIONS SUPPORT FACILITY	1/30/00	1/30/00
--------------	--	---------	---------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:
 Outyears Milestones:

Milestone ID	Title	Planning	Target
	Complete Definitive Design, Project W-301, WSCF Operational Support Facility	12/30/99	
	Complete Construction, Project W-301, WSCF Operational Support Facility	01/30/00	

Project W-301, WSCF Operational Support Facility is not supported at the target level.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

TPA Milestone M-17-00: Treated Effluent Facilities

REGULATORY KEY ISSUES:

NONE

COMP/PROG BENEFITS AT PLANNING LEVEL:

FY 1995 - Complete conceptual design report.

FY 1997 - Project validation

FY 1998 - Begin definitive design and construction

FY 2000 - Complete construction

CONCERNS AT PLANNING LEVEL:

NONE

REQUIRED TECHNICAL DEVELOPMENT:

NONE

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVER: TPA Milestone M-12-00 - Transport Efficacy Factor

REGULATORY KEY ISSUES: NONE

CONSIDER BENEFITS AT PLANNING LEVEL: 1995 - Complete conceptual design report

1997 - Project set design

THIS PAGE INTENTIONALLY LEFT BLANK

1998 - begin definitive design

2000 - complete construction

CONSIDER AT PLANNING LEVEL: NONE

RELEVANT TECHNICAL DEVELOPMENT: NONE

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7110 ADS SUF: 0 SUBACTIVITY: NE

SUBACTIVITY TITLE: TRANSURANIC WASTE ANALYSIS LABORATORY (TWAL)

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 270653 TEC: 258950

DESCRIPTION: RICHLAND SITE SUPPORT-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996 TOTAL
B&R		
OE	EW3130030	0
LI	39EW31303	0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	0	0	0		0	0	122	126	1600
LI	39EW31303	0	0	0		0	0	0	0	0
TOTAL		0	0	0	0	0	0	122	126	1600
DIRECT FTE		0	0	0	0	0	0	1	1	12

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	0	0	0		0	0	122	126	1600
LI	39EW31303	0	0	0		0	0	0	0	0
TOTAL		0	0	0	0	0	0	122	126	1600
DIRECT FTE		0	0	0	0	0	0	1	1	12

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

Project W-XXX, Transuranic Waste Analysis Laboratory (TWAL) entails the design and construction of a completely self supporting analytical laboratory with associated infrastructure at the Hanford Site, located in the Fuels Materials Examination Facility (FMEF). The Hanford TWAL will provide the capability to prepare samples and perform analyses on wastes that contain both high levels of Transuranic (TRU) materials and perform analyses on wastes that contain hazardous chemical constituents. Analyses that will be performed include radiological determinations as well as EPA required analyses as specified in Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and other environmental programs.

RELATED ACTIVITIES NARRATIVE:

ADS 2220 WRAP I

ADS 2230 WRAP II

ADS 2250 Retrieval

KEY ASSUMPTIONS:

WRAP Facilities funded and will meet the TPA milestone.

ACTIVITY BY PRIORITY:

This project is priority B1.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

None.

SCHEDULE INFORMATION

FY 1994 MILESTONES:
MILESTONE ID TITLE

PLANNING TARGET

CURRENT YEAR (FY 1994) TASK NARRATIVE:
FY 1994 Milestones:

Milestone ID	Title	Planning	Target
HAS-94-013	Complete Engineering Study, Project W-XXX, TWAL		3/31/94

Complete the engineering study and start the functional design criteria for Project W-XXX, Transuranic Waste Analytical Laboratory.

FY 1995 MILESTONES:
MILESTONE ID TITLE

PLANNING TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:
FY 1995 Milestones:

Milestone ID	Title	Planning	Target
	Complete Functional Design Criteria, Project W-XXX, TWAL	03/30/95	
	Begin Conceptual Design Review, Project W-XXX, TWAL	07/30/95	

Project W-XXX, TWAL, is not supported at the target level.

FY 1996 MILESTONES:
MILESTONE ID TITLE

PLANNING TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE:
FY 1996 Milestones:

Milestone ID	Title	Planning	Target
	Complete Conceptual Design Review, Project W-XXX, TWAL	01/30/97	

Project W-XXX, TWAL, is not supported at the Target level.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:
Outyears Milestones:

Milestone ID	Title	Planning	Target
	Begin definitive design and construction	01/98	
	Complete construction	01/30/2001	

Project W-XXX, TWAL, is not supported at the Target level.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

M-18 - WRAP I

M-19 - WRAP Module II

REGULATORY KEY ISSUES:

WIPP waste acceptance criteria needs to be defined.

COMP/PROG BENEFITS AT PLANNING LEVEL:

FY 1995 - Complete Functional Design Criteria

FY 1997 - Complete Conceptual Design Report and Project Validation

FY 1998 - Begin definitive design and construction

FY 2001 - Complete construction

CONCERNS AT PLANNING LEVEL:

None

REQUIRED TECHNICAL DEVELOPMENT:

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7110 ADS SUF: 0 SUBACTIVITY: NF

SUBACTIVITY TITLE: ACL OPERATIONS SUPPORT FACILITY UPGRADE & RLWS REPLACEMENT

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 270653 TEC: 258950

DESCRIPTION: RICHLAND SITE SUPPORT-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
B&R		TOTAL
OE	EW3130030	0
LI	39EW31303	0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	0	300	0		0	200	200	200	0
LI	39EW31303	0	0	0		0	2500	6000	2500	0
TOTAL		0	300	0	0	0	2700	6200	2700	0
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	0	300	50		50	200	200	200	0
LI	39EW31303	0	0	0		0	2500	6000	2500	0
TOTAL		0	300	50	0	50	2700	6200	2700	0
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

ACL OPERATIONS SUPPORT FACILITY UPGRADE AND RLWS REPLACEMENT (D450)

The 325 Building is the key 300 Area facility for the Hanford Waste Tank Characterization and the Hanford Radioactive Operable Unit Characterization. It is a critical component in the future development of these programs. This project will remove the portions of the existing Radioactive Liquid Waste System (RLWS) line that serve the 325 'B' Hot Cell Complex. It will replace these portions with an upgraded, properly shielded RLWS line and will develop a secondary method for removal of radioactive liquid from the 'B' Cell Complex. In addition, this project will reconfigure and modify the facility to provide separation of the radiation control area from non-radiation control areas, handicapped accessibility, and increased office space. It modifies access to offices now only accessible through radiological controlled areas.

Radioactive liquid waste that is generated in the 'B' Hot Cell Complex (Shielded Analytical Laboratory) is appropriately treated and then disposed of via the RLWS line, which runs directly through the basement (including hallways and laboratories) of the 325 Building. From the ALARA standpoint for worker safety, it is imperative that this waste line is relocated. From the standpoint of continuity in programmatic operation, it is imperative that a backup capability be available.

The 325 Building is out of compliance with DOE regulations in that the building configuration requires existing staff to access their office through a radiation control area. This increases staff exposure to possible hazards during their daily work routine. programmatic commitments to the Hanford waste Tank Characterization efforts anticipate that the sample analysis loading to this building will increase by a factor of four during the FY 1993 - FY 1998 time frame. The staff loading of 325 Building exceeds full capacity. There must be a concurrent increase in analytical staff, and office space to house them, in order to accomplish increases in analytical capacity.

RELATED ACTIVITIES NARRATIVE:

ADS 7100-0-DD, ACL Operations, contains funding for upgrading, operating, and maintaining the ACL.

ADS 7110-0-NH contain other Line Items associated with the ACL.

KEY ASSUMPTIONS:

The project is required to meet programmatic capacity demands for sample analysis projections.

ACTIVITY BY PRIORITY:
This project is priority B2.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:
NONE

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

CURRENT YEAR (FY 1994) TASK NARRATIVE:
There is no activity on this project in FY 1994.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:
Complete Engineering Study and FDC.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:
Conceptual Design Report will be prepared.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7110-00-0005	COMPLETE ACL OPS SUPPORT FAC UPGRADE & RLWS REPLACEMENT	9/30/99	9/30/99

OUTYEAR (FY 1997-2000) TASK NARRATIVE:
The project will go through the validation process in FY 1996.

Definitive design will begin in FY 1997.

Construction will begin in late FY 1997 and will be completed in FY 2000.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:****REGULATORY KEY ISSUES:**
NONE**COMP/PROG BENEFITS AT PLANNING LEVEL:**

An Engineering Study and a Functional Design Criteria (FDC) will be prepared in FY 1994.

The Conceptual Design Report (CDR) will be prepared in FY 1995.

The project will go through the validation process in FY 1996. Definitive design will begin in FY 1997; construction will begin in late 1997 and will be completed in FY 1999.

CONCERNS AT PLANNING LEVEL:
NONE**REQUIRED TECHNICAL DEVELOPMENT:**
None

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7110 ADS SUF: 0 SUBACTIVITY: NG

SUBACTIVITY TITLE: ALTERNATIVE RADIOACTIVE LIQUID WASTE DISPOSAL SYSTEM 325 BL

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 270653 TEC: 258950

DESCRIPTION: RICHLAND SITE SUPPORT-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996 TOTAL
B&R		
OE	EW3130030	0
LI	39EW31303	0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	0	100	300		300	0	200	200	0
LI	39EW31303	0	0	0		0	0	4000	6000	0
TOTAL		0	100	300	0	300	0	4200	6200	0
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	0	100	300		300	0	200	200	0
LI	39EW31303	0	0	0		0	0	4000	6000	0
TOTAL		0	100	300	0	300	0	4200	6200	0
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7110-00-0010	COMPLETE CONSTRUCTION OF ALTERNATIVE RADIOACTIVE LIQUID	9/30/00	9/30/00

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7110 ADS SUF: 0 SUBACTIVITY: NH

SUBACTIVITY TITLE: 325 BLD RENOVATION OF CHEMICAL PROCESS SYSTEMS SECTION LAB

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 270653 TEC: 258950

DESCRIPTION: RICHLAND SITE SUPPORT-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996 TOTAL
	B&R	
OE	EW3130030	0
LI	39EW31303	0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	0	0	0		0	450	200	200	200
LI	39EW31303	0	0	0		0	0	2000	8000	4000
TOTAL		0	0	0	0	0	450	2200	8200	4200
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	0	0	350		350	50	200	200	200
LI	39EW31303	0	0	0		0	0	2000	8000	4000
TOTAL		0	0	350	0	350	50	2200	8200	4200
DIRECT FTE		0	0	0	0	0	0	1	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

Project W-XXX, ACL RENOVATION OF CHEMICAL PROCESS SYSTEMS SECTION LABORATORIES

With the completion of the PNL Analytical Chemistry Upgrade Program at the end of FY95 or FY96, all of the 40 year-old analytical chemistry facilities within the 324 Building will have been modernized. However, there will still be approximately 7000 sq. ft. of obsolete laboratory space on the first floor of the 325 Building. These laboratories are a part of the Chemical Process Systems Section and are devoted to (1) tank core characterization, (2) tank safety developmental studies, and (3) nuclear waste treatment/remediation process development activities. These labs represent a vital part of the waste remediation capabilities at PNL and Hanford and must be modernized if they are to continue to support the Hanford mission. This project will fund the modernization of these laboratories.

RELATED ACTIVITIES NARRATIVE:

ADS 7100-0-DD, ACL Operations, contains funding for upgrading, operating and maintaining the ACL.

ADS 7110-0-NF and -NG contain other Line Items associated with the ACL.

KEY ASSUMPTIONS:

Programmatic demands will require this laboratory expansion.

ACTIVITY BY PRIORITY:

This project is a priority B2.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

NONE

SCHEDULE INFORMATION

TARGET PLANNING

FY 1994 MILESTONES
MILESTONE ID TITLE

CURRENT YEAR (FY 1994) TASK NARRATIVE
There is no activity on this project in FY 1994

TARGET PLANNING

FY 1995 MILESTONES
MILESTONE ID TITLE

BUDGET YEAR (FY 1995) TASK NARRATIVE
There is no activity on this project in FY 1995

TARGET PLANNING

FY 1996 MILESTONES
MILESTONE ID TITLE

PLANNING YEAR (FY 1996) TASK NARRATIVE
The conceptual engineering has been delayed one year to the current year

TARGET PLANNING

FY 1997-FY 2000 MILESTONES
MILESTONE ID TITLE

710-00-0015 COMPLETE CONSTRUCTION OF 325 BLDG
RENOVATION OF CHEM PROCESS SYS

OUTYEAR (FY 1997-2000) TASK NARRATIVE
An engineering study and functional design criteria will be prepared in FY 1997

The conceptual design report will be prepared in FY 1996. Validation in the project will occur in FY 1997; definitive design will occur in FY 1998. Construction will begin in late 1998 or early 1999 with construction expected to be completed by FY 2003.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

CURRENT YEAR (FY 1994) TASK NARRATIVE:

There is no activity on this project in FY 1993.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:

There is no activity on this project in FY 1994.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:

The conceptual engineering has been delayed one year at the Target level.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----
7110-00-0015	COMPLETE CONSTRUCTION OF 325 BLDG RENOVATION OF CHEM PROCESS SYS	9/30/00	9/30/00

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

An engineering study and functional design criteria will be prepared in FY 1996.

The conceptual design report will be prepared in FY 1996. Validation of the project will occur in FY 1997; definitive design will occur in FY 1998; construction will begin in late 1998 or early 1999 with construction expected to be completed by FY 2003.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

An Engineering Study and Functional Design Criteria (FDC) will be prepared in FY 1995.

The Conceptual Design Report (CDR) will be prepared in FY 1996. Validation of the project will occur in FY 1997; definitive design will occur in FY 1998; construction will begin in late 1998 or early 1999 with construction expected to be completed by FY 2002.

CONCERNS AT PLANNING LEVEL:

NONE

REQUIRED TECHNICAL DEVELOPMENT:

NONE

THIS PAGE INTENTIONALLY
LEFT BLANK

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7110 ADS SUF: 0 SUBACTIVITY: NK

SUBACTIVITY TITLE: LABORATORY STANDARDS FACILITY

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 270653 TEC: 258950

DESCRIPTION: RICHLAND SITE SUPPORT-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996 TOTAL
	B&R	
OE	EW3130030	0
LI	39EW31303	0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
	B&R									
OE	EW3130030	0	0	296		296	423	110	113	117
LI	39EW31303	0	0	0		0	0	1000	4000	0
TOTAL		0	0	296	0	296	423	1110	4113	117
DIRECT FTE		0	0	3	0	3	4	1	1	1

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
	B&R									
OE	EW3130030	0	0	166		166	41	110	113	117
LI	39EW31303	0	0	0		0	0	1000	4000	0
TOTAL		0	0	166	0	166	41	1110	4113	117
DIRECT FTE		0	0	1	0	1	0	1	1	1

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

Analytical Laboratory Standards are prepared at a variety of facilities at the Hanford Site. Some of these facilities, such as the 222-SA Facility, will not support planned laboratory operations for the required additional 30 years or are too small to support projected needs. An engineering study is planned to be completed in FY93 or early FY94 to evaluate current capabilities vs projected needs. Although options have yet to be developed, they will include renovation of one or more of the existing standards laboratories or construction of one or more new facilities. Because of this, all costs are rough order of magnitude (ROM) only.

RELATED ACTIVITIES NARRATIVE:

All 222-S, WSCF and 325 Laboratory base funding activities.

KEY ASSUMPTIONS:

Laboratory operations will be required to support programmatic needs in the future.

ACTIVITY BY PRIORITY:

Project W-XXX, Standards Laboratory is a priority B1.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

None

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:
FY 1994 Milestones

Milestone ID	Title	Planning	Target
	Complete Engineering Study, Project W-XXX, Standards Laboratory		03/30/94
	Start functional design criteria, W-XXX, Standards Laboratory		06/30/94

Complete Engineering Study and begin the Functional Design Criteria for Project W-XXX, Standards Laboratory.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:
FY 1995 Milestones

Milestone ID	Title	Planning	Target
	Complete Functional Design Criteria for Project W-XXX, Standards Laboratory	03/30/95	03/30/96
	Begin Conceptual Design Report for Project W-XXX, Standards Laboratory	05/01/95	06/01/96

Project W-XXX, Standards Laboratory is not supported at the target level.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:
FY 1996 Milestones

Milestone ID	Title	Planning	Target
--------------	-------	----------	--------

Complete Conceptual Design Report, Project W-XXX, Standards Laboratory 06/30/96 06/30/97

Complete Functional Design Project W-XXX, Standards Laboratory 03/30/96

Project W-XXX, Standards Laboratory is not fully supported at the target level.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7110-00-0045	COMPLETE CONSTRUCTION OF STANDARDS LAB FACILITY	9/30/00	9/30/00

OUTYEAR (FY 1997-2000) TASK NARRATIVE:
Outyears (FY97-FY00) Milestones

Milestone ID	Title	Planning	Target
	Project Validation	FY 1997	
	Begin Definitive Design and Construction	FY 1998	
	Complete Construction	FY 2000	

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

TPA Milestone M-10-00: Single Shell Tanks

TPA Milestone M-15-00: Operable Units

TPA Milestone M-17-00: Treated Effluent Facilities

REGULATORY KEY ISSUES:

None

COMP/PROG BENEFITS AT PLANNING LEVEL:

Complete FDC and begin CDR in FY 1995. Completion of CDR in FY 1996.
Project Validation in FY 1997. Begin Definitive Design and
construction in FY 1998.

CONCERNS AT PLANNING LEVEL:

None

REQUIRED TECHNICAL DEVELOPMENT:

None

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7110 ADS SUF: 0 SUBACTIVITY: NP

SUBACTIVITY TITLE: Waste Sampling Characterization Facility Upgrades

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 270653 TEC: 258950

DESCRIPTION: RICHLAND SITE SUPPORT-NFP

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996 TOTAL
OE EW3130030		0
LI 39EW31303		0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000	
		RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130030	0	0	0	0	0	0	715	42	113	117
LI 39EW31303	0	0	0	0	0	0	0	0	1000	4000
TOTAL	0	0	0	0	0	0	715	42	1113	4117
DIRECT FTE	0	0	0	0	0	0	6	0	1	1

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000	
		RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130030	0	0	0	608	0	608	171	42	113	117
LI 39EW31303	0	0	0	0	0	0	0	0	1000	4000
TOTAL	0	0	0	608	0	608	171	42	1113	4117
DIRECT FTE	0	0	0	5	0	5	1	0	1	1

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7110 ADS SUF: 0 SUBACTIVITY: NQ

SUBACTIVITY TITLE: 222-S ANCILLIARY EQUIPMENT ADDITION

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 270653 TEC: 258950

DESCRIPTION: RICHLAND SITE SUPPORT-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
B&R		TOTAL
OE	EW3130030	166
LI	39EW31303	0
TOTAL		166
DIRECT FTE		1

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	0	386	166		166	41	113	113	117
LI	39EW31303	0	0	0		0	0	4000	1000	0
TOTAL		0	386	166	0	166	41	4113	1113	117
DIRECT FTE		0	2	1	0	1	0	1	1	1

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	0	386	166		166	41	113	113	117
LI	39EW31303	0	0	0		0	0	1000	3000	1000
TOTAL		0	386	166	0	166	41	1113	3113	1117
DIRECT FTE		0	2	1	0	1	0	1	1	1

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

Project W-367, 222-S Ancillary Equipment Addition, will provide the 222-S Facility with an addition that will provide there separate functions. These functions will be manipulator repair and storage, equipment decontamination, and laundry storage capability. The manipulator repair and storage portion of the addition will provide storage for multiple manipulators being used within the 222-S facility. Also a decontamination hood and repair stations to accommodate 222-S mission will be provided. The equipment decontamination area shall provide spare for decontamination equipment, decontamination hoods, and storage capability for potentially contaminated equipment and cleaned equipment which is used regularly in the 222-S Facility. The laundry portion of the addition shall provide separate storage for clean and dirty laundry that is utilized by the facility personnel.

RELATED ACTIVITIES NARRATIVE:

ADS 7100-0-BB contains funding for ready-to-serve operation of the 222-S Laboratory.

ADS 7100-0-EE contains funding for upgrades to the 222-S and startup of the Project W-041H, 222-S Hot Cell Addition.

ADS 2310-1 contains funding for construction of the 222-S Hot Cell Addition (Project W-041H).

KEY ASSUMPTIONS:

Demands from programs driven by Tri-Party Agreement requirements will continue to expand as currently projected.

ACTIVITY BY PRIORITY:

Project W-367, 222-S Ancillary Equipment Addition, is priority B1.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

The engineering study for Project W-367, 222-S Ancillary Equipment Addition is complete.

SCHEDULE INFORMATION

FY 1994 MILESTONES:
MILESTONE ID TITLE

PLANNING TARGET

CURRENT YEAR (FY 1994) TASK NARRATIVE:
FY 1994 Milestones:

Milestone ID	Title	Planning	Target
	Complete FDC for Project W-367 222-S Ancilliary Equipment Addition (formerly W-XXX, 222-S Capacity Upgrades)		06/01/93

Complete Functional Design Criteria for Project W-367, 222-S Ancilliary
Equipment Addition.

FY 1995 MILESTONES:
MILESTONE ID TITLE

PLANNING TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:
FY 1995 Milestones:

Milestone ID	Title	Planning	Target
	Completion CDR for Project W-367, 222-S Ancilliary Equipment Addition		09/30/95

Complete Conceptual Design Report for Project W-367, 222-S Ancilliary
Equipment Addition.

FY 1996 MILESTONES:
MILESTONE ID TITLE

PLANNING TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE:
FY 1996 Milestones:

Milestone ID	Title	Planning	Target
	Continue conceptual engineering activities.		

FY 1997-FY 2000 MILESTONES:
MILESTONE ID TITLE

PLANNING TARGET

7110-00-0020	COMPLETE CONSTRUCTION 222-S ANCILLIARY EQUIPMENT ADDITION	----- 9/30/00	----- 9/30/00
--------------	--	------------------	------------------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Outyears (FY 97-FY 00) Milestones:

Milestone ID	Title	Planning	Target
	Validate Project W-367, 222-S Ancilliary Equipment Addition		FY 1997
	Begin definitive design and construction, Project W-367, 222-S Ancilliary Equipment Addition		FY 1998
	Complete construction, Project W-367, 222-S Ancilliary Equipment Addition		FY 2000

Complete project validation, definitive design, and construction for
Project W-367, 222-S Ancilliary Equipment Addition.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

- TPA Milestone M-01-00: Grout Campaigns
- TPA Milestone M-10-00: Single Shell Tanks
- TPA Milestone M-17-00: Treated Effluent Facilities

REGULATORY KEY ISSUES:

None.

COMP/PROG BENEFITS AT PLANNING LEVEL:

None.

CONCERNS AT PLANNING LEVEL:

None.

REQUIRED TECHNICAL DEVELOPMENT:

None.

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7250 ADS SUF: 0 SUBACTIVITY: AA

SUBACTIVITY TITLE: INTEGRATED RISK ASSESSMENT

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 0 TEC: 0

DESCRIPTION: PROGRAM CONTROL/SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW3110010		TOTAL
TOTAL		844
DIRECT FTE		5

TARGET CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
OE EW3110010		0	2479	2211		2211	5330	9416	4863	2884
TOTAL		0	2479	2211	0	2211	5330	9416	4863	2884
DIRECT FTE		0	14	12	0	12	30	32	26	14

PLANNING CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
OE EW3110010		0	5196	5918		5918	6181	5743	2875	2884
TOTAL		0	5196	5918	0	5918	6181	5743	2875	2884
DIRECT FTE		0	31	34	0	34	35	31	39	35

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

Integrated Risk Assessment Program (IRAP)---IRAP develops and implements methodology for conducting Hanford Site-wide risk assessments and also for estimating the associated uncertainties. These methods are applied to estimate health and safety risks to the public, workers, and ecosystem for three time periods, each projected into the future: at the current time, during remediation, and for the final Site endstate. Risks are produced by IRAP in a consistent manner across Hanford Site programs using existing data and results, when feasible, and developing new data and results, when necessary. The objective is to understand from a Site-wide perspective if and when cleanup is needed and to what extent. This analysis also includes understanding temporal and spatial aspects of risks associated with cleanup.

Specifically, risk results support Hanford Site-wide planning and management to accomplish the following: 1) set priorities and allocate budgets across programs, 2) renegotiate the Tri-Party Agreement (TPA) to focus on reducing risk and managing high-risk activities, 3) determine technology needs in support of cleanup.

Risk results are used to: 1) support communication to defend the Site budget to Congress and DOE headquarters, 2) develop an integrated cleanup management plan working with the public and other stakeholders, 3) communicate with the scientific community about knowledge gaps for cleanup planning and implementation (including for risk assessment), and 4) communicate with regulators about the cleanup plan for Hanford, factors that drive cleanup, and regulatory reforms needed for more efficient and effective cleanup.

On a three- to five-year cycle, risk assessments will be updated to include new information. In addition, results of risk assessments will be analyzed to understand areas in which additional information will reduce uncertainties in risk and elucidate decisions. Needed research to clarify conclusions will be recommended, and results will be input back into risk assessments to update them.

RELATED ACTIVITIES NARRATIVE:

Risk results produced by IRAP will be integral to five-year plans, to Systems Engineering activities, to public involvement activities, and to the Hanford Integrated Planning Program activities, particularly the risk management/risk-based decision making task. Results will substantially influence priorities and directions of these activities and also will impact the Site approach to management of cleanup.

IRAP staff will coordinate risk assessments across programs at Hanford to assure (to the extent possible) consistency in data, assumptions, and methods. IRAP staff will also coordinate with various Hanford programs to assure consistency of results or to understand reasons for a lack of consistency. Currently, coordination among risk activities is increasing, but programmatic results generally are incompatible with multiple purpose

use. Thus, IRAP will coordinate with other risk assessment activities so that their results can be used by IRAP, as feasible.

In addition, IRAP will interface with DOE complex-wide risk assessment activities. This interface will consist of both using information produced by complex-wide programs and providing risk results from the Hanford Site.

Involvement of all stakeholders is a critical activity for IRAP. Without stakeholder buy-in on the concept and its uses by the various publics, regulators, funding organizations, scientific communities, M&Os, and workers, IRAP objectives cannot be achieved. In addition, to aid in achieving technical credibility, IRAP will have a scientific advisory board to provide guidance on methods and priorities.

KEY ASSUMPTIONS:

The IRAP concept is based on the assumption that, first and foremost, Hanford-Site decisions will use risk information as one input. Other assumptions are as follows:

- 1) An objective of cleanup is to reduce health and ecological risk in addition to achieving regulatory compliance and releasing land for other uses. Another objective is to efficiently and effectively spend funds.
- 2) A long-term, risk-based plan for cleanup of the Hanford Site is needed. The plan must have credibility with all stakeholders so that Site contractors and subcontractors are credible and trusted.
- 3) Public involvement will be supported financially both for IRAP and for stakeholders to be involved in defining assumptions and technically reviewing results.

In addition, it is assumed that existing risk assessments cannot fill the mission of IRAP, although they may contribute aspects of their results that can be used by IRAP.

ACTIVITY BY PRIORITY:

Activities related to near-term execution are essential, must be performed, and are not amenable to safety, compliance, and operation priorities as provided in general prioritization guidelines.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

During FY92 and FY93, limited risk assessment activities were support by the Hanford Integrated Planning Project. Two reports were published:

Doctor, P.G., J.A. Mahaffey, P.J. Cowley, M.D. Freshley, N.L. Hassig, J.W. Brothers, C.S. Glantz, and D.M. Strachan. 1992. Computer-Based Tools for Decision Support at the Hanford Site. PNL-8286, Pacific Northwest Laboratory, Richland WA.

Mahaffey, J.A., P.G. Doctor, R.L. Buschbom, C.S. Glantz, P.M. Daling, L.E. Sever, A.L. Pajunen, R.C. Hoyt, G.J. Vargo, D.M. Strachan, J.D. Ludowise. 1993. A Strategic Analysis Study-Based Approach To Integrated Risk Assessment: Occupational Health Risks From Environmental Restoration and Waste Management Activities at Hanford. PNL-8598, Pacific Northwest Laboratory, Richland WA.

These reports provide a survey of tools (data, models, and information systems) available to support risk assessments (some specific to Hanford, some more general), and an approach developed for assessing worker risks from remediation actions.

The report on the work started in FY93 on no-intervention public health baseline risk assessment is being finalized in FY94. It is as follows:

Mahaffey, J.A., J.S. Dukelow, R.D. Stenner, R.A. Kennedy, C.S. Glantz, C.R. Watson, L.H. Sawyer, J.K. Soldat, R.L. Buschbom, B.L. Harper. 1994. No-Intervention Risk Assessment. PNL-XXXX, Pacific Northwest Laboratory, Richland WA.

SCHEDULE INFORMATION

FY 1994 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

CURRENT YEAR (FY 1994) TASK NARRATIVE:

IRAP will initiate activities to produce Site-wide public health baseline risk results today and in the future from current Hanford Site wastes, materials, infrastructure, and activities. This task assumes maintenance and operations continue to maintain safe Site conditions, to the extent possible. This work will establish priorities for conduct of risk assessments in FY95.

IRAP will initiate public involvement activities during FY94. Five public meetings associated with the baseline public health risk assessment are planned, as follows:

- ± describe IRAP and define stakeholder roles
- ± define method to prioritize elements
- ± select assumptions, exposure parameters, environmental settings
- ± define sensitivity/uncertainty approach
- ± discuss prioritization results.

The report for the no-intervention public health baseline risk assessment will be finalized in FY94.

IRAP will also qualitatively evaluate North Slope risks in light of risks identified at other NIKE missile sites.

IRAP will recast existing risk results to support prioritization of the groundwater plumes at the Hanford Site.

Finally, IRAP will carry out other tasks including tool enhancement, liaison with other Site risk activities to provide increased Hanford Site coordination of risk activities, and establishing an advisory board to provide technical oversight.

FY 1995 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:

The risk assessments to be conducted between FY95 and FY00 are summarized as follows. In FY95, the public health baseline risk assessment will be completed. In FY96, the worker health and safety baseline risk assessment will be conducted. In FY97, three risk assessments will be completed: 1) the ecological health baseline, 2) the endstate public health, and 3) the worker health and safety during cleanup. In FY 1998, two risk assessments will be completed: the endstate worker health and safety and the endstate ecological health. In FY99, one risk assessment will be completed and two will be updated: 1) the ecological risks during cleanup risk assessment

will be completed, 2) the public health baseline risk assessment will be updated, and 3) the worker health and safety baseline will be updated. In FY00, two risk assessments will be updated: the ecological health baseline and the endstate public health.

In FY95, the public health baseline that was started in FY94 will be completed. This is likely the largest effort of all risk assessments, since it will serve as the standard for measuring accomplishments in terms of public health risk reduction and net risk reduction from cleanup. Consequently, it must be as comprehensive and accurate as possible. It must be constructed to enable aggregation and disaggregation in numerous ways. The public health baseline risk assessment will also produce risk results to help set priorities and allocate budgets and to communicate with various stakeholders. It further allows understanding of urgency of risk remediation.

IRAP will also carry out tasks including tool enhancement, stakeholder involvement to assure that all affected parties accept the approach and results being produced, liaison with other Site risk activities to provide increased Hanford Site coordination of risk activities, and interaction with the technical oversight advisory board.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

In FY96, the worker health and safety baseline will be conducted. This is a substantial effort, and the worker health and safety baseline is the standard for evaluation of worker risk impacts from cleanup and also for estimating net risk reduction from Hanford cleanup. Adding the worker health and safety baseline to the public health baseline will allow understanding of 1) existing worker risks, 2) tradeoffs between long-term public health baseline risks and shorter-term workers risks in the absence of cleanup, and 3) sources of worker risk at Hanford that are most important and need to be monitored.

If the 15% decrement (worst case) budget occurs in FY96, IRAP will be reduced 62%; consequently, the worker health and safety baseline will not be completed in FY96 and all subsequent tasks will be delayed.

IRAP will also carry out tasks including tool enhancement, stakeholder involvement to assure that all affected parties accept the approach and results being produced, liaison with other Site risk activities to provide increased Hanford Site coordination of risk activities, and interaction with the technical oversight advisory board.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

In FY97, three risk assessments will be completed: 1) the ecological risk baseline; 2) the endstate public health risk assessment assuming achievement of activities specified in the Tri-Party Agreement in force at that time; and 3) the worker health and safety risk assessment during cleanup. The latter is a substantial effort, and will require update with high frequency until cleanup technology to be employed is well defined on a broad scale.

Ecological risk results will complete the baseline risk picture. Combined with baseline public and worker results, this will allow development of a comprehensive risk management plan for Hanford cleanup. Combined baseline risk results will allow an understanding of how the three baseline risk components (worker, public, ecosystem) interrelate, and what further information is needed (perhaps at a more detailed level) to assure that cleanup activities will achieve the most cost-effective and efficient approach to risk reduction.

The Tri-Party Agreement endstate public health risk assessment will provide risks results to understand 1) residual risks from required actions, and 2) adequacy of technology to reduce risks from baseline public health risks to the Tri-Party Agreement endstate. Combined with baseline public health risks, this information will allow an understanding of longer-term technology needs, both what is required and when, and also of the adequacy of the Tri-Party Agreement in driving cleanup to a final safe and clean endstate.

Assessment of worker risks during cleanup will allow an understanding of worker protection and safety procedures and practices, and of changes required in risk management practices to accommodate more intensive cleanup activities. Results also allow identification of cleanup technologies that have high risks.

In FY98, ecological and worker risks will be assessed that will exist at the end of cleanup were the cleanup to achieve Tri-Party Agreement milestones in effect at that time. Public health risks during cleanup will also be estimated.

In FY99, the baselines for public health and for worker health and safety will be updated. Ecological risks during cleanup will be estimated.

In FY00, the baseline ecological risk assessment will be updated. The public health risks from the cleanup achieved by the Tri-Party Agreement will also be updated.

In each of these years, IRAP will also carry out tasks including tool enhancement, stakeholder involvement to assure that all affected parties accept the approach and results being produced, liaison with other Site risk activities to provide increased Hanford Site coordination of risk activities, and interaction with the technical advisory board.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:
H.R. 2445

REGULATORY KEY ISSUES:
None

COMP/PROG BENEFITS AT PLANNING LEVEL:

IRAP will provide information for actions by Site decision makers:

- setting priorities and allocating budgets across programs
- negotiating with regulators for relief from or changes to regulations, including to the Tri-Party Agreement
- requesting funding from Congress and DOE headquarters for appropriate actions at Hanford
- communicating with the public about relative risks of various activities and involving the public in decision making and planning of cleanup
- communicating with the scientific community about research that is needed to reduce uncertainties in risk results and about technologies that are required to achieve risk reduction
- determining data needs to support risk assessments
- deciding among cleanup strategies and technologies
- defining worker protection needs associated with cleanup activities
- evaluating risk reduction, both of planned and of actual cleanup activities.

Without a comprehensive, Site-wide risk assessment for the Hanford Site, cleanup priorities and actions tend to be driven by factors that have little correlation with protecting health, safety, and the environment. Decisions and activities regarding environmental restoration and waste management at the Hanford Site respond to public or expert opinion and to demands by regulatory agencies on specific issues rather than to needs from a global understanding of risks. Further, existing regulations and public perception do not necessarily have a firm scientific foundation and can drive actions that do not make sense from a health and safety standpoint and that don't wisely use public funds. Cleanup activities may not necessarily reduce risk, but may merely redistribute risks in time and space.

It is important that input for cleanup decisions by regulators and DOE

decision makers include information on relative risks. Tradeoff processes that weigh various factors against each other must give priority to activities that 1) address the highest risks, and 2) achieve cost-effective risk reduction. The comprehensive IRAP analyses provide the basis for such trade-off processes.

CONCERNS AT PLANNING LEVEL:

Because of limited funding, elements to understand the big picture of risk at Hanford are being spread out through FY99. This information is needed prior to that time.

REQUIRED TECHNICAL DEVELOPMENT:

Much of the activity discussed in Section 1 is technical development. Particularly, methods for risk assessment and for uncertainty/sensitivity analysis will be developed, including models and methods that are both Hanford specific and that are general and can be used at other sites.

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7250 ADS SUF: 0 SUBACTIVITY: AB

SUBACTIVITY TITLE: BASELINE CONTROL

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 0 TEC: 0

DESCRIPTION: PROGRAM CONTROL/SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE EW3110010		178
TOTAL		178
DIRECT FTE		2

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3110010		201	174	178		178	182	186	190	194
TOTAL		201	174	178	0	178	182	186	190	194
DIRECT FTE		0	2	2	0	2	2	2	2	2

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3110010		201	174	178		178	182	186	190	195
TOTAL		201	174	178	0	178	182	186	190	195
DIRECT FTE		0	2	2	0	2	2	2	2	2

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

Program Management Support of Planning Integration--this activity includes the development and submittal of the Planning Integration Multi-Year Program Plan (MYPP) and Planning Integration Fiscal Year Work Plan (FYWP). It includes interfacing with the program element teams to coordinate development of Five-Year Plan, monthly Site Management System (SMS) and Progress Tracking (PTS) System reporting associated with the Planning Integration Program.

RELATED ACTIVITIES NARRATIVE:

Related activities include coordination and programmatic analysis of data associated with Planning Integration, maintaining baseline control logs, ensuring proper change control and change control logs exist and are updated, and miscellaneous activities and exercises associated with Planning Integration as requested by RL.

KEY ASSUMPTIONS:

Continuation of Site Management System requirements and programmatic reporting.

ACTIVITY BY PRIORITY:

Activities related to program management support are essential activities which must be performed and are not amenable to safety, compliance, and operation priorities as provided in general prioritization guidelines.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

Activity is ongoing producing monthly and annual products. Tasks include 1993 Fiscal Year Work Plan, 1993 Multi-Year Program Plan, and monthly SMS and PTS reports.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

See technical scope and related activities in this narrative. Tasks associated with this activity are ongoing and under current assumption will not change from year to year.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Same as current year task narrative.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Same as current year task narrative.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Same as current year task narrative.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

DOE Order 4700.5 Project Control System Guidelines DOE Order 4700.1
Project Management System
DOE Order 5700.7B Work Authorization System
DOE Order 1332.1C Uniform Reporting System

REGULATORY KEY ISSUES:

None

COMP/PROG BENEFITS AT PLANNING LEVEL:

None

CONCERNS AT PLANNING LEVEL:

None

REQUIRED TECHNICAL DEVELOPMENT:

None

LAST UPDATE: 03-03-1992 TIME: 18:12:29

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7250 ADS SUF: 0 SUBACTIVITY: AC

SUBACTIVITY TITLE: BASELINE INTEGRATION MGMT SUPPORT

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 0 TEC: 0

DESCRIPTION: PROGRAM CONTROL/SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW3110010		TOTAL
		294
TOTAL		294
DIRECT FTE		3

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL BUD	LEGAL	ESH	TOTAL				
B&R									
OE EW3110010	271	288	294		294	301	307	314	321
TOTAL	271	288	294	0	294	301	307	314	321
DIRECT FTE	0	3	3	0	3	3	3	3	3

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL BUD	LEGAL	ESH	TOTAL				
B&R									
OE EW3110010	271	288	294		294	301	307	314	321
TOTAL	271	288	294	0	294	301	307	314	321
DIRECT FTE	0	3	3	0	3	3	3	3	3

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

Program Baseline Integration (PBI) management and administration is the program management function associated with oversight of the Multi-Year Planning organization and the Five-Year Plan Integration organization. Oversight is most significantly focused on the direction and integration of program baseline development for the Hanford site including coordination of site-wide development of the Environmental and Waste Management budget data, program baseline plans and integrated logics/schedules. PBI management and administration is also directly responsible for direction and coordination of the Program Integration Team, a team composed of program managers across the site which is directly responsible for integration and prioritization of site work scope and allocation of associated budget resources.

RELATED ACTIVITIES NARRATIVE:

This subactivity supports the management oversight and administration of Program Baseline Integration scope of work, consistent with the objectives of the Planning and Systems Integration Program. This subactivity is associated with the management oversight of the functions described within subactivities AI & AJ.

KEY ASSUMPTIONS:

The key assumption which directs activities associated with this subactivity include acknowledgement that the mission of the Program Baseline Integration organization is to lead and support effective planning by responsible line organizations. This includes the development of multiyear baselines which will be maintained through change control. These multiyear baselines will be completely defined using integrated planning techniques and will be validated through independent review and audit. The Environmental Management Five-Year Plan products and related budget submittal activities will be driven by approved, integrated, logic driven program plans. These plans will include the consideration of all stakeholder values derived through an active public participation plan. This mission will be accomplished through a teaming effort of all Hanford programs and contractor planning organizations, in partnership with the U.S. Department of Energy, Richland Operations Office (RL).

ACTIVITY BY PRIORITY:

All activities within this TDD are defined as priority 2.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

This management and administration activity provided oversight in the following areas of accomplishment to date:

Phase I of the Multi-Year Program Plans and an integrated site schedule and logic were submitted to DOE-RL in July, 1993. Reviews of the MYPPs have been completed. Development of a procedure and training for Activity Based Cost Estimating is taking place in FY 1994. Completed integrated resolution of \$152.2M FY 1994 key unfunded activities. A FY 1994

Environmental Management reprogramming package was completed and submitted to RL for subsequent presentation to DOE-HQ in mid-January, 1994.

Proactively initiated guidance for FY 1996-2000 ADS development cycle to the Hanford site programs and contractors and held two kickoff meetings with DOE-RL and contractors to begin ADS development activity which is scheduled to culminate in late April, 1994.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

This subactivity provides the management oversight and administrative support for the following activities:
 Direction and integration of program baseline development for the Hanford Site. Coordination of site-wide development of the Environmental and Waste Management (EM) budget data, program baseline plans and integrated logics/schedules. Development and implementation of company-wide systems for program integration and resource allocation. Support to the development and implementation of systems for prioritization of work scope. Provide definition and coordination support of the RL public participation process for stakeholder review and input on the EM budget and planning activities. Specific milestones for these activities are contained within subactivities AK & AJ.

Staff support by this subactivity includes one division manager, one program administrator, and one divisional secretary.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

See current year task narrative.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

See current year task narrative.

No additional resources are requested beyond the target level of funding.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

See current year task narrative.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS
The Five-Year Plan development and related budget support is directly in support of the Defense Authorization Act (105 STAT 1299 Sec. 3121(a)). It has also become a key element in the preparation of DOE's budget. Multi-year planning activities are also driven by the need to identify and plan corrective actions necessary for safe and compliant support of the sites mission.

REGULATORY KEY ISSUES
Failure to submit the five-year plan and EA budget submitted requirements to meet the terms of the Defense Authorization Act and the Party Agreement requirement to report funding to meet the terms of the agreement. Essentially, without ADS, work will stop at Hanford because we will not have requested the funding. The Five-Year Plan and EA budget submitted are directly supported by the development of multi-year plans and fiscal year work plans. Without approval of the programmatic fiscal year work plans, RL will not be able to effectively issue the required work authorization which drives initiation of each year's work plans.

COMPROB BENEFITS AT PLANNING LEVEL
None

CONCERN AT PLANNING LEVEL
None

REQUIRED TECHNICAL DEVELOPMENT
None

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

The Five-Year Plan development and related budget support is directly in support of the Defense Authorization Act (105 STAT 1290 Sec. 3135(a)). It has also become a key element in the preparation of DOE's budget. Multi-year planning activities are also driven by the need to identify and plan corrective actions necessary for safe and compliant support of the sites mission.

REGULATORY KEY ISSUES:

Failure to submit the Five-Year Plan and EM budget submittal represents failure to meet the terms of the Defense Authorization Act and the Tri-Party Agreement requirement to request funding to meet the terms of the agreement. Essentially, without ADSs, work will stop at Hanford because we will not have requested the funding. The Five-Year Plan and EM budget submittals are directly supported by the development of multi-year plans and fiscal year work plans. Without approval of the programmatic Fiscal Year Work Plans, RL will not be able to effectively issue the required work authorization which directs initiation of each year's work scope.

COMP/PROG BENEFITS AT PLANNING LEVEL:

None

CONCERNS AT PLANNING LEVEL:

None

REQUIRED TECHNICAL DEVELOPMENT:

None.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7250 ADS SUF: 0 SUBACTIVITY: AD

SUBACTIVITY TITLE: PERFORMANCE REPORTING

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 0 TEC: 0

DESCRIPTION: PROGRAM CONTROL/SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW3110010		TOTAL
TOTAL		617
DIRECT FTE		617
		7

TARGET CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
			RL	BUD	LEGAL	ESH	TOTAL			
OE EW3110010		791	614	617			617	644	647	663
TOTAL		791	614	617	0		617	644	647	663
DIRECT FTE		0	7	7	0		7	7	7	7

PLANNING CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
			RL	BUD	LEGAL	ESH	TOTAL			
OE EW3110010		791	614	617			617	644	647	663
TOTAL		791	614	617	0		617	644	647	663
DIRECT FTE		0	7	7	0		7	7	7	7

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

The Progress Tracking System (PTS) activity involves integration and implementation of the Department of Energy - Headquarters (DOE-HQ) mandated PTS reporting requirement. DOE-HQ established an Environmental Management (EM) program reporting system to track work scope progress at the Activity Data Sheet (ADS) level. PTS serves as the primary EM management tool which provides a consistent EM-wide reporting format and database for responding to internal and external requests for program information. This is an ongoing activity required to meet monthly reporting submittals to DOE-HQ.

RELATED ACTIVITIES NARRATIVE:

PTS reports activity status for all EM ADSs and Technical Task Plans (TTPs). Non EM ADSs are not included in this activity. PTS integrates reports from the Site Management System (SMS) and the Financial Data System and incorporates them into the PTS format via the Environmental Planning Data System on site. Currently, incorporation of the SMS report is a manual process which we are working toward automating.

KEY ASSUMPTIONS:

PTS is being used as the primary reporting tool for DOE-HQ EM. It is assumed that PTS will continue as the primary reporting tool. Also assumed is that the data will be reported by ADS and total project (4700.1) reporting will remain a requirement.

ACTIVITY BY PRIORITY:

The PTS reporting is a priority D2. This activity ensures compliance with DOE Orders through reasonable interpretation of policy thrusts.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

Development of a networked application of the DOE-HQ PTS has been accomplished. The monthly submittal includes milestone status and budget/cost information of all EM ADSs and TTPs, enforceable agreement milestones, PEG milestones and installation summary milestones found in the national Five-Year Plan. The PTS reports current month, fiscal year to date, and out year enforceable agreement milestone information.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

DOE-HQ upgrade 2.3 and the HQ program hook-up to each site is planned for completion in FY 1994. DOE-HQ upgrade 5.0 is scheduled to begin in FY 1994 and will incorporate a wide area network throughout the DOE complex. This upgrade will assume that a network technology client server will be installed at each site to connect to the DOE-HQ proposed wide area network. This is a new level of technology for the Hanford Site. Upgrade 5.0 is scheduled for completion in FY 1995. Additional funding has been received to complete the above upgrades and submit PTS reports to DOE-RL for the remaining nine months of FY 1994.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

The PTS reporting requirements will be an ongoing activity at both the Planning and Target funding levels. In FY 1995, upgrade 5.0 is scheduled for completion. At this point in time there are no new DOE-HQ upgrades scheduled for FY 1995. This is pending further direction from DOE-HQ.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

At this time there are no additional upgrades planned for FY 1996 from DOE-HQ. Enhancements scheduled for FY 1996 for use by DOE-RL include access to PTS system and reports on screen.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

The PTS reporting requirements will be an ongoing activity at both the Planning and Target funding levels. Currently, no DOE-HQ directed upgrades have been scheduled in the outyears. Only maintenance functions for the PTS reports have been planned.

SCHEDULE INFORMATION

FY 1994 MILESTONES
MILESTONE ID TITLE
PLANNING TARGET

CURRENT YEAR (FY 1994) TASK NARRATIVE
DOE-HQ upgrade 2.3 and the HQ program hook-up for each site is planned for completion in FY 1994. DOE-HQ upgrade 2.0 is scheduled to begin in FY 1994 and will incorporate a wide area network throughout the DOE complex. This upgrade will assume that a network technology client server will be installed at each site to connect to the DOE-HQ program wide area network. This is a new level of technology for the Hanford site. Upgrade 2.0 is scheduled for completion in FY 1995. Additional funding has been received to complete the above upgrades and submit PIS reports to DOE-HQ for the remaining nine months of FY 1994.

FY 1995 MILESTONES
MILESTONE ID TITLE
PLANNING TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE
The PIS reporting requirements will be an ongoing activity at both the Planning and Target funding levels. In FY 1995 upgrade 2.0 is scheduled for completion. At this point in time there are no new DOE-HQ upgrades scheduled for FY 1995. This is pending further direction from DOE-HQ.

FY 1996 MILESTONES
MILESTONE ID TITLE
PLANNING TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE
At this time there are no additional upgrades planned for FY 1996. DOE-HQ Enhancements scheduled for FY 1996 for use by DOE-HQ include access to PIS system and reports on screen.

FY 1997-FY 2000 MILESTONES
MILESTONE ID TITLE
PLANNING TARGET

JULY/AUG (FY 1997-2000) TASK NARRATIVE
The PIS reporting requirements will be an ongoing activity at both the Planning and Target funding levels. Currently, no DOE-HQ directed upgrades have been scheduled in the outyears. Only maintenance funding for the PIS reports have been planned.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

This is a DOE-HQ mandated reporting requirement by the Undersecretary to comply with OMB management directions--105 Stat 1290 Sec. 3135 (a); DOE Order 2250.1C, CSCSC; DOE Order 4700.1, Project Management System; and the Office of Waste Operations -Management Policies and Requirements.

REGULATORY KEY ISSUES:

Not applicable.

COMP/PROG BENEFITS AT PLANNING LEVEL:

At both the Planning and Target funding levels, all PTS HQ directed upgrades will occur along with the maintenance functions for the monthly PTS reports.

CONCERNS AT PLANNING LEVEL:

There are no concerns at the planning level for maintaining PTS monthly reporting to HQ. Upgrades planned for PTS are based upon historical information. The extent or types of upgrades are unknown at this point in time.

REQUIRED TECHNICAL DEVELOPMENT:

This is not required for this TDD.

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7250 ADS SUF: 0 SUBACTIVITY: AE

SUBACTIVITY TITLE: HANFORD MISSION PLANNING

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 0 TEC: 0

DESCRIPTION: PROGRAM CONTROL/SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW3110010		TOTAL
TOTAL		1052
DIRECT FTE		5

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3110010		1685	1415	1457		1457	1501	1546	1592	3630
TOTAL		1685	1415	1457	0	1457	1501	1546	1592	3630
DIRECT FTE		0	7	7	0	7	7	6	6	11

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3110010		1685	3492	3637		3637	3521	3568	3580	3630
TOTAL		1685	3492	3637	0	3637	3521	3568	3580	3630
DIRECT FTE		0	15	13	0	13	13	12	11	11

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

Hanford Mission Planning provides the planning framework that guides and analyzes the program baselines. It is the site wide program guidance, integration, and baseline document. It is driven by the Hanford Strategic Plan and is based on systems engineering derived analysis.

The Hanford Site is using this effort to achieve cross program integration. Hanford Mission Planning focuses planning resources toward the development of the planning basis for achieving the cleanup of the Hanford Site. This planning basis integrates the objectives, needs and requirements of the various program efforts. Hanford Mission Planning will document site guidance (site level assumptions, program mission statements, interface definitions and strategic issues) based on systems engineering analysis, agreements, existing records of decisions, and the Hanford Strategic Plan. It will be issued to the program to align their Multi-Year Program Plans.

There are three major activities within Hanford Mission Planning: (1) Hanford Strategic Analysis: this is a disciplined systems analysis of the integrated process (chemical processes) material balance options available to achieve Site cleanup. This is coordinated with the systems engineering activity to support the alternatives analysis associated with 'Remedy Unsafe and Unacceptable Conditions' function in the Hanford Cleanup Mission. This activity will reduce the range of uncertainty associated with the broad range of cleanup options, clarify program interfaces, and support guidance. (2) Regulatory Analysis: this activity will support systems engineering development of requirements and application against the functions and products. The requirements and existing decisions in the 'Hanford Mission Plan, Site Guidance' will be maintained as new agreements, directives and records of decision are issued. Key regulatory drivers will be identified. (3) Site Guidance: this activity will compile the guidance necessary to allocate the systems engineering product tree to the programs and to direct the preparation of the Multi-Year Program Plans.

RELATED ACTIVITIES NARRATIVE:

Equivalent work scope is included as a subactivity in the ER ADS 3400-AC because the Hanford Integration Planning efforts address the combined work scope across these two missions. The activities will be managed as a single, integrated program with the funding being divided between WM and ER. It should be noted that this is a joint effort between WHC and PNL that addresses the entire work scope of the Hanford Site. Within this subactivity there is cooperative work scope involving both organizations and all areas of Hanford Integrated Planning.

KEY ASSUMPTIONS:

The Systems Engineering Activity will complete the Capstone Site Level Functions and Requirements for Hanford Cleanup as well as the Product Specification in FY1994.

The mechanism for linking the Capstone efforts with the preparation of the program baselines will be the Hanford Mission Plan 'Site Guidance'

Systems Engineering is the site decision making process and the Risk Management Task which is designing and implementing risk based decision making at Hanford will be a part of systems engineering.

The funding split, 80 percent waste management (ADS 7250) and 20 percent Environmental Restoration (ADS 3400), will continue for Hanford Mission Planning. Facility Transition participation will be developed and formalized.

Hanford Mission Plan will support the Hanford Strategic Quality Planning Board.

Upfront stakeholder participation in Hanford Strategic Plan, Systems Engineering and Hanford Mission Plan and site decision making will continue to increase in future years. It will be coordinated with other outreach and stakeholder interactions.

The Long Range Planning Process (RLID 5000.2) initiated in FY 1993 will not be substantially revised during this period.

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

In September 1991 the first draft Hanford Mission Plan was prepared. In June 1992 the draft was extensively revised; improved description of Site Management System role, prioritized list of problems, list of Science and Technology needs, results from application of system engineering to base case and revised WBS. In August 1993 the first edition of the Hanford Mission Plan 'Site Guidance' was released. The Site Guidance was revised in FY 1994 to incorporate the TPA negotiations, revisions to the Hanford Strategic Plan, and applicable initial systems engineering results.

Activities to date have focused on establishing a planning basis for each major program area (e.g., tank wastes) that describes the best available information regarding the process by which that area will be dealt with in the cleanup effort. This provides a comprehensive understanding of key characteristics of each option (e.g., cost, residual material balances, risk) relative to other options. The Hanford Strategic Analysis report was issued in FY 1994 presenting the planning basis and other process options.

SCHEDULE INFORMATION

FY 1994 MILESTONES:
MILESTONE ID TITLE

PLANNING TARGET

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Integration of the Systems Engineering results into the Hanford Mission Plan is being initiated. Analysis generated previously for the Hanford Mission Plan (Hanford Strategic Analysis process studies, cost, schedule information; Regulatory Analysis; etc) are being adapted and applied to the systems engineering efforts.

In the decrement case for FY 1996, the Hanford Mission Plan will be reduced approximately 28% and will impact on the following activities: 1) public involvement activities will be reduced resulting in fewer public meetings thereby limiting public influence on prioritization activities; 2) the planning database activities will be reduced resulting in more manual compilation of data and less ability to cross-cut data, and 3) reduced regulatory analysis activity which may impact analysis of a compliance strategy.

Site Guidance will be revised and issued to the programs providing site context and direction for preparation of Multi-Year Program Plans. The guidance will include site assumptions, decisions, WBS, interfaces, site wide and cross cutting issues.

Activities during FY 1994 will provide a additional detailed set of systems and analyses for disposition of Site inventories through publication of the Hanford Strategic Analysis. Stakeholder involvement will result in additional cases that will be analyzed in support of systems engineering.

FY 1995 MILESTONES:
MILESTONE ID TITLE

PLANNING TARGET

MILESTONE ID	TITLE	PLANNING	TARGET
7250-00-0030	Hanford Mission Plan "Site Guidance" update	3/31/95	3/31/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

The Hanford Mission Plan 'Site Guidance' will allocate the products to the programs to implement the systems engineering link to the program baselines. Priority criteria will be developed for ordering products. Ongoing Hanford Strategic Analysis and Regulatory Analysis will be directed toward maintaining the site planning basis.

FY 1996 MILESTONES:
MILESTONE ID TITLE

PLANNING TARGET

MILESTONE ID	TITLE	PLANNING	TARGET
7250-00-0045	Hanford Mission Plan "Site Guidance" update	3/31/96	3/31/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

The site guidance will be updated annually capturing decisions on issues, technical analysis and issues resolution.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7250-00-0060	Hanford Mission Plan "Site Guidance" update	3/31/97	3/31/97
7250-00-0075	Hanford Mission Plan "Site Guidance" update	3/31/98	3/31/98
7250-00-0090	Hanford Mission Plan "Site Guidance" update	3/31/99	3/31/99
7250-00-0015	Hanford Mission Plan "Site Guidance" update	3/31/00	3/31/00

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Continued updating of planning information will be integrated into the Site Guidance.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

OMB Circular A-109 directs federal agencies to carry out comprehensive program planning. The efforts described here are required to fully comply with this direction and DOE intent as defined in SEN-25A-91. The Hanford Site must achieve cross program integration and institute a consistent effort to involve regulators and include stakeholder concerns in the decision process. These are essential to achieve cost efficiency, eliminate redundancy, ensure compliance with regulatory drivers and enhance the credibility of the DOE's efforts. Further, sound definition of technical requirements, funding constraints, and regulatory requirements and constraints is necessary as a basis for renegotiation of TPA and other regulatory milestones, when appropriate.

RLID 5000.2 requires the preparation of the Hanford Mission Plan. It specifies the preparation of sitewide program guidance, integration, and baseline document. This is divided into two volumes 'Site Guidance' and 'Program Integration'

REGULATORY KEY ISSUES:

None.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Funding at the planning level will permit greater integration of programs through additional supporting analysis defining the technical basis. These analysis will be documented in the Hanford Mission Plan Volume 2 'Program Integration'. This volume would become the repository for data generated by MYPP's such as resource requirements, regulatory issues, science and technology requirements, waste type inventory, and infrastructure demands. These would be analyzed for interface/integration issues. These analysis would identify redundancies between programs, assure site capabilities/capacities, correspond to site mission needs, resolve interface issues and facilitate assignment of responsibilities. The Hanford Mission Plan integration analysis would be expanded with regards to the depth of crosscutting data and issues identified and recommendations proposed. A database would be developed (preferably based on existing systems) to compile the crosscutting programmatic information on a faster schedule (approximately 1 year). Lastly, methods for presenting data to assist understanding of the complex Hanford cleanup, systems engineering interfaces and the consequences of possible decisions would be developed on a faster schedule to support contractors, RL, HQ, and stakeholders. These activities would be the basis for stakeholder involvement in site level planning. The overall site perspective would enhance decision making and improve effectiveness by identifying synergism between programs and eliminating redundancy. Lastly an Issues Management System for addressing Sitewide issues would be implemented to identify/collect sitewide issues, clarify them, assign them to programs for resolution and track progress towards resolution.

CONCERNS AT PLANNING LEVEL:

Activities are funded in the planning level.

REQUIRED TECHNICAL DEVELOPMENT:

None.

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

Systems Engineering will be utilized to refine site and program missions, functions, and requirements, technical baselines, organization and execution. It will strengthen the technical basis and integration.

Systems engineering is a process to organize highly complex missions systems, processes, or projects. Systems engineering form a technical basis for project, program, and site management. It is a formal structured methodology for examining systems and subsystems.

System Engineering will be applied at the site level (mission analysis, functional analysis, requirements, parametric analysis, alternative evaluation, decision analysis, system decomposition, requirements allocation) and at the program and subprogram levels.

This will be integrated into future Hanford Mission Plan, Multi-Year Program Plans and Fiscal Year Work Plans. It will build on the existing issue of these documents.

This TDD scope includes the development of system engineering tools to be used by site level and project level system engineers. The site level system engineers will work with the program level system engineers to facilitate the process, identify interfaces, and assist integration. The site level system engineers will assist program systems engineers interface and coordinate with the system engineering organization in the Engineering Applications Division. The site level system engineers will interface with the Hanford Mission Planning team to enhance program integration and strengthen the long-term technical basis and decision making processes.

RELATED ACTIVITIES NARRATIVE:

Systems engineering is a comprehensive rigorous methodical approach to management and engineering (define the program, specify characteristics of the solution, identify alternatives, select the best solution set). Systems engineering will interface with all site and program planning, engineering, and management activities. Risk management will support Systems Engineering by implementing/facilitating risk based decision making as an element of the design process. It will support identification of site objectives, development of risk criteria and weights, adaptation of EM Risk Management and allocation of site wide risk to programs.

KEY ASSUMPTIONS:

Systems Engineering policies, procedures and training will be developed using overhead G&A funding.

Programs will develop, support, and initiate program level system engineering activities within their respective activity data sheets. This will fit within the site Systems Engineering hierarchy.

Systems engineering will support the long range planning process.

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

Systems Engineering workshops were conducted in April and May 1993 to initiate a site wide process, contractor site level problem definitions, mission statement, functional trees, requirements, product structure, work breakdown structure, and organization structure were reviewed and analyzed by senior management. An implementation plan was outlined. Individual programs (TWRS, Environmental Restoration, Facility Operations) have initiated program level systems engineering activities.

The past Hanford Mission Planning activities will provide feedback and direction to the Hanford Mission Plan. The document, coupled with the FY 1994 Hanford Mission Plan Site Guidance and Program Function and Requirement Document will provide the basis for preparation of the FY 1995 Multi-Year Program Plans. The Site Function and Requirements document will initiate evaluation and selection of site and program alternatives leading to baseline product specifications.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Prepare in conjunction with program teams the capstone functions and Requirements Documents and the Site Product Specifications. These will specify the essential functions/products required to complete the cleanup mission at Hanford.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Work with Hanford Mission Plan and allocation of the products to the programs, establish WBS/PBS/OBS Crosswalks and integrate program systems engineering activities. The functions and requirements and baseline product specifications will be updated.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

The site baseline product specification documents the decisions made and serves as the technical baseline for the site. It will draw from analysis prepared by the Hanford Mission Plan and by program system engineering activities. It will be utilized in the FY 1996 Multi-Year Program Plans. It will be released in conjunction with the Hanford Mission Plan Site Guidance. It will be maintained and address architecture decisions and uncertainties pending RCRA/CERCLA/NEPA actions.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

The site technical baseline will be updated as needed and issued in conjunction with the annual updates of the Hanford Mission Plan Site Guidance.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:
None.

REGULATORY KEY ISSUES:
None.

COMP/PROG BENEFITS AT PLANNING LEVEL:
No impact. The target and planning levels coincide.

CONCERNS AT PLANNING LEVEL:
Activities are funded in the planning level.

REQUIRED TECHNICAL DEVELOPMENT:
None.

**THIS PAGE INTENTIONALLY
LEFT BLANK**

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

This subactivity deals with the direction, training, analysis, coordination and assessment of the following programs/documents:

DIRECT FUNDED PROGRAM

1. The Multi-Year Program Plan (MYPP) and Fiscal Year Work Plan (FYWP), were consolidated in 1994 and form the Hanford programmatic baseline information which is contained within the MYPP:

- program level objectives,
- technical requirements,
- baseline assumptions,
- program and program element level WBS and dictionary,
- program logics and schedules.

INDIRECT FUNDED PROGRAMS

2. Indirect MYPP-Site Support Program Plan (SSPP) formerly the Indirect MYPP, deals with Indirect Program planning. This is a means by which goals, strategies, and future needs are determined for Indirect Programs. This situational analysis forms the Indirect Program's planning basis for determining Direct Program support requirements.

SCHEDULING

3. Site Integrated Schedule is a vital tool in determining site-critical path via analysis of inter-program logical relationships in the MYPP program master baseline schedules. The Site Integrated Schedule is based on the critical path methodology and technique.

Level 0 schedule graphically portrays the DOE-RL/HQ and Tri-Party Agreement milestones through the year 2000. It is structured by the DOE-RL WBS and includes WHC, Kaiser and PNL workscope with a summarization of milestone progress.

PLANNING SERVICES

4. Planning Services is to provide technical assessment accomplished by independent reviews of the ADS, FY94 MYPP, FYWP, future MYPPs/FYWPs developed for the Hanford Site. Baseline technical review task elements provide an independent review and technical validation of work scope (narrative), and schedule (milestones), as they relate to the given funding estimates, and include:
 - Planning Integration Self Assessment
 - FYP Review Coordination/including support of DOE-HQ and RL review activities
 - Cost quality Management Assessment Updates
 - Training development activities for baseline reviews

DEPARTMENT MANAGEMENT

5. Administrative activities associated with the performance of assigned work. Workslope includes:

- Department ADS preparation
- Department Planning & Management
- Personnel Administration
- Contracted Services Procurement
- Special Projects (Internal)

RELATED ACTIVITIES NARRATIVE:

The MYPPs/FYWPs are developed by all Hanford programs and divisions (not just EM) across the Hanford site and the training, guidance and coordination associated with the development of this product is covered within this subactivity.

KEY ASSUMPTIONS:

The major assumption for the development of this subactivity is that the MYPP/FYWP will continue to be utilized by DOE-RL and contractor programs as the cornerstone baseline document for planning. This document will continue to evolve in terms of content to meet the needs of the annual planning process.

ACTIVITY BY PRIORITY:

All activities within this TDD are defined as priority 2.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

The following tasks are completed to date; the developed MYPP/FYWP including the conduct of workshops and clarification of content. A draft procedure for use in administering MYPPs/FYWPs submittals and support of technical programs. Site Integrated Schedule coordination activities which precede the actual integrated schedule effort. Coordination of efforts associated with the task force for review and creation of Indirect MYPP Program, subsequently identified as the Site Support Program Plan (SSPP). Additionally wrote procedure for support groups use in understanding and implementing the SSPP. Developed Priority Matrix which delineates the

logic used for future risk assessment. Enhanced Level 0 Schedule through pro-active approach to interfacing with technical programs/schedulers, and Tri-Party Agreement individuals for statusing. Completed Executive Plan, a pocket size guide and information packet summarizing the Hanford Mission and Vision. Completed submittal of Phase I MYPPs. Developed procedure for Activity Based Cost Estimating.

Reviewed the following documents for compliance with guidance

FY 1994-1999 Activity Data Sheets
FY 1994 Multi-Year Program Plan Phase I
FY 1994 Multi-Year Program Plan Phase II

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7250-00-0210	DOE-RL APPROVAL OF MYPP/FYWP 1995	9/30/94	9/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

The subactivities described in the Technical Scope Narrative are in a developmental mode, and begin to be implemented in the second quarter of the fiscal year. The consolidation of MYPPs and FYWPs into one document will materialize with the submittal of updates and expanded schedules, milestone description sheets, WBS, and cost summary to RL by June 15, 1994. With the final MYPPs/FYWPs being submitted on August 31, 1994 to RL for approval. The SSPP for Indirect MYPPs will begin implementation in the first quarter of FY 1994 with extensive workshops and planning sessions. The Site Integrated Schedule Program began implementation in the first quarter as well with further development and analysis continuing throughout the fiscal year. The Level 0 Schedule is on-going throughout the year with monthly promulgation. The Technical Assessment activities ADS review and report, MYPP/FYWP review/reporting and other assessment activities.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7250-00-0220	DOE-RL APPROVAL OF MYPP/FYWP 1996	9/30/95	9/30/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

See current year technical scope narrative.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7250-00-0230	DOE-RL APPROVAL OF MYPP/FYWP 1997	9/30/96	9/30/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

See current year technical scope narrative.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7250-00-0240	DOE-RL APPROVAL OF MYPP/FYWP 1998	9/30/97	9/30/97
7250-00-0250	DOE-RL APPROVAL OF MYPP/FYWP 1999	9/30/98	9/30/98
7250-00-0255	DOE-RL APPROVAL OF MYPP/FYWP 2000	9/30/99	9/30/99

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

See current year technical scope narrative.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

The development of the Multi-Year Program Plans lays the foundation for the development of the Five-Year Plan Activity Data Sheets which is required by the Defense Authorization Act (105 STAT, 1290 Sec. 3135(a)). The MYPP also is responsible for identifying and planning corrective actions to be taken over the life of the program which addresses regulatory compliance.

REGULATORY KEY ISSUES:

Failure to develop and submit the MYPP means that there is a lack of foundation for the ADSs in terms of schedule and logic as well as budget and technical scope baselines.

COMP/PROG BENEFITS AT PLANNING LEVEL:

The planning level allows for increased interface with the program teams to provide a consistent review and analysis of the MYPPs/FYWPs ensuring that requirements are met prior to submittal to DOE-RL.

CONCERNS AT PLANNING LEVEL:

None

REQUIRED TECHNICAL DEVELOPMENT:

None.

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

The scope of this subactivity covers the development of program guidance and coordination of activities leading to the development of the site's activity Data Sheets (ADSs) and Task Description Documents (TDDs); development and implementation of the Environmental Planning Data System (EPDS) and the Hanford Resource Pricing Module (RPM). RPM is used for documenting and developing ADSs, supporting various HQ/RL 'what if' exercises, supporting analysis of the annual EM and Safety and Health budget submittal, coordinating sitewide workscope prioritization and integration exercises, and coordinating and summarizing budgetary information and related briefing materials as requested by DOE-RL and DOE-HQ.

A significant element of this subsection is the development of program guidance and coordination of the annual Five-Year Plan submittal of the ADSs. Coupled with this is the development and maintenance of EPDS, the local database used for managing and reporting the data collected within these documents and RPM, the database utilized for documenting and pricing the cost estimates within the ADSs. This effort may include multiple submittals of the ADSs and TDDs in support of the annual Environmental Management (EM) and Safety and Health budget processes.

RELATED ACTIVITIES NARRATIVE:

Site-wide coordination of all products related to the production of ADSs and their supporting elements (TDDs, EPDS, RPM, etc.) are covered within this subactivity.

KEY ASSUMPTIONS:

This subactivity is based on the following assumptions: EPDS will continue, as currently structured, as the site's principal medium for developing ADSs; RPM remains the system of preference for capturing and reporting supporting financial data related to ADSs; only one HQ ADS submittal will be required preceded and followed by numerous program integration exercises; SMS and Change Control data bases will be developed and incorporated within EPDS; development of TDDs will continue to be a site requirement.

ACTIVITY BY PRIORITY:

All activities within this TDD are defined as priority 2.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

The FY 1995 -1999 ADSs and TDDs were submitted on May 12, 1993. These ADSs represented the planning for the EM budget submittal process and the basis for Hanford's budget request. In December 1993, an extensive site-wide budget/ADS (for FY 1994) integration exercise was completed. At the present time, the FY 1996-2000 ADSs are being written for submittal to DOE-HQ in order to support the Environmental Management and Safety and Health budget submittal processes for FY 1996.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7250-00-0135	FY 1996 5YP ADS SUBMITTAL	4/28/94	4/28/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

This subactivity includes the completion (and April 28, 1994 HQ submittal) of the FY 1996-2000 ADSs in support of the budget planning process for the FY 1996 budget request. Other supporting accomplishments include the completion of related Safety and Health budget documentation, the completion of related budget crosscut analysis exercises, and the development and implementation of EPDS and RPM in support of Five-Year Plan ADS and TDD development. Additional activity includes the support to DOE-HQ ADS review as well as other external and internal ADS and business system reviews. Support will also be provided for the coordination of the Independent ADS review referenced in subactivity AF of ADS 7250-00.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7250-00-0195	FY97 5YP ADS SUBMITTAL	4/28/95	4/28/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

See current year task narrative.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7250-00-0005	FY98 5YP ADS SUBMITTAL	4/28/96	4/28/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

See current year task narrative.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7250-00-0010	FY99 5YP ADS SUBMITTAL	4/28/97	4/28/97
7250-00-0020	FY 2000 5YP ADS SUBMITTAL	4/28/98	4/28/98

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

See current year task narrative.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

ADS development is in direct support of the Defense Authorization Act (105 STAT 1290 Sec. 3135(a)). It has also become the formal budget development and allocation system supporting the budget request. ADSs are the agreed upon medium for complying with TPA provisions requiring RL to communicate funding information.

REGULATORY KEY ISSUES:

Failure to submit the Five-Year Plan and EM budget submittal represents failure to meet the terms of the Defense Authorization Act and the Tri-Party Agreement requirement to request funding to meet the terms of the agreement. Essentially, without ADSs, work will stop at Hanford because we will not have requested the funding.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Funding at the planning level provides for review, analysis and coordination of the ADS development to ensure integration within each of the programs across the Hanford site. This level of funding also provides for training for the contractor and RL personnel involved with ADS development to ensure that quality and success-oriented ADSs are being developed. At the planning level, support can be provided to the development of integrated, site-wide building blocks which incorporate analysis of strategic planning assumptions and priorities as they relate to the Hanford site as a whole. Additional personnel would be available to respond to programmatic needs for guidance as it related to ADS development and analysis and development of crosscut data as requested by DOE-RL and DOE-HQ to support the annual budget process. Additionally, the planning level of funding provides continued support for responding to the continually increasing requirements of the Safety and Health component of the Five-Year Plan and it provides an increased ability to deal with system and procedural changes which are common to ADS development. Planning level funding also provides for effective integration with the contractor associated with the ERMC management of the Environmental Restoration program.

CONCERNS AT PLANNING LEVEL:

The planning level of funding for this subactivity provides for a well-balanced, success-oriented program and no compliance or safety concerns exist at that level of funding. Five-Year Plan requirements are met at this level.

REQUIRED TECHNICAL DEVELOPMENT:

None.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS
AOS development is in direct support of the Defense Authorization Act (105 STAT 1290 Sec. 3132(a)). It has also become the formal budget development and allocation system supporting the budget request. AOS is the agreed upon medium for complying with TPA provisions regarding the communication funding information.

REGULATORY KEY ISSUES
Failure to submit the five-year plan and EM budget submitted represents failure to meet the terms of the Defense Authorization Act and the Party Agreement requirement to request funding to meet the terms of the agreement. Essentially, without AOS, work will stop at certain points as will not have requested the funding.

COMPARISON BENEFITS AT PLANNING LEVEL
Funding at the planning level provides for review, analysis and coordination of the AOS development to ensure integration with other programs across the Harford site. This level of funding also provides for training for the contractor and all personnel involved with AOS development to ensure that quality and success-oriented AOS are being developed. At the planning level, support can be provided to the development of integrated, site-wide building blocks which integrate analysis of strategic planning assumptions and priorities as they relate to the Harford site as a whole. Additional personnel would be available to respond to programmatic needs for guidance as it related to AOS development and analysis and development of critical data as requested by DOE-RI and DOE-HQ to support the annual budget process. Additionally, the planning level of funding provides continued support for responding to the continually increasing requirements of the safety and health component of the five-year plan and it provides an increased ability to deal with system and procedural changes which are common to AOS development. Planning level funding also provides for effective integration with the contractor associated with the ERM management of the Environmental Restoration program.

CONCERNS AT PLANNING LEVEL
The planning level of funding for this activity provides for a well-balanced, success-oriented program and an compliance or safety concern exist at that level of funding. Five-year plan requirements are not at this level.

REQUIRED TECHNICAL DEVELOPMENT
None

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7250 ADS SUF: 0 SUBACTIVITY: AK

SUBACTIVITY TITLE: RISK MANAGEMENT - PNL

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 0 TEC: 0

DESCRIPTION: PROGRAM CONTROL/SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW3110010		TOTAL
		320
TOTAL		320
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3110010		0	360	320		320	400	400	400	400
TOTAL		0	360	320	0	320	400	400	400	400
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3110010		0	360	320		320	400	400	400	400
TOTAL		0	360	320	0	320	400	400	400	400
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

Risk Management is defined as a systematic approach to making decisions in which risk is a significant factor, taking steps to reduce those risks, monitoring the results of those decisions and, if necessary, taking appropriate actions when expected results are not achieved. Risk, in this context, consists of three general types:

Environmental, worker safety, and public health (hereafter referred to as 'ES&H risk'), and

Uncertainty regarding achievement of program cost, schedule, and performance requirements (hereafter referred to as 'programmatic risk').

Other risks, such as perceived stakeholder risks, economic risks, legal risks, and political risks

The overall purpose of risk management at Hanford is to eliminate or reduce risks to the public, workers, and the environment associated with the storage, treatment, and disposal of hazardous and radiological waste. To do so, Hanford managers have been directed by DOE-HQ to implement risk-based decision making (Grumbly 1993). This means that all major decisions must be based, in part, upon a consideration of risk factors. The critical decisions, invariably, involve the allocation of resources. Headquarters has made it clear that the DOE will spend its money on those activities which address the greatest risks and which provide the greatest risk reduction. In order to comply with Headquarters guidance, Hanford will implement a Risk Management System at all levels of the Site. The overall goal of the risk management task is the design, implementation, and assessment of this System. We will also tie it to subsequent efforts at DOE-HQ.

Risk management currently is a task under Hanford mission planning; however, in FY94 and beyond, risk management will support systems engineering directly and will be partially managed and funded under that program. Primary support for mission planning will include the implementation of the Hanford Risk Management System through the execution of Hanford's risk management policy and the associated procedures at various levels in the organization.

In the long run, the Hanford risk management program will assist site managers through the Risk Management System by using risk data to focus, prioritize, and choose among cleanup efforts. The risk management task will also assist systems engineers and Hanford managers by:

- 1) Determining, in conjunction with the Integrated Risk Assessment Program (IRAP), a Site-wide picture of risk information and making risk data available to the organizations and decision makers through a common data base
- 2) Communicating with the public and other stakeholders and increasing our credibility and programmatic chances of success through the development and dissemination of accurate risk data

- 3) In conjunction with IRAP, rank-ordering potential hazards and comparing that ordering with public perceptions
- 4) Integrating risk considerations associated with specific program objectives and technology applications with the risks associated with achievement of larger Site-wide goals and objectives, including stakeholder values, legal, and future land use determination
- 5) Providing input to decision-makers on resource allocation and prioritization of effort, including sharing decision-making information and interactive consultation with stakeholders
- 6) Performing and reporting comparative risk analyses
- 7) Comparing the net risks, costs, and benefits of a given technology or options with risks, costs, and benefits of alternatives; reviewing established science and technology priorities from a risk perspective and recommending changes, where necessary; identifying the risk reduction achieved by a given technology or program option and comparing the reduction from alternative technologies or options
- 8) Providing risk data to assist in Tri-Party Agreement renegotiations
- 9) Analyzing risks associated with noncompliance or minimal compliance with regulatory requirements and performing risk analyses necessary to support the application of risk-based standards and to obtain variances and/or other appropriate regulatory relief
- 10) Sharing information and techniques with other DOE sites and DOE-HQ so complex-wide, risk-based decisions can be made

RELATED ACTIVITIES NARRATIVE:

Risk management will continue to support Hanford Mission Planning and other elements of the Long Range Planning Process. Most importantly, risk management interfaces with the Integrated Risk Assessment Program and other risk assessment activities at the Site.

Risk management will support systems engineers in all phases of the systems engineering process, especially the identification and evaluation of technical alternatives.

The Integrated Risk Assessment Program (IRAP) is currently determining the existing public health risks at the Site. They have completed a ±no intervention± assessment, which ranks risks for next 300 years if we cease current operations. Over the next several years, IRAP will develop worker, environmental, and public health risks for existing conditions, remedial actions, and end-states.

KEY ASSUMPTIONS:

The funding identified above will be increased by 25% from ADS 3400.

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K: Capital equipment for data base storage, both hardware and software, may be required in the long term. If so, capital equipment needs will be submitted as separate proposals, if necessary.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

The risk management task began in June 1993, when funding to support the task was provided by DOE-RL as part of mission planning. A task plan was prepared that summer and briefed to strategic planners at WHC and the Manager of Planning and Integration. In FY93, the task:

Identified the requirements for risk-based decision making at Hanford

Developed a risk management process based upon an EM-60 model and proposed the establishment of a Hanford Risk Management Advisory Group to apply that process in support of the Hanford Strategic Quality Planning Council and others

Identified potential risk-related applications and prioritized those applications for near-, mid- and long-term efforts. Those potential applications included:

- 1) Implementation of risk policies/procedures
- 2) Resource allocation
- 3) Support of systems engineering
- 4) Technical decisions, such as groundwater, land use, transuranic waste, etc.

Prepared a draft public involvement plan for risk management and risk assessment.

The results of the FY93 work were reported to WHC and RL in October, 1993. A total of \$84K was spent on RM activities in FY93.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

In FY94, The RM task proceeded on several fronts:

Resource allocation. Task members obtained information about resource allocation procedures used at several DOE Sites, including Rocky Flats and LANL. They also developed a draft set of Site priorities for the HMP Volume I and recommended modifications to the Priority Planning Grid so it could be used to identify benefits, as well as risk reductions, for program activities. The revised PPG was made available for FY95 budget prioritization efforts and provided the ability for managers to allocate resources based on risks and risk reduction of various activities.

Land Use and Release. An initial risk analysis was performed on the planned release of the North Slope. This analysis included hazardous risk, ecological risk to plants and wildlife, conflicting stakeholder interests, and legal/liability risks associated with the release. The analysis was briefed to DOE-RL real estate and land use planners.

Risk Management Policy, Implementing Directive and Procedures. Task members worked with planners at RL to develop a risk management policy, the RL Implementing Directive, and supporting Procedures. This effort will continue into FY95.

Support of Program Activities. Members of the risk management task are supporting managers in the ER and TWRS programs in evaluating groundwater treatment strategies and prioritization of technology development.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

The risk management scope of work for FY95 will include direct support to strategic planners and managers for the management of risk, implementation of the Risk Management System, completion of the DOE-RL risk management procedures, implementation of resource allocation procedures based on risk and risk reduction data, linkage to the Integrated Risk Assessment Program and identification of risk requirements, construction (in conjunction with IRAP) of a Site-wide picture of risk assessment activities, and solidification of public values, concerns, and priorities for guidance to programs.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

The FY96 scope of work will continue to provide direct support to Site planning activities. The full implementation of the Risk Management System and risk-based decision making will be completed at Hanford, including the rigorous application of risk standards to resource allocation activities and the determination of the Site-wide picture of risk. Risk management procedures will be updated, and the effectiveness of risk reduction efforts by programs will be tracked. Coordination with IRAP will continue, with emphasis on remediation efforts and safety risks associated therewith. Risk mitigation and communications strategies will be developed and implemented, as appropriate.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

For the remainder of the decade, the Site will employ decision techniques that continue to be based upon risks to the public, workers, and the environment. Budgets are expected to level off and may decrease. Public organizations and other stakeholders will assume increasing roles in Site decision making. Integration of short-term programmatic objectives with future land uses and the economic transition mission and maintenance of a credible stakeholder involvement effort will become more crucial to ultimate success. Formal risk management and decision analytic procedures will be required to ensure the best choices are made and the public's interests are served. A complete picture of all risks at Hanford will be completed, including those risks associated with various cleanup options. Residual risks will be estimated and technical alternatives will be evaluated from a risk reduction perspective. Site managers will ensure risk is allocated among subordinate programs in a manner that is, overall, best for the Site. Programs will support and employ risk management techniques.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

In an effort to enhance cost efficiencies, this TDD reflects a Productivity Commitment for the Planning Integration Program. This Productivity Commitment will achieve the same workscope at a lower cost, through the application of more efficient processes and cost avoidance.

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7330 ADS SUF: 0 SUBACTIVITY: HA

SUBACTIVITY TITLE: PROGRAM ADMINISTRATION

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 0 TEC: 0

DESCRIPTION: PROGRAM CONTROL/SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE	EW3110010	460
TOTAL		460
DIRECT FTE		4

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3110010	476	447	460		460	474	488	502	517
TOTAL		476	447	460	0	460	474	488	502	517
DIRECT FTE		4	4	4	0	4	4	4	4	4

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3110010	476	447	460		460	474	488	502	517
TOTAL		476	447	460	0	460	474	488	502	517
DIRECT FTE		4	4	4	0	4	4	4	4	4

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

HA - Program Administration Activity includes program management and financial administration for the HEMP. Current year and long range program plans and budgets will be developed and current year budget documentation will be maintained in the Financial Data System (FDS) based upon baseline authorization and approved change control documentation. Program priority lists/building blocks will be developed and maintained to ensure resources are used as effectively as possible in meeting company, DOE and Regulatory expectations and requirements. Site Management System (SMS) requirements for HEMP will be implemented and maintained, and SMS requirements for the Environmental Support (WBS 1.5.2) portion of the Site Support mission will be coordinated. Program Level schedules will be developed and statused as required.

RELATED ACTIVITIES NARRATIVE:

This subactivity supports all other subactivities within ADS 7330, Environmental Support - Planning and Tri-Party Agreement Management. Site Management System reporting coordination for elements of the Environmental Support (WBS 1.5.2) program within the Site Support Mission is supported, including interfaces with ADS 7360, Environmental Support Inventories Management and ADS 7332, Pollution Prevention.

KEY ASSUMPTIONS:

A base level of financial/administrative support requirements assumed to continue through out-years at a level similar with that planned for in FY 1995.

In FY 1995 requirements are increased by approximately \$100K to provide program scheduling support.

ACTIVITY BY PRIORITY:

The Program Administration workscope is Priority 2 since it specifically supports compliance activities.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

In prior years, the program management and administrative support was provided as needed to meet existing planning requirements.

SCHEDULE INFORMATION

FY 1994 MILESTONES
MILESTONE ID TITLE
PLANNING TARGET

CURRENT YEAR (FY 1994) TASK NARRATIVE:
Activities for program administration include: provide program management and financial administration for the Hazardous Environmental Management Program (HEMP), coordinate development/maintenance of FY budget into the Financial Data System, coordinate development and input of the HEMP Activity Data Sheets (ADSs) into Five-Year Plan, provide input to management reports including the Site Management System reports, issue HEMP Multi Year Program Plan and Fiscal Year Work Plan.

FY 1995 MILESTONES
MILESTONE ID TITLE
PLANNING TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:
Continue to provide program administration activities which include: provide program management and financial administration for the Hazardous Environmental Management Program (HEMP), coordinate development/maintenance of FY budget into the Financial Data System, coordinate development and input of the HEMP Activity Data Sheets (ADSs) into Five-Year Plan, provide input to management reports including the Site Management System reports, issue HEMP Multi Year Program Plan and Fiscal Year Work Plan. Additional funding is allocated for program administration due to increased scheduling reporting requirements.

FY 1996 MILESTONES
MILESTONE ID TITLE
PLANNING TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE:
Continue to provide program administration activities which include: provide program management and financial administration for the Hazardous Environmental Management Program (HEMP), coordinate development/maintenance of FY budget into the Financial Data System, coordinate development and input of the HEMP Activity Data Sheets (ADSs) into Five-Year Plan, provide input to management reports including the Site Management System reports, issue HEMP Multi Year Program Plan and Fiscal Year Work Plan.

FY 1997-FY 2000 MILESTONES
MILESTONE ID TITLE
PLANNING TARGET

OUTYEAR (FY 1997-2000) TASK NARRATIVE

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Activities for program administration include: provide program management and financial administration for the Hanford Environmental Management Program (HEMP), coordinate development/maintenance of FY budget into the Financial Data System, coordinate development and input of the HEMP Activity Data Sheets (ADSs) into Five-Year Plan, provide input to management reports including the Site Management System reports, issue HEMP Multi Year Program Plan and Fiscal Year Work Plan.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Continue to provide program administration activities which include: provide program management and financial administration for the Hanford Environmental Management Program (HEMP), coordinate development/maintenance of FY budget into the Financial Data System, coordinate development and input of the HEMP Activity Data Sheets (ADSs) into Five-Year Plan, provide input to management reports including the Site Management System reports, issue HEMP Multi Year Program Plan and Fiscal Year Work Plan. Additional funding is allotted for program administration due to increased scheduling reporting requirements.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Continue to provide program administration activities which include: provide program management and financial administration for the Hanford Environmental Management Program (HEMP), coordinate development/maintenance of FY budget into the Financial Data System, coordinate development and input of the HEMP Activity Data Sheets (ADSs) into Five-Year Plan, provide input to management reports including the Site Management System reports, issue HEMP Multi Year Program Plan and Fiscal Year Work Plan.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Continue to provide program administration activities which include: provide program management and financial administration for the Hanford Environmental Management Program (HEMP), coordinate development/maintenance of FY budget into the Financial Data System, coordinate development and input of the HEMP Activity Data Sheets (ADSs) into Five-Year Plan, provide input to management reports including the Site Management System reports, issue HEMP Multi Year Program Plan and Fiscal Year Work Plan.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

Regulator drivers for this subactivity are: DOE Order 2250.1C - Cost and Schedule Control Systems Criteria, and DOE Order 4700.1 - Project Management System. In addition this subactivity supports all other subactivities within ADS 7330, Environmental Support -Planning and Tri-Party Agreement Management. Therefore all regulatory drivers listed in the ADS apply to this subactivity.

REGULATORY KEY ISSUES:

None

COMP/PROG BENEFITS AT PLANNING LEVEL:

None

CONCERNS AT PLANNING LEVEL:

None

REQUIRED TECHNICAL DEVELOPMENT:

None

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

HB - Environmental Planning Activity includes Program Planning -Priority 3 and Environmental Databases - Priority 1 and are described herein.

Program Planning - work focuses primarily on the National Five-Year Plan and its associated Hanford products. These products include the Installation Summary and Progress Chart, the Site-Specific Plan, the comment resolution document and the OMB Circular A-106 Environmental Project Plan.

Environmental Databases - The Waste Information Data System (WIDS) provides a focal point for the identification and summary data for all Hanford Waste Sites. This relational database includes all known waste sites included in the Tri-Party Agreement as well as all other sites or facilities requiring identification by regulatory requirements.

RELATED ACTIVITIES NARRATIVE:

This subactivity is related to all ADS's in the Five-Year Plan in that this activity prepares the Site-Specific Plan. All ADS's with environmental construction projects are also related through the OMB Circular A-106 report preparation.

KEY ASSUMPTIONS:

Assume key planning and reporting document requirements are transferred as follows: Program Planning transfers to ADS 7250 and Environmental Databases transfers to ADS 3400 starting in FY 1994.

ACTIVITY BY PRIORITY:

N/A

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

Prior year reports all issued on schedule, and WIDS maintained as planned.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Activities for Program Planning include: issue Installation Summary and Progress Chart (tentatively, draft due around mid January, final due end of March), issue draft Site-Specific Plan in May, followed by final in August, issue comment resolution document in January/February time-frame, issue OMB Circular A-106 Environmental Project Plan in July, issue compliance summary draft in April, and the annual revision of the Environmental Protection Plan in November. Activities for Environmental Database include: maintain/update WIDS database in support of environmental activities, issue quarterly status report on WIDS, prepare submittal to the National Integrated Data Base (IDB) and issue Hanford Site Waste Management Units Report, (Tri-Party Agreement requirement).

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Program Planning workscope transfers to ADS 7250, except for the OMB Circular A-106 workscope which transfers to subactivity HA - Program Administration, and the Environmental Databases workscope transfers to the Environmental Restoration Program ADS 3400.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

No activity.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

No activity.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

Drivers for this activity include DOE Orders 5820.2A, 5400.1 and 5400.3 the Defense Work Authorization Act of 1992 and OMB Circular A-106, Tri-Party Agreement.

REGULATORY KEY ISSUES:

N/A

COMP/PROG BENEFITS AT PLANNING LEVEL:

N/A

CONCERNS AT PLANNING LEVEL:

N/A

REQUIRED TECHNICAL DEVELOPMENT:

None

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

HC - Regulatory Field Support Activity includes the following activities: Inspection support, development of RCRA files, Environmental Compliance support and site-wide spill reporting guidance and reporting. These activities are described in the following paragraphs.

On-site inspections by regulatory agencies will be coordinated and documented in response to inspection findings.

Regulatory compliance files that demonstrate compliance with environmental regulatory and permit requirements for approximately 60 treatment, storage and disposal (TSD) units and 100+ waste generators on the Hanford Site will be supported. Files will be developed that are accessible to agency inspectors, easily retrieved and stored in a manner consistent with all applicable record keeping requirements.

A focal point will be provided for resolution of site-wide environmental compliance issues. Environmental compliance assessments evaluating environmental regulatory compliance status of operating and inactive facilities will be performed in preparation for regulatory agency inspections (e.g. EPA, Ecology, DOH). Site-wide efforts to achieve and maintain compliance with environmental laws and regulations will continue.

Site-wide spill reporting guidance and reporting will be coordinated. Spills to the environment from dangerous waste units or from facilities having hazardous substances must be reported to the appropriate agencies. Spills of hazardous substances exceeding reportable quantities listed in 40 CFR 302 must be reported within 24 hours to the Coast Guard National Response Center and written reports provided to RL for transmittal to EPA region 10. Spills of dangerous waste presenting a threat to human health and the environment must be reported to the Washington Department of Ecology. Spills of PCBs must be reported to EPA immediately.

RELATED ACTIVITIES NARRATIVE:

This subactivity is related to all ADSs that fund TSD units in the Hanford Facility.

KEY ASSUMPTIONS:

Environmental compliance assessments will continue to be performed in FY 1995 and beyond.

Regulatory file implementation for the Hanford RCRA Facility Permit compliance will be included in HG - Permit Requirements subactivity.

ACTIVITY BY PRIORITY:

This workscope is Priority 2, specifically ensuring compliance with

environmental laws and the Tri-Party Agreement.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

PROCUREMENT OF VEHICLES
PROCUREMENT OF VEHICLES
PROCUREMENT OF VEHICLES

TASKS COMPLETED TO DATE:

Guidance on environmental issues with site-wide impacts was issued, pre-inspection preparations for environmental inspections of the Hanford site by regulatory agencies was provided, escort of inspectors, inspection summaries and response to inspection findings was also provided.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Current activities include: coordination of onsite inspections by regulatory agencies, provide guidance and assistance in the preparation of regulatory compliance files at Treatment, Storage and Disposal facilities, provide focal point for resolution of site-wide specific environmental compliance issues and provide spill reporting guidance and reporting.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Continue regulatory field support activities which include: coordination of onsite inspections by regulatory agencies, provide guidance and assistance in the preparation of regulatory compliance files at Treatment, Storage and Disposal facilities, provide focal point for resolution of site-wide specific environmental compliance issues and provide spill reporting guidance and reporting.

Requirements for complying with the Hanford RCRA Facility Permit are included in HG - Permit Requirements subactivity .

\$55K of Capital funding is allotted to fund inspection vehicles to support the regulatory agency inspections.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Continue regulatory field support activities which include: coordination of onsite inspections by regulatory agencies, provide guidance and assistance in the preparation of regulatory compliance files at Treatment, Storage and Disposal facilities, provide focal point for resolution of site-wide specific environmental compliance issues and provide spill reporting guidance and reporting.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Continue regulatory field support activities which include: coordination of onsite inspections by regulatory agencies, provide guidance and assistance in the preparation of regulatory compliance files at Treatment, Storage and Disposal facilities, provide focal point for resolution of site-wide specific environmental compliance issues and provide spill reporting guidance and reporting.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

Drivers for this subactivity include; RCRA Sec. 3007 & 3007b, DOE-RL letter 91-EPB-018, WAC 173-303-604, WAC 174-404-690, Tri-Party Agreement Article XXXV11 & XXXVI, DOE Order 5482.1B, WAC 173-303 and 40 CFR 302.

REGULATORY KEY ISSUES:

None

COMP/PROG BENEFITS AT PLANNING LEVEL:

None

CONCERNS AT PLANNING LEVEL:

None

REQUIRED TECHNICAL DEVELOPMENT:

None

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7330 ADS SUF: 0 SUBACTIVITY: HD

SUBACTIVITY TITLE: AIR & WATER PERMITTING COORDINATION

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 0 TEC: 0

DESCRIPTION: PROGRAM CONTROL/SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE EW3110010		865
TOTAL		865
DIRECT FTE		7

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3110010		1931	1016	865		865	891	918	945	973
TOTAL		1931	1016	865	0	865	891	918	945	973
DIRECT FTE		9	9	7	0	7	7	7	7	7

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3110010		1931	1016	865		865	891	918	945	973
TOTAL		1931	1016	865	0	865	891	918	945	973
DIRECT FTE		9	9	7	0	7	7	7	7	7

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

HD - NEPA/Regulatory Permitting Coordination subactivity includes National Environmental Policy Act (NEPA) and Regulatory Permitting activities.

NEPA activities include: provide support to management on overall NEPA/State Environmental Policy Act (SEPA) issues pertaining to Hanford and DOE, including review of WHC NEPA/SEPA activities to ensure consistency and compliance.

Regulatory Permitting activities include: support to the Hanford Facility RCRA/Dangerous Waste Permit (FY 1994 only). In addition, preparation of permit applications and closure/postclosure plans for site-wide environmental permits to address RCRA requirements (Tri-Party Agreement milestone M-20-00) and permit documentation necessary to address air and water requirements.

New workscope includes support to Natural Damage Resource Assessment (NRDA). This workscope consists of identifying past and future site activities that have impacted site natural resources. An integration plan (team of PNL/WHC and other contractors) will be established to identify and assess various site studies, activities and programs that can be used to identify site locations where natural injury has occurred or is likely to occur due to future site activities, e.g., TSD activities. In addition, methods will be developed to collect, analyze, and interpret natural resource data to understand and identify potential future liabilities under the NRDA requirements. A framework will be provided from which to assess potential natural resource liabilities.

RELATED ACTIVITIES NARRATIVE:

This subactivity is related to all other ADS's which require NEPA documentation or which are required to prepare RCRA and other site-wide environmental/regulatory permitting documentation. Environmental Restoration ADS 3400 is related in the NRDA workscope.

KEY ASSUMPTIONS:

A base level of NEPA and Regulatory Permitting support requirements are assumed to continue through out-years at a level similar with that planned for in FY 1995.

Incremental funding will be required above the 'Target' to initiate a site-wide NEPA EIS required by 10 CFR 1021 in FY 1996.

Incremental funding will also be required to initiate an engineering study to support site-wide closure of canyon facilities in FY 1997.

ACTIVITY BY PRIORITY:

This workscope is Priority 2, specifically ensuring compliance with environmental laws and the Tri-Party Agreement.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

Prior year NEPA and Regulatory Permitting coordination conducted as required: monthly NEPA/Regulatory Permitting status reports written as scheduled.

A Hanford Facility RCRA/Dangerous Waste Permit Application, Revision 0 was completed and submitted to the regulators - October 1991. A review comment package was prepared to address a Draft Hanford Facility RCRA/Dangerous Waste Permit issued by the regulators for public comment.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

NEPA coordination activities include: provide overall general NEPA/SEPA review on issues pertaining to Hanford and DOE to ensure consistency and compliance.

Regulatory permitting activities include: support to the Hanford Facility RCRA/Dangerous Waste Permit. In addition, preparation of permit applications and closure/postclosure plans for site-wide environmental permits to address RCRA requirements (Tri-Party Agreement milestone M-20-00) and permit documentation necessary to address air and water requirements. Funding is also provided to support management oversight and coordination of NRDA workscope including development of a National Resource Injury Plan which will provide guidance and direction for protection of natural resources.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Continue NEPA Coordination activities which include: provide overall general NEPA/SEPA review on issues pertaining to Hanford and DOE to ensure consistency and compliance.

Continue to prepare permit applications and closure/postclosure plans for site-wide environmental permits to address RCRA requirements (Tri-Party Agreement milestone M-20-00) and permit documentation necessary to address air and water requirements.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7330-00-0035	SUBMIT PART B PERMIT APPLICATIONS OR CLOSURE PLANS FOR ALL RCRA	5/31/96	5/31/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Continue NEPA Coordination activities which include: provide overall general NEPA/SEPA review on issues pertaining to Hanford and DOE to ensure consistency and compliance.

Continue to prepare permit applications and closure/postclosure plans for site-wide environmental permits to address RCRA requirements (Tri-Party Agreement milestone M-20-00) and permit documentation necessary to address air and water requirements.

Incremental funding of approximately \$470K is required to initiate a site-wide NEPA EIS. This is required by 10 CFR 1021, and would take multiple years to complete.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Continue NEPA coordination activities which include: provide overall general NEPA/SEPA review on issues pertaining to Hanford and DOE to ensure consistency and compliance.

Continue to prepare permit applications and closure/postclosure plans for site-wide environmental permits to address RCRA requirements (Tri-Party Agreement milestone M-20-00) and permit documentation necessary to address air and water requirements. Continue to support management oversight and coordination of NRDA workscope including development of a National Resource Injury Plan which will provide guidance and direction for protection of natural resources.

Incremental funding of approximately \$500K - \$1M annually is identified in the Planning Level to fully support the site-wide NEPA EIS.

Additional funding of approximately \$700K/year FY 97-99 is identified in the Planning Level to support an engineering study for site-wide closure of canyon facilities. The study will look at alternatives for closure, including waste disposal, for treatment, storage and disposal units site-wide, including the B Plant, PUREX and UO3, and others as appropriate. Alternatives for the waste from each unit will be addressed, and will be used to develop alternatives for plant closures which will be addressed in each program's EIS, as the decision for closure becomes appropriate.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

Drivers for this subactivity include: NEPA of 1969, 10 CFR 1021, DOE Order 5440.1D, 40 CFR 122, 33 CFR 322, WAC 173-216, WAC 220-110, WAC 246-272, 40 CFR 61 Subpart A, 40 CFR 61 Subpart H, 40 CFR 61, Subpart M, 40 CFR 52, WAC 173-400, WAC 173-460, WAC 173-480, WAC 246-247, 40 CFR 270 and WAC 173-303-806, 43 CFR 11.

Regulatory drivers for the Natural Resource Damage Assessment workscope include: Water Pollution Control Act (Chapter 90.48 RCW), Model Toxics Control Act (Chapter 70.105D RCW), DOE Order 5400.4(7) (g) EO 12580.

REGULATORY KEY ISSUES:

None

COMP/PROG BENEFITS AT PLANNING LEVEL:

The site-wide NEPA EIS is initiated in FY 1996 and the engineering study for site-wide closure of canyon facilities in FY 1997.

CONCERNS AT PLANNING LEVEL:

None

REQUIRED TECHNICAL DEVELOPMENT:

None

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

HE - Environmental Reporting subactivity includes the following activities: Regulatory Reporting, Tri-Party Agreement Milestone M-26 and Air Emissions/NESHAP coordination. These activities are described in the following paragraphs.

Regulatory Reporting - work includes submittal of mandatory State and Federal regulatory reports for hazardous material inventories and releases, for dangerous waste operations and for toxic waste management. Regulatory requirements for the reports are specified in EPCRA/SARA Title III (Sections 311, 312 and 313), WAC 173-303, RCRA (3016) and TSCA. Workslope also includes development and maintenance of database reporting systems to keep pace with evolving environmental regulations, and establishment of Hanford Site infrastructure for reporting compliance through training of, and interfacing with, contractor and facilities staff personnel.

Hanford input will be provided to the Department of Energy - Headquarters Integrated Data Base (IDB) report, a requirement of DOE Order 5820.2A. The annual submittal, made to Oak Ridge National Laboratories, consists of current and projected inventories of high-level, transuranic, low-level, and low-level mixed waste.

Land Disposal Restrictions (LDR) Waste Status Reporting - activities focus on completion of Tri-Party Agreement Milestone M-26-01, which requires preparation of an annual status report on LDR mixed waste management and identification of interim milestones for LDR compliance.

Air Emissions/NESHAP Coordination - activities focus on development, administration and maintenance of data to support a permit application for air emissions which is required by the Clean Air Act, Title V.

RELATED ACTIVITIES NARRATIVE:

This subactivity is related to all ADSs which support these activities.

KEY ASSUMPTIONS:

A base level of environmental reporting requirements are assumed to continue through out-years at a level similar with that planned for in FY 1995.

In FY 1996 requirements are increased by approximately \$196K to provide additional reporting requirements to support the Hanford Site Air Operating Permit, Federal Facility Compliance Act and LDR status report.

ACTIVITY BY PRIORITY:

All workslope is Priority 2, specifically ensuring compliance with environmental laws and the Tri-Party Agreement.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

PROCUREMENT OF UNIX COMPUTER
PROCUREMENT OF UNIX COMPUTER
PROCUREMENT OF UNIX COMPUTER

TASKS COMPLETED TO DATE:

Prior calendar year reports submitted on schedule include: Annual Dangerous Waste Report, submitted - March 1993, Annual EPCRA/SARA Title III Section 312 Report submitted - March 1993, EPCRA 311 MSDS's updated in November 1992 and May 1993, EPCRA 312 Report submitted - March 1993, Annual PCB Document Log submitted - February 1993, EPCRA 313 Report submitted - July 1993, Annual PCB Report submitted - April 1993, Tri-Party Agreement Milestone M-26-01C "Submit Hanford Land Disposal Restrictions Plan for Mixed Wastes (LDR Plan) submitted - April 1993, submittal to the National Integrated Database - August 1993.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7330-00-0340	SUBMIT RCRA 3016 REPORT	1/31/94	1/31/94
7330-00-0360	SUBMIT HANFORD SITE ANNUAL PCB DOCUMENT LOG	2/15/94	2/15/94
7330-00-0345	SUBMIT EPCRA 312 TIER TWO HAZARDOUS CHEMICAL INVENTORY REPORT	3/01/94	3/01/94
7330-00-0350	SUBMIT HANFORD SITE ANNUAL DANGEROUS WASTE REPORT	3/01/94	3/01/94
7330-00-0330	PREPARE SUBMITTAL TO THE NATIONAL IDB	4/15/94	4/15/94
7330-00-0545	ISSUE ANNUAL LDR STATUS REPORT	4/30/94	4/30/94
7330-00-0005	COMPLETE LABORATORY ACTIVITY TOXIC CHEMICAL USE REPORT	8/01/94	8/01/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Activities for this subactivity include: submittal of mandatory State and Federal regulatory reports, development and maintenance of database reporting systems to keep pace with evolving environmental regulations, and establishment of Hanford Site infrastructure for reporting compliance through training of, and interfacing with, contractor and facilities staff personnel.

LDR Waste Status Reporting activities focus on completion of Tri-Party Agreement Milestone M-26-01.

Development of Clean Air Act Amendment database system required to implement permit application and annual reporting requirements, and expanded database operations and system maintenance for EPCRA and CAAA compliance is also supported.

Hanford input will be provided to the Department of Energy - Headquarters Integrated Data Base (IDB) report, a requirement of DOE Order 5820.2A. The annual submittal, made to Oak Ridge National Laboratories, consists of current and projected inventories of high-level, transuranic, low-level, and low-level mixed waste.

Support is provided for development, administration and maintenance of the data to support an Air Emission Operating Permit based on Clean Air Act compliance requirements. Work scope includes support to an Air Emission Inventory and establishment of a requisite data management system.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7330-00-0510	SUBMIT HANFORD SITE ANNUAL PCB DOCUMENT LOG	2/15/95	2/15/95
7330-00-0495	SUBMIT EPCRA 312 TIER TWO HAZARDOUS CHEMICAL INVENTORY REPORT	3/01/95	3/01/95
7330-00-0500	SUBMIT HANFORD SITE ANNUAL	3/01/95	3/01/95

7330-00-0480	DANGEROUS WASTE REPORT PREPARE SUBMITTAL TO THE NATIONAL IDB	4/15/95	4/15/95
7330-00-0665	ISSUE ANNUAL LDR STATUS REPORT	4/30/95	4/30/95
7330-00-0010	COMPLETE LABORATORY ACTIVITY TOXIC CHEMICAL USE REPORT	8/01/95	8/01/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Continue activities as noted: submittal of mandatory State and Federal regulatory reports, development and maintenance of database reporting systems to keep pace with evolving environmental regulations, and establishment of Hanford Site infrastructure for reporting compliance through training of, and interfacing with contractor and facilities staff personnel and IDB report preparation.

Continue LDR Waste Status Reporting activities which focus on completion of Tri-Party Agreement Milestone M-26-01.

Continue to provide support to Clean Air Act/NESHAP coordination. Work will support a permit application for air emissions which includes completion of the Air Emissions Inventory and maintenance of the system. Implementation of site-wide regulatory requirements by facility compliance with affected WHC operations and facilities is also supported.

Acquisition of an additional UNIX based computer and supporting software will be required to manage expanding data compilation activities for regulatory report compliance.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7330-00-0605	SUBMIT RCRA 3016 REPORT	1/31/96	1/31/96
7330-00-0625	SUBMIT HANFORD SITE ANNUAL PCB DOCUMENT LOG	2/15/96	2/15/96
7330-00-0610	SUBMIT EPCRA 312 TIER TWO HAZARDOUS CHEMICAL INVENTORY REPORT	3/01/96	3/01/96
7330-00-0615	SUBMIT HANFORD SITE ANNUAL DANGEROUS WASTE REPORT	3/01/96	3/01/96
7330-00-0595	PREPARE SUBMITTAL TO THE NATIONAL IDB	4/15/96	4/15/96
7330-00-0220	ISSUE ANNUAL LDR STATUS REPORT	4/30/96	4/30/96
7330-00-0015	COMPLETE LABORATORY ACTIVITY TOXIC CHEMICAL USE REPORT	8/01/96	8/01/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Continue activities as noted: submittal of mandatory State and Federal regulatory reports, Clean Air Act Amendment required reporting, development and maintenance of database reporting systems to keep pace with evolving environmental regulations, and establishment of Hanford Site infrastructure for reporting compliance through training of, and interfacing with, contractor and facilities staff personnel and IDB report preparation.

Continue LDR Waste Status Reporting activities focus on completion of Tri-Party Agreement Milestones M-26-01.

Continue to provide for Air Emissions/NESHAP site-wide coordination and reporting.

Approximately \$196K of growth in FY 1996 over FY 1995 levels is allotted to provide for increased requirements in the following areas; to implement conditions of the Hanford Site Air Operating Permit for tracking and formal mandatory reporting, and for development of final waste treatment plans as required by the Federal Facility Compliance Act. In addition, it will support new planning baselines and specific LDR waste stream data and information which will require significant expansion of and revision to the scope and content of the status report.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7330-00-0050	SUBMIT HANFORD SITE ANNUAL PCB DOCUMENT LOG	2/15/97	2/15/97
7330-00-0040	SUBMIT EPCRA 312 TIER TWO HAZARDOUS CHEMICAL INVENTORY REPORT	3/01/97	3/01/97
7330-00-0045	SUBMIT HANFORD SITE ANNUAL DANGEROUS WASTE REPORT	3/01/97	3/01/97
7330-00-0030	PREPARE SUBMITTAL TO THE NATIONAL IDB	4/15/97	4/15/97
7330-00-0055	ISSUE ANNUAL LDR STATUS REPORT	4/30/97	4/30/97
7330-00-0020	COMPLETE LABORATORY ACTIVITY TOXIC CHEMICAL USE REPORT	8/01/97	8/01/97
7330-00-0025	ISSUE ANNUAL LDR STATUS REPORT	4/30/98	4/30/98
7330-00-0060	ISSUE ANNUAL LDR STATUS REPORT	4/30/99	4/30/99
7330-00-0065	ISSUE ANNUAL LDR STATUS REPORT	4/30/00	4/30/00

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Continue activities as noted: submittal of mandatory State and Federal regulatory reports, Federal Facility Compliance Act reporting, Clean Air Act Amendment required reporting, development and maintenance of database reporting systems to keep pace with evolving environmental regulations, and establishment of Hanford Site infrastructure for reporting compliance through training of, and interfacing with, contractor and facilities staff personnel, and preparation of the IDB report.

LDR Waste Status Reporting activities focus on continuing to support Tri-Party Agreement Milestone M-26-01.

Continue to provide for Air Emissions/NESHAP site-wide coordination and reporting.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

Drivers for this subactivity are; 40 CFR 761.180, 40 CFR 761 Subpart K, 40 CFR 265.56 40 CFR 355, 40 CFR 370, 40 CFR 372, WAC 173-303-220, WAC 173-303-390, Tri-Party Agreement, 40 CFR 268, WAC 173-303-140, 29 CFR 1910.1200, 40 CFR 265.16, 40 CFR 260, 40 CFR 302.3, 40 CFR 761.1, 42 USC 6961, DOE Orders 5700.6C and 5820.2A, and WAC 173-303-330, Clean Air Act Amendments of 1990, Federal Facility Compliance Act of 1992.

REGULATORY KEY ISSUES:

None

COMP/PROG BENEFITS AT PLANNING LEVEL:

All workscope is funded at the Target level.

CONCERNS AT PLANNING LEVEL:

None

REQUIRED TECHNICAL DEVELOPMENT:

None

**THIS PAGE INTENTIONALLY
LEFT BLANK**

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

HF - Tri-Party Agreement subactivity includes oversight, statusing and administration of the Tri-Party Agreement. Specific administration requirements (change control, progress reporting, milestone tracking, Tri-Party Agreement amendments, data management, dispute resolution, etc.) are legal requirements of the Tri-Party Agreement. The Tri-Party Agreement change control process assures careful development and documentation of all changes made, and the milestone schedule performance database tracks all Tri-Party Agreement milestones. Monthly reports generated include information on progress, status, funding/cost performance and problems dealing with all Tri-Party Agreement activities. The Tri-Party Agreement is formally updated on an ongoing basis as changes are approved. Regular Amendments continue to be necessary and have been carried out per requirements in the Tri-Party Agreement. At least two meetings each month are held with EPA and Ecology to discuss milestone progress and to address Project Managers activities. Meetings with the public are held quarterly to enhance communication and to comply with the Tri-Party Agreement public involvement requirements.

Milestone managers are required to work with other WHC organizations, other contractors, RL and the regulators to ensure integration and to provide frequent statusing to both DOE and WHC management. If change is required, these milestone managers lead the negotiation process. "Look-ahead" reports will be produced and given to DOE and WHC.

RELATED ACTIVITIES NARRATIVE:

This subactivity is related to every ADS in the Five-Year Plan that supports Tri-Party Agreement milestones and work scope.

KEY ASSUMPTIONS:

Continued evolution of the Tri-Party Agreement is assumed through the out-years; work scope identified for FY 1996 is assumed to continue through the planning period.

Incremental funding will be required above the "Target" level to maintain meaningful public involvement, and support additional and re-structured work scope resulting from the FY 1993 Tri-Party Agreement renegotiations. The impact of target level funding will be a reduction in support to DOE and a reduction in actual staff supporting Tri-Party Agreement activities.

ACTIVITY BY PRIORITY:

This work scope is Priority 2, specifically ensuring compliance with environmental laws and the Tri-Party Agreement.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

Tri-Party Agreement signed May, 1989. Tri-Party Agreement was renegotiated and signed, and a comprehensive public comments and Tri-Party Agreement response document was issued in January, 1994. Monthly reports issued as planned, public status meetings held, schedules and tracking systems developed and maintained.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Continue to issue monthly budget, schedule, and milestone status reports. Provide the Annual Tri-Party Agreement update. Bi-monthly meetings will be held with EPA and Ecology, and quarterly meetings with the public. Milestone managers will continue to work with other WHC organizations, other contractors, RL and the regulators to ensure integration and to provide frequent statusing to both DOE and WHC management. "Look ahead" reports will be produced and given to DOE & WHC. A Tri-Party Agreement training program will be developed as required by DOE (Tiger Team audit finding). Continue follow on support to the renegotiated Tri-Party Agreement--publishing of the revised Tri-Party Agreement document, coordinating and conducting on-site employee and management briefings, and working with programs to interpret and implement changes.

Based on significant changes to the renegotiated Tri-Party Agreement in late FY 1993, additional required work scope has been identified relative to management support of Tank Waste Remediation System related milestones, management of Tri-Party Agreement database information, and expanded public involvement. The number of enforceable milestones was increased from 455 to 641, and an additional 100 target milestones are also being tracked. Work scope associated with these items is incremental to target level budgets.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Continue to issue monthly budget, schedule, and milestone status reports. Provide the Annual Tri-Party Agreement update. Bi-monthly meetings will be held with EPA and Ecology, and quarterly meetings with the public. Milestone managers will continue to work with other WHC organizations, other contractors, RL and the regulators to ensure integration and to provide frequent statusing to both DOE and WHC management. "Look ahead" reports will be produced and given to DOE & WHC.

An incremental \$376K above the Target is required to maintain meaningful public involvement, and support additional and re-structured work scope resulting from the FY 1993 Tri-Party Agreement renegotiations.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Continue to issue Monthly Progress Reports and the Annual Tri-Party Agreement update. Hold bi-monthly meetings will be held with EPA and Ecology, and quarterly meetings with the public. Milestone managers will continue to work with other WHC organizations, other contractors, RL and the regulators to ensure integration and to provide frequent statusing to both DOE and WHC management. "Look ahead" reports will be produced and given to DOE & WHC.

An incremental \$384K above the Target is required to maintain meaningful public involvement, and support additional and re-structured work scope resulting from the FY 1993 Tri-Party Agreement renegotiations.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

The work scope planned for outyears is consistent with work planned in FY 1996. Additional funding of approximately \$415K is provided to fully fund all Tri-Party Agreement requirements as previously noted.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

Drivers for this subactivity are legal requirements in the Tri-Party Agreement.

REGULATORY KEY ISSUES:

The continuing evolution of the Tri-Party Agreement will likely create additional administrative requirements which when identified, may require incremental funding. The additional work scope identified in FY 1995 is representative of changing needs which may continue to expand from future Tri-Party Agreement changes and regulator/public interpretation.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Anticipated increased Tri-Party Agreement renegotiations, additional required work scope relative to management support of Tank Waste Remediation System related milestones, management of Tri-Party Agreement database information, and expanded public involvement are fully supported.

CONCERNS AT PLANNING LEVEL:

None

REQUIRED TECHNICAL DEVELOPMENT:

None

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7330 ADS SUF: 0 SUBACTIVITY: HG

SUBACTIVITY TITLE: RCRA COMPLIANCE

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 0 TEC: 0

DESCRIPTION: PROGRAM CONTROL/SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW3110010		TOTAL
		2322
TOTAL		2322
DIRECT FTE		16

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3110010		2966	2827	2894		2894	4338	4645	3723	3960
TOTAL		2966	2827	2894	0	2894	4338	4645	3723	3960
DIRECT FTE		16	18	18	0	18	19	19	19	19

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3110010		2966	2827	4387		4387	4395	4645	3723	3960
CE 35EW31101		0	0	262		262	0	0	0	0
TOTAL		2966	2827	4649	0	4649	4395	4645	3723	3960
DIRECT FTE		16	18	19	0	19	19	19	19	19

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

HG - TSD Permit Requirements subactivity includes work required to comply with requirements identified in the Hanford Facility RCRA/Dangerous Waste Permit for the Hanford Site. Items included are: compliance coordination and permit modification, permit condition tracking, permit recordkeeping and retrieval, mapping and marking of underground piping, annual closure cost estimates and Waste Minimization reports facility-wide inspections and permit's waste inventory.

RELATED ACTIVITIES NARRATIVE:

This subactivity is related to all ADS's which are associated with Hanford Dangerous Waste TSD facilities.

KEY ASSUMPTIONS:

The Draft Hanford RCRA Facility Permit is assumed to be finalized and issued in FY 1994. The HEMP assumes to accept responsibility for coordinating selected requirements of the Permit which are of a site-wide nature and not readily assignable to specific operating Programs. Changes from the Draft to Final permit may change workscope requirements.

Facility specific requirements will be the responsibility of individual plants/programs.

ACTIVITY BY PRIORITY:

This workscope is Priority 2, specifically ensuring compliance with environmental laws and the Tri-Party Agreement.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

CAPITAL EQUIPMENT PURCHASE

TASKS COMPLETED TO DATE:

The Draft permit has been reviewed, and preliminary assumptions about work requirements made.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Workscope includes that to support the Hanford Facility RCRA/Dangerous Waste Permit when issued. Initially a Permit Implementation Plan will be prepared to address overall and specific impacts to the Hanford Facility. The plan will include a strategy for implementing the permit as well as estimated budget impacts for those organizations/facilities/programs required to respond to requirements. Compliance requirements to be initiated include: mapping and marking of underground piping.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Assuming the Permit is issued in FY 1994, work will need to be initiated in the areas of compliance coordination and permit modification, permit condition tracking, permit recordkeeping and retrieval, mapping and marking of underground piping, annual closure cost estimates and Waste Minimization reports facility-wide inspections and permit's waste inventory.

\$659K above the target is required to fully fund permit recordkeeping and retrieval and mapping and marking of underground piping.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Permit requirements will be supported in the areas of compliance coordination and permit modification, permit condition tracking, permit recordkeeping and retrieval, mapping and marking of underground piping, annual closure cost estimates and Waste Minimization reports facility-wide inspections and permit's waste inventory. HEMP will coordinate these activities for the site.

\$21.9M above the target is required to fully fund permit recordkeeping and retrieval, mapping and marking of underground piping and to purchase Capital Equipment (computer, boat and vehicles) to fulfill specific requirements.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

This work will continue in the outyears at the same estimated level as FY 1996.

Additional funding is required in the outyears to fully fund all requirements.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

The driver for this subactivity is RCRA.

REGULATORY KEY ISSUES:

Requirements for this subactivity cannot be finalized until the Permit is issued, however, workscope at the levels identified or even higher should be anticipated.

COMP/PROG BENEFITS AT PLANNING LEVEL:

All permit recordkeeping/ retrieval and mapping/marketing of underground piping and closure cost estimates would be funded.

CONCERNS AT PLANNING LEVEL:

None

REQUIRED TECHNICAL DEVELOPMENT:

None

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7330 ADS SUF: 0 SUBACTIVITY: HH

SUBACTIVITY TITLE: POLLUTION PREVENTION

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 0 TEC: 0

DESCRIPTION: PROGRAM CONTROL/SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996 TOTAL
OE EW3110010		0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
OE EW3110010		716	0	0		0	0	0	0	0
TOTAL		716	0	0	0	0	0	0	0	0
DIRECT FTE		5	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL				
OE EW3110010		716	0	0		0	0	0	0	0
TOTAL		716	0	0	0	0	0	0	0	0
DIRECT FTE		5	0	0	0	0	0	0	0	0

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

The Pollution Prevention (formerly Waste Minimization) Program is organized to meet Federal, State, and DOE regulations, policies, and reporting requirements; and to develop a Hanford site-wide pollution prevention (P2) program. The P2 program team works to remove barriers to pollution prevention, develop site-wide programmatic elements that encourage and facilitate pollution prevention, collect information and prepare reports, and assist Site facilities in the implementation of P2.

Activities related to the development of a site-wide P2 and awareness program include: identify waste reduction initiatives, provide project management for WHC-wide waste reduction initiatives, coordinate with affected organizations and DOE, prepare and implement project plans. Leadership is provided to on-site operations in coordinating the implementation of P2 requirements for all Hanford contractors, establishing goals, and monitoring progress. Reports for the DOE-HQ, EPA and state of Washington are prepared on pollution prevention, and the Pollution Prevention organization is represented on the DOE-HQ Cross-cut Planning Team and the GOCO Waste Minimization Committee.

The P2 program also includes the development of site-wide material control practices and tracking systems to measure P2 progress against established goals. And most importantly, it involves removing administrative barriers that hinder P2 at Hanford.

Regulatory reporting and program documentation require the P2 program team to collect information for preparing reports, respond to DOE-HQ requests, and maintain the RL and WHC Site P2 Program Plan. It also involves assisting facilities in identifying and implementing P2 opportunities.

RELATED ACTIVITIES NARRATIVE:

This activity is related to all ADSs which should include facility and operations specific Waste Minimization implementation.

KEY ASSUMPTIONS:

Environmental regulations and requirements will continue to evolve, which will result in a greater demand on resources.

ACTIVITY BY PRIORITY:

Workscope is all Priority 2, specifically ensuring compliance with environmental laws and the Tri-Party Agreement.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

The Hanford Site Pollution Prevention Accomplishments Book was prepared and issued - September 1993, a Hazardous Materials Reduction Initiative was developed - September 1993, site-wide initiative on co-disposal was conceptually designed - September 1993, prepared Hanford input for DOE report SEN-37-92 Annual Report - March 1993.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7330-00-0205	SUBMIT ANNUAL WASTE MINIMIZATION REPORT TO RL	3/15/94	3/15/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Continue implementation of a Hanford site-wide pollution prevention program, implement site-wide programmatic elements that encourage and facilitate P2, collect information, prepare P2 reports, assist facilities in their P2 implementation, coordinate P2 requirements for all Hanford Site contractors, respond to DOE-HQ requests, and assist waste generators in identifying and implementing P2 opportunities.

Continue development of a Hanford site-wide P2 program, develop site-wide programmatic elements that encourage and facilitate P2, collect information, prepare P2 reports, assist facilities in the implementation of P2, coordinate P2 requirements for all Hanford Site contractors, respond to DOE-HQ requests, and assist waste generators in identifying and implementing P2 opportunities.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Pollution Prevention workscope transfers to ADS 7332.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE:

N/A

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

N/A

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

Regulatory drivers for Waste Minimization include: WAC 173-307; DOE Orders 5820-2A, 5400.1, 5400.3, and 5700.6C; RCRA Section 3016; Pollution Prevention Act of 1990; Executive Orders 12843, 12856, and 12873; Tri-Party Agreement; and the Draft Hanford Site Part B Permit.

REGULATORY KEY ISSUES:

N/A

COMP/PROG BENEFITS AT PLANNING LEVEL:

N/A

CONCERNS AT PLANNING LEVEL:

N/A

REQUIRED TECHNICAL DEVELOPMENT:

N/A

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7330 ADS SUF: 0 SUBACTIVITY: ZZ

SUBACTIVITY TITLE: PRODUCTIVITY CHALLENGE/PROGRAM ADJUSTMENT

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 0 TEC: 0

DESCRIPTION: PROGRAM CONTROL/SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW3110010		TOTAL
TOTAL		-800
DIRECT FTE		-800
		0

TARGET CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
OE EW3110010		RL	BUD	LEGAL	ESH	TOTAL				
TOTAL		0	-911	-941		-941	-1381	-1919	-1072	-979
DIRECT FTE		0	-911	-941	0	-941	-1381	-1919	-1072	-979
		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
OE EW3110010		RL	BUD	LEGAL	ESH	TOTAL				
TOTAL		0	-911	-941		-941	-1381	-1919	-1072	-979
DIRECT FTE		0	-911	-941	0	-941	-1381	-1919	-1072	-979
		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7332 ADS SUF: 0 SUBACTIVITY: WA

SUBACTIVITY TITLE: POLLUTION PREVENTION

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 0 TEC: 0

DESCRIPTION: WASTE MINIMIZATION

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE	EW3110020	566
TOTAL		566
DIRECT FTE		5

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3110020	0	550	566		566	583	883	970	867
TOTAL		0	550	566	0	566	583	883	970	867
DIRECT FTE		0	5	5	0	5	5	7	8	7

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3110020	0	550	1280		1280	1319	1358	1399	1441
TOTAL		0	550	1280	0	1280	1319	1358	1399	1441
DIRECT FTE		0	5	11	0	11	11	11	11	11

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

The Pollution Prevention (formerly Waste Minimization) Program is organized to meet Federal, state, and DOE regulations, policies, and reporting requirements; and to develop a Hanford sitewide pollution prevention (P2) program. The P2 program team works to remove barriers to pollution prevention, develop sitewide programmatic elements that encourage and facilitate pollution prevention, collect information and prepare reports, and assist site facilities in the implementation of P2.

RL has designated WHC as the Hanford Site P2 lead and RL point of coordination for all other site contractors. WHC will coordinate P2 onsite according to the key elements for the sitewide and generator-specific programs identified in the 1994 DOE Waste Minimization/Pollution Prevention (WMin/PP) Crosscut Plan.

The key program elements for a sitewide P2 program include:

- Organization and Infrastructure
- Program Development
- Employee Involvement
- Tracking
- Reporting
- Sitewide Waste Reduction
- Technical Assistance
- Information and Technology Exchange
- Program Evaluation

The funding profile associated with each program element is detailed in the Task Narratives below.

RELATED ACTIVITIES NARRATIVE:

This subactivity is related to all ADSs which support Pollution Prevention. In prior years Pollution Prevention workscope is covered in ADS 7330 - subactivity HH.

KEY ASSUMPTIONS:

Environmental regulations and requirements will continue to evolve, which will result in a greater demand on resources.

ACTIVITY BY PRIORITY:

Workscope is all Priority 2, specifically ensuring compliance with environmental laws and the Tri-Party Agreement.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

Prior year Pollution Prevention tasks are shown on ADS 7330.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:
 Pollution Prevention activities are funded in ADS 7330.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7332-00-0030	SUBMIT ANNUAL WASTE MINIMIZATION REPORT TO RL	3/15/95	3/15/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:
 Based on an assessment of required workscope and projected outyear funding levels, the workscope identified in this ADS assumes a redistribution of Richland's FY 1995 Congressional Budget request. The delta change from the President's budget is \$(267K), resulting in a new total of \$550K. These adjustments may require a FY 1995 budget amendment.

TARGET LEVEL FUNDING: \$550K
 \$550K - Provides for a Hanford sitewide P2 program according to elements identified in the WMin/PP Crosscut Plan:

(1) Organization and Infrastructure 51K
 Support to RL in coordination of sitewide P2 program strategy, guidance, performance measures, and data calls for special projects

Establish Site coordination networks for P2

Limited participation in DOE Complex-wide program development

(2) Program Development 51K
 Modify/improve tools and guides developed in FY 94 (Model P2OA and guidance)

Revise guidance for preparing generator P2 plans

Assist program managers in establishing separate, identifiable P2 funding, broken down according to key program elements

Integrate activities, goals, and budgets

(3) Employee Involvement 90K
 Pollution Prevention Opportunity Assessment (P2OA) training

Awareness and publicity through displays, P2 accomplishments book, Hanford REACH, and other education materials

Employee incentive/recognition programs

(4) Tracking 34K
P2OAs and implementation

Performance measures and goals

(5) Reporting 135K
Complete and submit: WAC 173-307 Pollution Prevention Plan report, DOE Annual Waste Generation and Waste Minimization report, Affirmative Procurement progress report, ODS report, 1995 Dangerous Waste Pilot Report, input for SARA 313 and LDR reports, and other standard data calls

(6) Sitewide Waste Reduction 34K
Hazardous Materials Reduction Initiative - maintain database

Support for waste reduction/implementation

Support for reduction of ozone-depleting substances

(7) Technical Assistance 130K
Provide limited Site assistance for compliance with Executive Orders 12843, 12856, 12870, and 12902; P2OAs, goal setting, opportunity implementation, and other generator-specific program development and implementation

(8) Information and Technology Exchange 17K
Participation in public outreach programs

Input to DOE information exchange network/participate in DOE and industry-sponsored conference and symposia

(9) Program Evaluation 8K
Assess employee participation

Assess program implementation status and evaluate performance against goals

PLANNING LEVEL INCREMENT: \$695K
\$695K - Provides incremental funding for the following additional activities:

(1) Organization and Infrastructure 70K
Full participation in DOE Complex-wide program development

Assist in the establishment and monitoring of generator P2 programs, committees, and P2OA teams

Develop and present monthly Sr mgt P2 program status reports

(2) Program Development 17K
Coordination of P2 into Hanford operating procedures

Incorporate DOE quality assurance objectives and methods (DOE Order 5700.6C) into P2 activities

(4) Tracking 52K
Modify hazardous materials tracking database to electronically ID material use

Summary level tracking of Site and WHC savings from P2

Waste cost avoidance model

(6) Sitewide Waste Reduction 134K
 P2 in design of new or modified facilities

Hazardous Materials Reduction Initiative (HMRI) field support Tracking

(7) Technical Assistance 405K
 Full Site assistance for compliance with: Executive Orders 12843, 12856, 12873, and 12902; P2OAs, goal setting, baselining, opportunity implementation, and other generator-specific program development and implementation

Hanford goal setting approach

(8) Information and technology exchange 17K
 Pursue P2 technology transfer initiatives

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7332-00-0035	SUBMIT ANNUAL WASTE MINIMIZATION REPORT TO RL	3/15/96	3/15/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:
 DECREMENT AND TARGET LEVEL FUNDING: \$566K
 \$566K - Provides for a Hanford sitewide P2 program according to elements identified in the WMin/PP Crosscut Plan:

(1) Organization and Infrastructure 55K
 Support to DOE-RL in coordination of sitewide P2 program strategy, guidance, performance measures, and data calls for special projects

Establish Site coordination networks for P2

Limited participation in DOE Complex-wide program development

(2) Program Development 58K
 Assist program managers in establishing separate, identifiable P2 funding, broken down according to key program elements

Integrate activities, goals, and budgets

Development of any new initiatives identified in FY 95

(3) Employee Involvement 90K
 Pollution Prevention Opportunity Assessment (P2OA) training

Awareness and communication through displays, P2 accomplishments book, Hanford REACH, and other education materials

Employee incentive/recognition programs

(4) Tracking 34K
P2OAs and implementation

Performance measures and goals

(5) Reporting 135K
Complete and submit: EPA Biennial WMin report, WAC 173-307 Pollution Prevention Plan report, DOE Annual Waste Generation and Waste Minimization report, Affirmative Procurement progress report, ODS report, 1995 Dangerous Waste Pilot Report, input for SARA 313 and LDR reports, and other standard data calls

(6) Sitewide Waste Reduction 34K
Hazardous Materials Reduction Initiative - maintain database

Support for waste reduction/implementation

Support for reduction of ozone-depleting substances

(7) Technical Assistance 130K
Provide limited Site assistance for compliance with Executive Orders 12843, 12856, 12870, and 12902; P2OAs, goal setting, opportunity implementation, and other generator-specific program development and implementation

(8) Information and Technology Exchange 20K
Participation in public outreach programs

Input to DOE information exchange network/participate in DOE and industry-sponsored conference and symposia

(9) Program Evaluation 10K
Assess employee participation

Assess program implementation status and evaluate performance against goals

PLANNING LEVEL INCREMENT: \$715K
\$715K - Provides incremental funding for the following additional activities:

(1) Organization and Infrastructure 70K
Continue in the establishment of generator P2 committees and P2OA teams

Develop and present monthly Sr mgt P2 program status reports

(4) Tracking 17K
Summary level tracking of Site and WHC savings from P2

(6) Sitewide Initiatives 67K
Hazardous Materials Reduction Initiative (HMRI) Field Support

(7) Technical Assistance 527K
Full site assistance for compliance with: Executive Orders 12843, 12856, 12873, and 12902; P2OAs, opportunity implementation, and other generator-

specific program development and implementation

P2 in design of new or modified facilities

Waste cost avoidance model

Hanford goal setting approach

(8) Information and technology exchange 34K
 Pursue P2 technology transfer initiatives onsite and offsite

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7332-00-0005	SUBMIT ANNUAL WASTE MINIMIZATION REPORT TO RL	3/15/97	3/15/97
7332-00-0010	SUBMIT ANNUAL WASTE MINIMIZATION REPORT TO RL	3/15/98	3/15/98
7332-00-0015	SUBMIT ANNUAL WASTE MINIMIZATION REPORT TO RL	3/15/99	3/15/99
7332-00-0020	SUBMIT ANNUAL WASTE MINIMIZATION REPORT TO RL	3/15/00	3/15/00

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

TARGET LEVEL FUNDING:

Continue implementation of a Hanford sitewide pollution prevention program according to Crosscut plan elements:

- (1) Organization and Infrastructure
- (2) Program Development
- (3) Employee Involvement
- (4) Tracking
- (5) Reporting
- (6) Sitewide Waste Reduction
- (7) Technical Assistance
- (8) Information and Technology Exchange
- (9) Program Evaluation

\$283K is allotted in FY 98 to partially fund incremental items identified in FY 1996:

Develop and present monthly Sr mgt P2 program status reports 34K

Full Site assistance for compliance with: Executive Orders 12843, 12856, 12873, and 12902; P2OAs, opportunity implementation, and other generator-specific program development and implementation 211K

Pursue P2 technology transfer initiatives onsite and offsite 34K

PLANNING LEVEL INCREMENTS:

Additional funding is required in the outyears to fund the remaining items from FY96 and continuation of hazardous materials reduction activities, including review of all purchase requisitions and recommendation of nonhazardous substitutes, and establishment of a substitute database.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

Regulatory drivers for Pollution Prevention include: WAC 173-307, WAC 173-303, DOE Orders 5820.2A, 5400.1, 5400.3, 5700.6C, Hazardous Solid Waste Amendments to RCRA, Pollution Prevention Act of 1990, Tri-Party Agreement, Hanford Site Part B Permit, Executive Orders 12780, 12856, 12873 and 12843, 12902, Emergency Planning and Community Right to know Act, Federal Facility Compliance Act, Clean Air Act Amendments of 1990.

REGULATORY KEY ISSUES:

Decrement and Target funding levels do not support the additional resources required for program development and implementation in FY 95 and beyond. Program implementation will involve extensive field work and field support, not only to WHC operated facilities but also with other contractors; much more than is currently being provided by the P2 organization. Additionally, recent Executive Orders (E.O.s) 12843, 12856, 12873, and 12902 have placed increased emphasis on P2 and established the following: phaseout of Class I and II ozone depleting substances; a goal for 50 percent reduction of toxic chemicals by December 31, 1999; affirmative procurement practice for products made from recycled materials; and goals for reduced energy consumption efficiency, and water conservation. These E.O.s have all been issued since April 1993 and additional regulatory and DOE WMin/P2 requirements are expected to be issued. Without additional funds, the P2 organization will be able to provide only minimal support and guidance to site program coordination, development, and implementation. Benefits of waste reduction, cost savings, and reduced future liability will not be realized if activities are not funded. Key elements of the sitewide and generator-specific WMin/P2 program will not be fully implemented and goals will not be achieved. Also, Toxic Chemical Release reduction initiatives and the identification, requesting, allocating, reporting of funding for pollution prevention and waste minimization activities may not occur if these activities are not funded. Compliance with DOE directives and current and future regulatory requirements will not be achieved without additional funding.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Pollution Prevention Program implementation is fully supported.

CONCERNS AT PLANNING LEVEL:

None

REQUIRED TECHNICAL DEVELOPMENT:

Technical development will be identified as P2OAs are performed on waste generating activities.

THIS PAGE IS BLANK

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7340 ADS SUF: 0 SUBACTIVITY: AA

SUBACTIVITY TITLE: PROGRAM MANAGEMENT

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 23079 TEC: 25392

DESCRIPTION: RICHLAND SITE SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996 TOTAL
B&R		
OE EW3120100		954
CE 35EW3120A		2000
TOTAL		2954
DIRECT FTE		7

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3120100	1298	1027	954		954	1094	1324	1189	1369
CE 35EW3120A	4885	2000	2000		2000	1500	2000	1500	2000
TOTAL	6183	3027	2954	0	2954	2594	3324	2689	3369
DIRECT FTE	8	7	7	0	7	7	7	7	7

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3120100	1297	1031	1061		1061	1602	1682	1700	1785
CE 35EW3120A	4885	2000	2000		2000	3000	3000	3000	3000
TOTAL	6182	3031	3061	0	3061	4602	4682	4700	4785
DIRECT FTE	8	7	7	0	7	9	9	9	9

 SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

This activity is administrative in nature and provides programmatic management and control of the RCRA and Operational Monitoring Program. All RCRA and Operational Monitoring Program activities are performed in compliance with State and federal regulations as stated below in the regulatory drivers section. In addition, the RCRA and Operational Monitoring program must ensure adherence to the contractor requirements of:

- ± DOE Order 5400.1, General Environmental Protection Program
- ± DOE Order 5480.1B, Environment, Safety and Health Program for DOE Operations
- ± DOE Order 5820.2A, Radioactive Waste Management.
- ± QAMS 005/80, Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans
- ± WHC-CM-2-5, Management Control System
- ± WHC-CM-6-1, Standard Engineering Practices
- ± WHC-CM-7-7, Environmental Investigation and Site Characterization Manual
- ± WHC RCRA Project Management Plan and Quality Assurance Program Plan

The work breakdown structure for the RCRA and Operational Monitoring Program Office aligns each End Function with an Activity Data Sheet (ADS). The following technically oriented End Functions or ADSs are supported:

7340-00 The objective of this End Function is to monitor and maintain groundwater monitoring wells around the Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal (TSD) Facilities and the remaining operational facilities on the Hanford site. Perform surveillance of land surface, and liquid and gaseous effluents in the 200 and 600 Areas to identify and limit the spread of surface contamination or unintentional releases and maintain the areas safe for personnel entry. Periodically maintain the surveillance equipment and procedures as required.

7340-01 The objective of this End Function is to install groundwater monitoring wells around the Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal Facilities and the remaining operational facilities on the Hanford site. Add RCRA wells at the rate specified in Tri-Party Agreement Milestone M-24-00.

- ± RCRA and Operational Monitoring Program Management activities include but are not limited to:
 - ± Budget baseline preparation and annual budget submittal preparation.
 - ± Implementation and approval of change control.
 - ± Monthly reporting and presentation preparation.
 - ± Program integration, cost and schedule monitoring and control.
 - ± Long-range planning and administration of the Management Control policies and procedures.

- ± This activity and its supporting personnel will be the focal point for the programmatic interface with:
 - ± Westinghouse organizations and programs as well as other contractors and the Department of Energy.
 - ± Federal, state and local regulatory agencies as necessary in support of the RCRA and Operational Monitoring activities.

Program management activity is expected to continue at a fairly constant level of activity until RCRA and Operational Monitoring is no longer required. Current law requires groundwater monitoring to continue for 30 years after closure of treatment, storage and disposal facilities. This would continue until at least the year 2070 under current schedules.

RELATED ACTIVITIES NARRATIVE:

Provides general management and support for program subactivities AC, AD, AZ, BA and BB under this ADS and subactivity AG in ADS 7340-1.

KEY ASSUMPTIONS:

The key assumptions in planning the Program Management activity are:

- ± The RCRA and Operational Monitoring program will continue to operate in accordance with:
 - ± The milestones and schedules laid out in the Tri-Party Agreement
 - ± The interim status rules for treatment, storage and disposal of hazardous waste as required by 40 CFR 265 and as implemented by Washington State codes.
- ± The program will continue to grow as air monitoring required by the most recent revisions to the Clean Air Act are implemented at the site during the next two years before stabilizing.
- ± Any major perturbations to the current schedule and scope for site activities will change this activity.

The Issues and Constraints are:

- ± Fiscal year (FY) 1992 and 1993 Expense Funds are assumed to be carried over into FY 1994 where available.
- ± There are currently no provisions for additional staff.

ACTIVITY BY PRIORITY:

Priority A2 because it provides management of activities directly related to the conduct of RCRA groundwater monitoring and Operational Environmental monitoring which detect and assess the extent of groundwater contamination, monitor and assess liquid and gaseous effluents, and monitor surface contaminants near operational facilities and thereby prevent the spread of contamination offsite. Activities include priority B1 work which focuses

on ensuring compliance with environmental laws and the Tri-Party Agreements.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

CAPITAL EQUIPMENT NOT RELATED TO CONSTRU
 CAPITAL EQUIPMENT NOT RELATED TO CONSTRU
 CAPITAL EQUIPMENT NOT RELATED TO CONSTRU

TASKS COMPLETED TO DATE:

At the direction of DOE, a RCRA and Operational Monitoring Program was established in FY92. In FY93 a program office was formed and minimum staffing was achieved. The new program office collectively represents many activities that were performed under various titles since the early days of site activity. Years of development have resulted in a somewhat repetitive set of annual tangible deliverables as indicated below:

- ± Annual Activity Data Sheets, Multi-Year Program Plan and Fiscal Year Work Plan
- ± Annual Report for Operational Groundwater Monitoring at Hanford
- ± Quarterly Groundwater Report for RCRA Facilities
- ± Annual Calendar Year Groundwater Monitoring Report
- ± Annual Hanford (Seismic) Network Catalog
- ± Annual Environmental Surveillance Report
- ± Annual Report of Gaseous & Liquid Effluent Discharges
- ± Annual Transmittal of EIS / ODIS data to Idaho National Engineering Labs
- ± Annual Hanford Air Emissions Report to EPA
- ± Quarterly Environmental Radiological Monitoring Report
- ± Installation of the number of wells required by Tri-Party Agreements (TPA Stake-holders are WDOE / DOE / EPA). RCRA groundwater monitoring well milestones required by the Tri-Party Agreement (TPA) historically have been met ontime or early.
 - ± The 26 wells installed in CY 1992 completed as required by TPA Milestone, M-24-00D.
 - ± The 6 wells installed in CY 1993 completed as required by TPA Milestone, M-24-00E.
 - ± Collectively there have been 32 interim TPA milestones completed.

The RCRA and Operational Monitoring Program continues to provide both tangible and intangible deliverables. Other significant intangible deliverables include:

- ± The program management and administration required for financial reporting, program scheduling and reporting, staff planning, staff management, and services to support conformance to State and federal regulatory requirements and Tri-Party Agreement milestones.
 - ± Program Management support required for interfacing with the Department of Energy (DOE), Environmental Protection Agency (EPA), and Washington State Department of Ecology (WDOE).
- ± Responses to compliance issues by preparing initial capital equipment procurement documents and programmatic documentation to obtain

- appropriate budgetary support.
- ± Support for audits or surveillances of the program activities.
- ± Responses to continuous and repeated reviews of plans, budgets, regulatory drivers, costs, and performance.
- ± Management of Capital Equipment Not Related to Construction (CENRTC) funds for replacing and upgrading equipment used by the program.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Funded at the Planning Case (Case I) level, the program would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

- ± Improvements in programmatic long range planning documentation that includes more comprehensive cross referencing between ADS, Multi-Year Program Plan (MYPP) and Fiscal Year Work Plan (FYWP).
- ± Implementation of new cost / schedule integration methodologies requested by DOE.
- ± Improvements to Change Control Documentation and traceability that includes updating of FYWP and MYPP to reflect actions approved by Class I Change Requests.
- ± Funding is provided only to the minimal level of well installation rate expected and is completely dependent on existence and availability of carryover line item capital funding from the FY 93 appropriation. Expense support funding for drilling in FY94 is anticipated for up to five wells

Funded at the Target Case (Case II) level, the program would include incremental changes to the Planning Case as follows:

- ± New planning methodologies being introduced may result in manpower demands that exceed our current staffing. Improvements in long range planning will likely suffer for the lack of adequate staff to absorb the additional work load.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Funded at the Planning Case (Case I) level, the program would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

- ± Restrictive funding from previous years has been spread among the lower tier cost elements to the point of restricting exploration of innovative and cost savings ideas.
 - ± Reductions of this nature result in diminished capacity to absorb reactionary or future regulatory concerns.

Funded at the Target Case (Case II) level, the program would include incremental changes to the Planning Case as follows:

- ± New planning methodologies being introduced may result in manpower demands that exceed our current staffing. Improvements in long range planning will likely suffer for the lack of adequate staff to absorb the additional work load.
- ± Further reductions in available funding will be spread among the lower tier cost elements. This may render some cost elements unable to meet regulatory compliance requirements.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Funded at the Planning Case (Case I) level, the program would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

- ± Dependent on the results of the NESHAPs Compliance engineering studies, it may be necessary to request additional Activity Data Sheet designations and / or Capitol Projects funding.
- ± Restrictive funding from previous years has been spread among the lower tier cost elements to the point of restricting exploration of innovative and cost savings ideas.
 - ± Reductions of this nature result in diminished capacity to absorb reactionary or future regulatory concerns.

Funded at the Target Case (Case II) level, the program would include incremental changes to the Planning Case as follows:

- ± New planning methodologies being introduced may result in manpower demands that exceed our current staffing. Improvements in long range planning will likely suffer for the lack of adequate staff to absorb the additional work load.
- ± Further reductions in available funding will be spread among the lower tier cost elements. This may render some cost elements unable to meet regulatory compliance requirements.

Funded at the Decrement Case (Case III) level, the program would include incremental changes to the Planning Case as follows:

- ± Serious reductions in available funding will be spread among the lower tier cost elements. This will render some cost elements unfunded.
 - ± The RCRA and Operational Monitoring Program is highly dependent on the interaction of all of its WBS defined elements. Unfunding a single element would ripple through the program and cause some regulatory compliance requirement to be delayed and jeopardized.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Funded at the Planning Case (Case I) level, the program would continue to perform the tangible and intangible annual deliverables referenced above.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

The major driver for this activity is the Tri-Party Agreement (with action plan) which is based, in part, on the State and federal RCRA regulations (40 CFR 265 Subpart F all sections, 40 CFR 270 Subpart G sections 270.70 through 270.73, QAMS 005/80, WAC-173-160, WAC-173-303, WAC-173-304). The RCRA Groundwater Monitoring Technical Enforcement Guidance Document (TEGD) describes what the USEPA deems to be essential components of a groundwater monitoring system that meets the goal of RCRA. The Tri-Party Agreement allows the Hanford Site to continue to operate while RCRA treatment, storage and disposal facilities are out of compliance with State and federal RCRA regulations as long as the DOE continues actions to bring those facilities into compliance. Specific actions and schedules for those actions are detailed in the Tri-Party Agreement. This activity takes place to provide the overall program and technical management and administration needed to coordinate many of the varying aspects of groundwater monitoring and to provide periodic updates of the site specific groundwater protection management plan as new rules, audits, and interpretations occur.

The regulatory drivers for the Operational Environmental Monitoring portion of the program are principally those which drive the DOE Order 5400.5. Cited DOE Orders, statutes, and regulatory orders which apply include the following:

- (1) Monitor and assess radioactive contamination and potential exposure to employees and the public (DOE Order 5400.5).
- (2) Monitor new and existing sites, processes, and facilities for potential impacts and releases (DOE Order 5484.1 and DOE/EH-173T).
- (3) Determine effectiveness of effluent treatment and controls in reducing effluents and emissions (DOE/EH-0173T, DOE/EV/1830-T5).
- (4) Detect and quantify unplanned releases (DOE/EH-0173T, 40 CFR 302, WAC 173-303-145, DOE 5000.3A, DOE 5484.1).
- (5) Monitor and control all inactive, existing, and new low-level waste (LLW) disposal sites to assess both radiological and nonradiological hazards (DOE Order 5820.2A).
- (6) Monitor and maintain all surplus facilities prior to decontaminating or decommissioning (DOE Order 5820.2A).
- (7) Monitor and control fugitive emissions and diffuse sources from contaminated areas for compliance with NESHAP (40 CFR 61, DOE/EH-0173T, Toxic Air Emissions Inventory (40 CFR 265, Subparts AA & B13, and Source Registration WAC 246-247.)

REGULATORY KEY ISSUES:

Regulator interface within this subactivity is key to control of issues and maintaining a technically sound groundwater and operational monitoring program with regulatory agreement.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Compliance with RCRA monitoring system requirements is anticipated during the planning years. Target budgets will impact Tri-Party Agreement

milestones and monitoring. The lack of groundwater well drilling in 7340-1 will impair ability to establish a RCRA compliant groundwater monitoring system for each of the Hanford's Treatment, Storage and Disposal (TSD) facilities.

CONCERNS AT PLANNING LEVEL:

Planning, budgeting and reporting have become full-time activities with continuous reviews. Additional personnel will be necessary to leave time for management and program contact if the current pace of reviews and addition of an oversight team to drive each plan, report and budget continue. One additional employee per year is likely to be necessary to meet the demands; no provision has been made.

Full time representatives for dealing with regulator and intervenor fines, lawsuits, compliance orders and other punitive measures will be required if compliance is not reached and maintained for other than technically defensible reasons. No provision for such additions to staff has been included in the plans.

REQUIRED TECHNICAL DEVELOPMENT:

Severely limited because funding at the target level for the necessary testing of innovative methods within the program has been eliminated by budget restrictions. Testing of drilling and well installation techniques, not presently in use at Hanford, is best done in this program where most wells are drilled in a non-hazardous environment.

Funding for technology development and testing of innovative ways to limit the cost of well decommissioning is not provided. Total estimated cost in constant dollars to decommission the nearly 4,000 groundwater wells and boreholes on the site is in excess of \$280 million. A few percent savings would make millions of dollars available for other activities or accelerate the closure of these wells.

In the well or at the well site analysis of groundwater for many of the physical properties and certain analytical determinations is common at other government and private facilities. Adaptation and testing of these techniques at Hanford promises substantial savings if funding for this activity is made available.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7340 ADS SUF: 0 SUBACTIVITY: AC

SUBACTIVITY TITLE: GROUNDWATER MONITORING

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 23079 TEC: 25392

DESCRIPTION: RICHLAND SITE SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW3120100		TOTAL
TOTAL		7060
DIRECT FTE		33

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3120100		11649	13028	9372		9372	12243	15887	14886	14932
TOTAL		11649	13028	9372	0	9372	12243	15887	14886	14932
DIRECT FTE		62	57	39	0	39	57	57	58	58

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3120100		11649	13028	16504		16504	19335	22888	23545	24291
TOTAL		11649	13028	16504	0	16504	19335	22888	23545	24291
DIRECT FTE		62	57	66	0	66	67	67	68	68

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

This activity funds groundwater monitoring (sampling and analysis) for RCRA regulated treatment, storage and disposal facilities at Hanford. This activity also funds operational groundwater monitoring for those facilities which may impact the quality of groundwater but are not regulated by RCRA.

All groundwater monitoring activities are performed in compliance with State and federal regulations as stated below in the regulatory drivers section. In addition, the RCRA and Operational Monitoring program must ensure adherence to the contractor requirements of:

- ± DOE Order 5400.1, General Environmental Protection Program
- ± DOE Order 5480.1B, Environment, Safety and Health Program for DOE Operations
- ± DOE Order 5820.2A, Radioactive Waste Management.
- ± QAMS 005/80, Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans
- ± WHC-CM-6-1, Standard Engineering Practices
- ± WHC-CM-7-7, Environmental Investigation and Site Characterization Manual
- ± WHC RCRA Project Management Plan and Quality Assurance Program Plan

The Groundwater Monitoring Activity consist of 5 major elements as follows:

- 1 The objective of the Well Sampling and Analysis Cost Account is to provide technical expertise for the groundwater monitoring program, coordinate the overall sampling and analysis process, and upgrade groundwater monitoring procedures as required. Activities include but are not limited to:
 - ± Collect and analyze samples per approved procedures.
 - ± Provide review and evaluation of analyses.
 - ± Provide statistical and trend analysis of sample results.
 - ± Provide QC data evaluation for regulatory reporting.

Actual chemical analyses are performed by a subcontracted, RCRA compliant laboratory. Other aspects of this activity are performed by PNL. Proposals for transfer of the sampling activity are in preparation and are expected to provide improved control over the activity and substantial cost savings.

- 2 The objective of the RCRA Reporting Cost Account is to coordinate activities associated with data management in support of RCRA quarterly and annual reports. Activities include but are not limited to:
 - ± Prepare quarterly reports for RCRA groundwater monitoring in fulfillment of RCRA interim status record keeping and reporting requirements (40 CFR 265.94)
 - ± Initiate testing of technology for automated data collection for groundwater monitoring.
 - ± Provide groundwater database management and support for RCRA and other groundwater activities as required.

-
- 3 The objective of the RCRA Project Scientist Cost Account is to coordinate activities and provide technical management of groundwater monitoring activities at RCRA facilities (including solid waste landfills). Activities include but are not limited to:
- ± Provide Project W-152 technical support, and coordination for RCRA Groundwater Monitoring around 21 TSD facilities.
 - ± Prepare and/or revise site specific groundwater monitoring plans, analysis of results, characterization reports and presentations to support RCRA groundwater monitoring.
 - ± Prepare and/or revise Project Management Plan (PMP) and Quality Assurance Project Plan (QAPP).
 - ± Provide expertise on aquifer testing methodology
 - ± Provide expertise to support permitting activities as needed
 - ± Prepare RCRA Groundwater assessment Plans/Reports as determined from statistical evaluations.
 - ± Conduct engineering studies to support RCRA groundwater monitoring activities.
 - ± Provide additional milestones as necessary prior to authorizing next year's CAA.
- 4 The objective of the Groundwater Support Cost Account is to provide administrative support to Geoscience work funded by the RCRA and Operational Monitoring Program. Support is to include, but is not limited to:
- ± Provide monthly report input to the Management Control System (MCS), SMS, PTS and DOE-HQ/DOE-RL inquiries as required.
 - ± Provide current and outyear budget planning/scheduling, prioritization and other exercises as directed by DOE and WHC.
 - ± Provide responses to QA audits, surveillance, appraisals, etc as required.
 - ± Provide monthly report describing QA status.
 - ± Provide monthly MCS status information for Geosciences RCRA Cost Accounts.
- 5 The objective of the Purgewater Disposal Cost Account is to provide funds for the work associated with the collection, transportation, storage and analysis of groundwater monitoring well purgewater. Required activities include, but are not limited to:
- ± Engineering support to purgewater activities. Ensure that purgewater trucks are in compliance with current applicable DOT standards. Maintain tracking of purgewater movement.
 - ± Provide geosciences support to purgewater activities. Update list of wells required for collection, within the strategy document, upon receipt of sampling data supplied by PNL. Provide sampling, packaging and transportation services as required for purgewater.
 - ± Provide Environmental Field Services (EFS) support for purgewater activities.
 - ± Operate Purgewater Storage Facility. Perform daily and weekly inspection practices to ensure containment within the tanks.
 - ± Provide for vehicle maintenance services and personnel to transport purgewater from wells to the storage facility. Remove tumble weeds and spray the area surrounding the storage facility with herbicide.
 - ± Provide analytical support for sampling and data interpretation of purgewater samples.

- ± Provide Engineering support to include purgewater in influent stream of Waste Water Treatment Facility.

RELATED ACTIVITIES NARRATIVE:

Program management and general support for this activity are provided under subactivity 734000AA.

Groundwater well maintenance and remediation activities performed under subactivity 734000AD are essential to the continuation of this activity, because between 5 and 10 percent of the wells monitored required maintenance before sampling on each visit.

Groundwater Well Installations provided by ADS 7340-1 are achieving a RCRA compliant groundwater monitoring well network in support of the ground water monitoring sampling requirements.

KEY ASSUMPTIONS:

The key assumptions in planning the Groundwater Monitoring activity are:

- ± Current sampling and analysis regulations will not change.
- ± Analysis costs will not change from those incurred under existing contracts.
- ± Two new sites per year begin groundwater Quality Assessment monitoring.
- ± Historical data used to formulate cost, scope and schedules can be accurately extrapolated through the planning period, in spite of differences in sizes of facilities.
 - ± The two sites (1301-N and 1324-N/NA) were used to estimate the costs associated with beginning a groundwater quality assessment monitoring program at small TSD facilities. Larger facilities will result in larger assessment monitoring costs, but because there were no historical data for larger facilities, the smaller models were used.

The Issues and Constraints are:

- ± Standards for analysis required by the regulators and site requirements have not been achieved by subcontract laboratories.
 - ± A unit price increase averaging 40% by the outside laboratories, if repeated, will result in significant additional costs for analysis.
 - ± Cost increases like this would invalidate the cost basis for outyear ADS and budget planning.

ACTIVITY BY PRIORITY:

This activity is Priority B1 because it is in direct support of documenting and ensuring compliance with environmental laws and the Tri-Party Agreements. The RCRA groundwater monitoring program is intended to detect and assess the extent of groundwater contamination and thereby ensure

compliance of RCRA TSD facilities. Operational monitoring assesses the near-field impact of non-regulated disposal operations on the groundwater.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

This activity continues groundwater monitoring which began in the 1940s at Hanford and has evolved in response to improved analytical techniques, concerns about the presence of hazardous chemicals in addition to radionuclides in groundwater, and groundwater protection legislation and regulation. Years of evolution have resulted in a somewhat repetitive set of annual tangible deliverables as indicated below:

- ± Annual Report for Operational Groundwater Monitoring at Hanford
- ± Quarterly Groundwater Report for RCRA Facilities
- ± Annual Calendar Year Groundwater Monitoring Report

Other intangible accomplishments include:

- ± PNL contracted laboratories under long-term contracts for analysis of radiological and hazardous chemicals early in FY 92. Sending of samples for analysis started immediately.
- ± Quality control and backup laboratory facilities have been arranged to support groundwater monitoring under this program.
- ± Twenty-six new wells, drilled in CY 1992, were added to the sampling schedule.
- ± Six new wells, drilled in CY 1993, have been added to the sampling schedule. A total of more than 450 wells will be sampled for the RCRA and operational groundwater monitoring activity.
- ± In FY 1993 the operational network began to integrate hydrogeologic information between RCRA sites to ensure that impacts to the uppermost aquifer are understood as dictated in 40 CFR 265 Subpart F all sections, and WAC-173-303. This activity should continue throughout the planning years.
- ± Hazardous analytical unit prices have increased an average of about forty percent during the past year, establishing a new base for future increases in outside charges.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7340-00-0090	ISSUE 2ND QTR CY93 REPORT FOR RCRA GROUNDWATER MONITORING TO REGU	10/31/93	10/31/93
7340-00-0095	ISSUE 3RD QTR CY93 REPORT FOR RCRA GROUNDWATER MONITORING TO REGU	1/31/94	1/31/94
7340-00-0205	ISSUE CY93 GROUNDWATER MONITORING REPORT TO REGULATORS	3/01/94	3/01/94
7340-00-0100	ISSUE 4TH QTR CY93 REPORT FOR RCRA GROUNDWATER MONITORING TO REGU	4/30/94	4/30/94
7340-00-0105	ISSUE 1ST QTR CY94 REPORT FOR RCRA GROUNDWATER MONITORING TO REGU	7/31/94	7/31/94
7340-00-0005	FY94 REVIEW THE GROUNDWATER PROTECTION MANAGEMENT PLAN	9/30/94	9/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Funding at the Planning Case (Case I) level would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

- ± The operational monitoring program will continue to be decreased as newly installed wells compliant with current regulations and construction standards are added to the network.
- ± Barcoding and electronic data collection capability during well water level and sampling visits will continue. Interactive recording of data will bring entry and transcription errors to a minimum.

Funding at the Target Case (Case II) level would include incremental changes to the Planning Case as follows:

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7340-00-0110	ISSUE 2ND QTR CY94 REPORT FOR RCRA GROUNDWATER MONITORING TO REGU	10/31/94	10/31/94
7340-00-0115	ISSUE 3RD QTR CY94 REPORT FOR RCRA GROUNDWATER MONITORING TO REGU	1/31/95	1/31/95
7340-00-0215	ISSUE CY94 GROUNDWATER MONITORING REPORT TO REGULATORS	3/01/95	3/01/95
7340-00-0125	ISSUE 4TH QTR CY94 REPORT FOR RCRA GROUNDWATER MONITORING TO REGU	4/30/95	4/30/95
7340-00-0015	FY95 REVIEW THE GROUNDWATER PROTECTION MANAGEMENT PLAN	9/30/95	9/30/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Funding at the Planning Case (Case I) level would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

Funding at the Target Case (Case II) level would include incremental changes to the Planning Case as follows:

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7340-00-0020	FY96 UPDATE THE GROUNDWATER PROTECTION MANAGEMENT PLAN	9/30/96	9/30/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Funding at the Planning Case (Case I) level would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

- ± This is the first year that the monitoring network could be essentially complete at all of the RCRA sites.
- ± During the year remaining operational wells will be deleted from the sampling network, however, many of the wells will still be required for water table level measurements.

Funding at the Target Case (Case II) level would include incremental changes to the Planning Case as follows:

Funding at the Decrement Case (Case III) level would include incremental changes to the Planning Case as follows:

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7340-00-0235	ISSUE CY96 GROUNDWATER MONITORING REPORT TO REGULATORS	3/01/97	9/01/97
7340-00-0025	FY97 REVIEW THE GROUNDWATER PROTECTION MANAGEMENT PLAN	9/30/97	9/30/97
7340-00-0245	ISSUE CY97 GROUNDWATER MONITORING REPORT TO REGULATORS	3/01/98	3/01/98
7340-00-0030	FY98 REVIEW THE GROUNDWATER PROTECTION MANAGEMENT PLAN	9/30/98	9/30/98
7340-00-0035	ISSUE CY98 GROUNDWATER MONITORING REPORT TO REGULATORS	3/01/99	3/01/99
7340-00-0145	FY99 UPDATE THE GROUNDWATER PROTECTION MANAGEMENT PLAN	9/30/99	9/30/99

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Funding at the Planning Case (Case I) level would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

- ± Adjustments will be necessary as the monitoring network is adjusted for declining water levels and replacement wells are drilled to maintain monitoring capability.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

The Tri-Party Agreement allows the Hanford Site to continue to operate with facilities that are out of compliance with State and federal RCRA regulations as long as the DOE continues actions to bring those facilities into compliance. Specific actions and schedules for those actions are detailed in the Tri-Party Agreement. One of those actions is the TSD permitting process. Groundwater monitoring is required for permitting of Treatment, Storage and Disposal (TSD) facilities.

Regulatory drivers include:

- ± 40 CFR 265 Subpart F all sections, Interim Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities.
- ± WAC-173-303-645, Dangerous Waste Regulations-Groundwater Protection.
- ± WAC-173-304, Minimum Waste Regulations for Solid Waste Handling

REGULATORY KEY ISSUES:

Regulators require standards of all aspects of sampling and analysis not yet achieved by subcontracted labs at Hanford. Interruptions of drilling budgets needed to replace wells that become unusable because the water table has dropped below their screens and the groundwater flows have changed direction can cause non-compliance for groundwater monitoring in what is now a nearly complete monitoring system. Interruptions of detection monitoring periods required before a reduced schedule of monitoring is permitted will necessitate repetition of the four consecutive quarters of monitoring after compliance is restored. Compliance orders and other regulatory actions may be expected.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Completion of the required detection monitoring if all segments of the program are executed at the planning level will allow an eventual reduction in the numbers of samples, the number of analytes measured and the cost of the monitoring.

CONCERNS AT PLANNING LEVEL:

Standards for analysis required by regulators and site requirements have not yet been achieved by subcontract laboratories. A unit price increase averaging 40% by the outside laboratories, if repeated will result in significant additional costs for analysis, not planned in the development of this ADS and not contemplated when previous years' ADS were developed which provide the basis for future constant dollar budgets.

REQUIRED TECHNICAL DEVELOPMENT:

The measurement of physical properties and analyte concentrations at the well site is being practiced in groundwater monitoring in other states. Adaptation or direct application without change at Hanford has the promise of significant reduction of analytical and sampling costs. Real dollar reductions in the program make it impossible to fully test and obtain regulator concurrence with these advanced techniques.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7340 ADS SUF: 0 SUBACTIVITY: AZ

SUBACTIVITY TITLE: MONITOR AND ASSESS LIQUID EFFLUENT STORAGE BASINS

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 23079 TEC: 25392

DESCRIPTION: RICHLAND SITE SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

B&R	FY1996 TOTAL
TOTAL	0
DIRECT FTE	0

TARGET CASE (\$ IN THOUSANDS)

B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
OE EW3120100	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3120100	0	0		0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0
DIRECT FTE	0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
OE EW3120100	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3120100	0	0		0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0
DIRECT FTE	0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

All Monitor and Assess Basin Activities would be performed in compliance with State and federal regulations as stated below in the regulatory drivers section. In addition, the RCRA and Operational Monitoring program must ensure adherence to the contractor requirements of:

- ± DOE Order 5400.1, General Environmental Protection Program
- ± DOE Order 5400.3, Hazardous and Radioactive Mixed Waste
- ± DOE Order 5400.5, Radiation Protection of the Public & Environment
- ± DOE Order 5480.1B, Environment, Safety and Health Program for Departmental Operations
- ± DOE Order 5484.1, Environmental Protection, Safety, and Health Information Reporting Requirements
- ± DOE Order 5820.2A, Radioactive Waste Management.
- ± WHC-CM-6-1, Standard Engineering Practices
- ± WHC-CM-7-4, Environmental Monitoring Manual
- ± WHC-CM-7-5, Environmental Compliance Manual
- ± WHC RCRA Project Management Plan and Quality Assurance Program Plan

The objective of the Monitor and Assess Basin Cost Account is to monitor and assess large liquid effluent storage basins, both active and inactive, located in the 100 and 300 Areas which are adjacent to the Columbia River and contain hazardous and/or radioactive liquids. This assessment is to evaluate the potential for impact to the groundwater and ultimately the Columbia River. Activities include but are not limited to:

- ± Evaluation of basin facilities along the Columbia River to determine which of these facilities contain hazardous and/or Radioactive liquids capable of impacting groundwater or river water.
- ± Evaluation of existing groundwater composition data for each facility containing hazardous and/or radioactive liquids capable of impacting groundwater or river water. The purpose of the evaluation is to determine whether that facility has already impacted the aquifer.
- ± Preparation of characterization reports for each facility containing hazardous and/or radioactive liquids capable of impacting groundwater or river water. These reports will contain the geologic and hydrologic information necessary to design a site specific groundwater monitoring plan.
- ± Preparation of a schedule to have necessary, site-specific, groundwater monitoring plans in place.
- ± Preparation of site-specific groundwater monitoring plans for those facilities deemed capable of impacting groundwater or river water.
- ± Sampling and analysis of groundwater to monitor for facility impact on the environment. Annual reporting of sampling and analysis results.
- ± Installation of new groundwater monitoring wells at needed locations such that each facility has a minimum acceptable monitoring well network.

RELATED ACTIVITIES NARRATIVE:

These activities are supported by the RCRA & Operational Monitoring Program 'Program Management' activity as described in subactivity 734000AA.

Data gathered under this activity is used in regulatory required reports produced by subactivity 734000AC.

KEY ASSUMPTIONS:

The key assumptions in planning the Monitor and Assess Basins activity are:

- ± There will likely be no real scope of work identified and there is no current reason to attempt to fund this activity.

The Issues and Constraints are:

- ± Inadequate funding could eliminate the possibility to explore more cost effective methods and equipment.
- ± Lack of actual work scope could also remove the need to carry this activity in the future Work Breakdown Structure and Activity Data Sheet.

ACTIVITY BY PRIORITY:

The Monitor and Assess Basins activity could be priority 'B1'. This activity would work to ensure compliance with environmental laws and provide monitoring data for related regulatory required reports.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

The RCRA and Operational Monitoring Program continues to carry this activity as a candidate for actual work scope. There has been no significant work in this area to report at this time.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Funded at the Planning Case (Case I) level, the program would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

- ± There is no funding identified and no scope to cause a need for funding.

Funded at the Target Case (Case II) level, the program would include incremental changes to the Planning Case as follows:

- ± N/A

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Funded at the Planning Case (Case I) level, the program would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

- ± N/A

Funded at the Target Case (Case II) level, the program would include incremental changes to the Planning Case as follows:

- ± N/A

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Funded at the Planning Case (Case I) level, the program would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

- ± N/A

Funded at the Target Case (Case II) level, the program would include incremental changes to the Planning Case as follows:

- ± N/A

Funded at the Decrement Case (Case III) level, the program would include incremental changes to the Planning Case as follows:

± N/A

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Funded at the Planning Case (Case I) level, the program would continue to perform the tangible and intangible annual deliverables referenced above.

± N/A

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

Regulatory drivers would include:

- ± Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (40 CFR 300-399)
- ± Uranium Mills Tailings Radiation Control Act (40 CFR 192)
- ± Clean Water Act (40 CFR 122-130).
- ± Safe Drinking Water Act (40 CFR 144-149)
- ± Occupational Safety Hazards Administration (OSHA) requires a safe working environment.
- ± 40 CFR 265 Subpart F all sections, requires Liquid effluent monitoring to provide a check on releases of liquids to the soil.
- ± Data gathered supports permitting and investigations required by Tri-Party Agreement.

REGULATORY KEY ISSUES:

There are none identified at this time.

COMP/PROG BENEFITS AT PLANNING LEVEL:

None

CONCERNS AT PLANNING LEVEL:

None.

REQUIRED TECHNICAL DEVELOPMENT:

None.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7340 ADS SUF: 0 SUBACTIVITY: BA

SUBACTIVITY TITLE: EFFLUENT MONITORING

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: 23079 TEC: 25392

DESCRIPTION: RICHLAND SITE SUPPORT

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE	EW3120100	4996
TOTAL		4996
DIRECT FTE		36

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3120100	5656	5444	4996		4996	10424	10541	10881	10764
TOTAL		5656	5444	4996	0	4996	10424	10541	10881	10764
DIRECT FTE		44	40	36	0	36	37	37	37	35

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3120100	5656	5444	6427		6427	11637	11839	12046	12271
TOTAL		5656	5444	6427	0	6427	11637	11839	12046	12271
DIRECT FTE		44	40	44	0	44	44	44	44	44

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

All Effluent Monitoring activities are performed in compliance with state and federal regulations as stated below in the regulatory drivers section. In addition, the RCRA and Operational Monitoring program must ensure adherence to the contractor requirements of:

- ± DOE Order 5400.1, General Environmental Protection Program
- ± DOE Order 5400.3, Hazardous and Radioactive Mixed Waste
- ± DOE Order 5400.5, Radiation Protection of the Public & Environment
- ± DOE Order 5480.1B, Environment, Safety and Health Program for Departmental Operations
- ± DOE Order 5484.1, Environmental Protection, Safety, and Health Information Reporting Requirements
- ± DOE Order 5820.2A, Radioactive Waste Management.
- ± WHC-CM-6-1, Standard Engineering Practices
- ± WHC-CM-7-4, Environmental Monitoring Manual
- ± WHC-CM-7-5, Environmental Compliance Manual
- ± WHC RCRA Project Management Plan and Quality Assurance Program Plan

The Effluent Monitoring Activity consists of 4 major elements as follows:

- 1 The objective of the Environmental Effluent Cost Account is to provide for Health Physics Technicians (HPT) that perform surveillance of gaseous effluents in the 200 and 600 Areas to identify and limit the spread of surface contamination or unintentional releases and maintain the areas safe for personnel entry. This Cost Account periodically maintains the surveillance equipment and upgrades procedures as required. Specific support for the following facilities is as follows:

- ± Plutonium Uranium Extraction (PUREX) Plant, Plutonium Finishing Plant (PFP), 222-S Laboratory, Tank Farms and UO3 activities include but are not limited to:
 - ± Operate gaseous effluent monitoring system. Includes shift data recording system analysis and trouble shooting, and functional tests. Routinely pull air samples, do source checks, liquid effluent samples and stack checks. Respond to alarms. Tank Waste Remediation Health Physics (TWRHP) provide coverage to Respiratory Protection's in-tank vapor assessments to Tank Farms.
- ± 222-S Laboratory activities include but are not limited to:
 - ± Receive and process 200 Area samples.

- 2 The objective of the Effluent and Environmental Monitoring cost account is to coordinate the development, documentation, and maintenance of environmental monitoring and surveillance equipment, activities and events within the 200 and 600 Areas of the Hanford Site. Tasks include but are not limited to:

- ± Planning, direction, and execution of near-field environmental monitoring and surveillance in accordance with DOE Orders and federal or state regulations and standards.
- ± Administer the Effluent Monitoring and Reporting Program for Facility Operations and Waste Management facilities.
- ± Determine compliance with applicable DOE and Westinghouse Hanford Co. requirements.
- ± Perform surveillances of facilities and activities with potential to release pollutants to the environment for compliance requirements.
- ± Respond to environmental occurrences (including releases of radioactive and hazardous materials, fires, accidents), facilitating remedial actions where needed, and preparing formal reports of occurrences when they are required.
- ± Prepare annual reports of status of effluent releases and radioactive and hazardous material contamination within the 200 and 600 Areas.
- ± Conduct reviews of reports, criteria, designs, procedures, excavation permits, and other documentation affecting effluent control systems or having potential for effect on the environment.
- ± Interpret/enforce WHC-CM-7-5, Environmental Compliance Manual, and WHC-CM-7-4, Environmental Monitoring Manual requirements.

Environmental Surveillance tasks include:

- ± Annual environmental surveillance report and monthly report on routine surveillances
- ± Support to DOE-HQ Environmental Survey and Tiger Teams
- ± Maintain stack, liquid, and ambient air monitoring equipment.
- ± Upgrade specified effluent monitoring systems to comply with regulatory requirements.
- ± 200 Area environmental program - upgrade and maintain procedures as necessary to maintain and calibrate effluent and ambient air monitoring equipment consistent with the requirements of NQA-1.
- ± Perform PM, PISCES, and corrective maintenance on Near Field Constant Air Monitors (CAMS) brought to T Plant for service. In addition, assure that spare CAMS are available for field service when required.
- ± Performance of routine surveillance of hazardous waste satellite accumulation and <90 day storage areas.

Radioactive Effluent Monitoring tasks include:

- ± Preparation of annual effluent monitoring reports and maintenance of effluent monitoring plans.
- ± Performance of routine surveillances and sample and analysis of active effluents.
- ± Maintain regulatory expertise for facility cognizance.
- ± Reporting of hazardous waste effluents and support to RCRA groundwater monitoring for closure.

3 The Compliance and Technical Management Cost Account activity provides

expertise and data reporting for air emissions sample data collected around the Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal (TSD) Facilities and the remaining operational facilities on the Hanford site. Activities include but are not limited to:

- ± Provide regulatory requirements for monitoring, reporting and compliance with air emission from the Hanford Site.
 - ± Provide dose calculation for inclusion in the Calendar Year (CY) 1993 air emissions.
 - ± Prepare draft CY air emissions report for internal review; resolve comments and issue draft for DOE-HQ review; resolve comment and publish cleared document for transmittal to EPA and Ecology. The annual report satisfies the requirements of 40 Code of Federal Regulations (CFR) 61, Subpart H, National Emissions Standards for Hazardous Air Pollutants (NESHAP).
- 4 The objective of the NESHAP Compliance Cost Account is to support the development, administration, and maintenance of National Emission Standards for Hazardous Air Pollutants (NESHAP) compliance activities within the 200 and 600 Areas of the Hanford Site. Tasks include but are not limited to:
- ± Scheduling and tracking completion of continuous measurement system upgrades and/or requests for approval of sampling and flow measurement equipment for the existing sixteen (16) significant stacks listed below:

± PUREX	(291-A-1)
± PUREX	(296-A-1)
± PFP	(291-Z-1)
± PFP	(296-Z-3)
± 242-A Evaporator	(296-A-22)
± 241-AP Tank Farm Exhaust	(296-A-40)
± 340 Waste Handling Facility	(340-NT-EX)
± 308 Building	(308-GL-EX)
± Tank Farms	(296-A-17)
± Tank Farms	(296-A-27)
± Tank Farms	(296-A-29)
± Tank Farms	(296-P-16)
± Tank Farms	(296-P-23)
± Tank Farms	(296-S-15)
± ERO	(296-S-7W)
± BPlant	(291-B-1)
 - ± Developing and meeting milestones for identifying and evaluating any other RL point sources of radioactive airborne emissions and completing assessments to determine which, if any, are subject to 40 CFR 61, Subpart H continuous measurement requirements.
 - ± A Compliance Order was issued by the EPA on February 1, 1993 to direct the correction of regulatory deficiencies at seven of the sixteen Hanford registered stacks. Compliance activities for four of those stacks (B Plant, 340 Facility and 2 stacks in Tank Farms) are supported by this cost account.

Recent Clean Air Act amendments to 40 CFR 61, Subpart H, National Emissions

Standards for Hazardous Air Pollutants (NESHAP) require additional analyses and measurements for point source radioactive air emissions. Stacks, vents, pipes and other point source releases are to be continuously monitored or sampled in accordance with prescriptive requirements. Documentation must be in place to show if potential emissions are excluded from measurement requirements. The team that provides the annual air emissions report satisfies these requirements and provides leadership for the site emissions inventory.

RELATED ACTIVITIES NARRATIVE:

The RCRA and Operational Monitoring Program provides program management for this subactivity as described in subactivity 734000AA.

Groundwater monitoring under subactivity AC measures the effect of water releases to the soil.

KEY ASSUMPTIONS:

The key assumptions in planning the Effluent Monitoring activity are:

- ± Facilities and areas requiring surveillance will remain near constant.
- ± Legal and prudent monitoring and surveillance requirements will not be changed.
- ± When funds become available from discontinued monitoring activities, they will be used to fund activities whose scope was reduced, where appropriate.

The Issues and Constraints are:

- ± A Federal Facility Compliance Agreement (FFCA) was prepared to complete the required actions to satisfy the NESHAP Compliance Order. The FFCA was signed by the Secretary of Energy at DOE Headquarters on February 1, 1994.

ACTIVITY BY PRIORITY:

Environmental Effluent HPT activities are a priority 'A2' because they are directly responsible for operating and maintaining safety related equipment that is essential to operational safety. Health Physics Technicians directly support protection of plant workers, the public, and the environment through the identification of radioactive contamination in the environment.

The remaining 3 major elements are priority 'B1'. The Effluent and Environmental Monitoring activity and the Compliance and Technical Management activity ensure compliance with environmental laws and provide related regulatory interpretations and reporting for compliance orders and permitting. The NESHAP Compliance activity is working to ensure ontime completion of milestones provided in the NESHAP FFCA and establishing compliance with new environmental regulations.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

The program has performed RCRA and Operational monitoring under various titles since the early days of site activity. Years of development have resulted in a somewhat repetitive set of annual tangible deliverables as indicated below:

- ± Annual Environmental Surveillance Report
- ± Annual Report of Gaseous & Liquid Effluent Discharges
- ± Annual Transmittal of EIS / ODIS data to Idaho National Engineering Labs
- ± Annual Hanford Air Emissions Report to EPA
- ± Quarterly Environmental Radiological Monitoring Report
- ± Data gathered and analyzed are a major component of the site environmental report that is prepared annually by PNL.

The RCRA and Operational Monitoring Program continues to provide both tangible and intangible deliverables. Activities such as environmental surveillance continued to identify and oversee correction of 'near-field' conditions in the 100, 200, 300 and 600 Areas that could threaten environment, safety and health. 'Near-field' monitoring is the second line of defense against releases which could harm workers, the environment, and the public. Operating facilities are required to provide the first line of defense by funding and performing internal monitoring for process control purposes, to protect workers, and prevent releases. 'Far-field' measurements at and beyond the site boundary provide the third line of defense and are performed independently by the site research contractor under a different ADS.

Other significant intangible deliverables include:

- ± Administrative support required for interfacing with the Department of Energy (DOE), Environmental Protection Agency (EPA), and the Washington State Department of Ecology (WDOE).
- ± Preparations for NESHAP compliance and FEMP implementation by preparing initial capital equipment procurement documents in anticipation of FY 94 CENRTC funding that was not available in FY 93.
- ± Replacing and upgrading equipment and vehicles used by the program.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7340-00-0530	CY93 TRANSMIT EIS/ODS DATA TO INEL	3/31/94	3/31/94
7340-00-0360	ISSUE CY93 ANNUAL AIR EMISSIONS REPORT TO EPA	6/30/94	6/30/94
7340-00-0535	CY93 ISSUE ANNUAL REPORT ON ENVIRONMENTAL SURVEILLANCE	7/31/94	7/31/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Funding at the Planning Case (Case I) level would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

- ± Support for the NESHAP Compliance Order will increase expense funding as an 18 month effort to perform the front-end engineering studies begins.
- ± Tiger team findings required that the Constant Air Monitors (CAM) be raised to two meters above ground level and timers installed. Completion of refurbishing and raising all CAMs is expected in FY94.

Funding at the Target Case (Case II) level would include incremental changes to the Planning Case as follows:

- ± NESHAP Compliance Order funding will suffer for the lack of adequate dollars. The planned front-end engineering studies will be delayed.
- ± Further reductions in available funding will be spread among the lower tier cost elements. This may render some cost elements unable to meet regulatory compliance requirements.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7340-00-0545	CY94 TRANSMIT EIS/ODIS DATA TO INEL	3/31/95	3/31/95
7340-00-0365	ISSUE CY94 ANNUAL AIR EMISSIONS REPORT TO EPA	6/30/95	6/30/95
7340-00-0550	CY94 ISSUE ANNUAL REPORT ON ENVIRONMENTAL SURVEILLANCE	7/31/95	7/31/95
7340-00-0540	CY94 ISSUE ANNUAL REPORT ON GASEOUS & LIQUID EFFLUENT DISCHARGE	7/31/95	7/31/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Funding at the Planning Case (Case I) level would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

- ± Support for the NESHAP Compliance Order will increase expense funding as an 18 month effort to perform the front-end engineering studies end and NESHAP CENRTC spending ends.

Funding at the Target Case (Case II) level would include incremental changes to the Planning Case as follows:

- ± The planned front-end engineering studies will be behind schedule and the time-table for completion will be stretched out.
- ± Any further reductions in available funding will be spread among the lower tier cost accounts. This may render some cost elements unable to meet regulatory compliance requirements.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7340-00-0560	CY95 TRANSMIT EIS/ODIS DATA TO INEL	3/31/96	3/31/96
7340-00-0370	ISSUE CY95 ANNUAL AIR EMISSIONS REPORT TO EPA	6/30/96	6/30/96
7340-00-0570	CY95 ISSUE ANNUAL REPORT ON ENVIRONMENTAL SURVEILLANCE	7/31/96	7/31/96
7340-00-0555	CY95 ISSUE ANNUAL REPORT ON GASEOUS & LIQUID EFFLUENT DISCHARGE	7/31/96	7/31/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Funding at the Planning Case (Case I) level would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

- ± NESHAP Compliance Order activities will likely generate a separate ADS to provide Capital Project or Line Item support for the recommendations of the NESHAP compliance engineering studies.

Funding at the Target Case (Case II) level would include incremental changes to the Planning Case as follows:

- ± Although desirable, and the most effective way to manage the program, there would not be enough dollars to justify a separate ADS at this time in this fiscal year. Additionally, other NESHAP Compliance Order activities would have to be delayed.

Funding at the Decrement Case (Case III) level would include incremental changes to the Planning Case as follows:

- ± Serious reductions in available funding will be spread among the lower tier cost accounts. The Compliance and Technical Management cost account, which supports air emissions calculations and related reports for the Hanford site, would be unfunded completely.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7340-00-0575	CY96 TRANSMIT EIS/ODIS DATA TO INEL	3/31/97	3/31/97
7340-00-0375	ISSUE CY96 ANNUAL AIR EMISSIONS REPORT TO EPA	6/30/97	6/30/97
7340-00-0585	CY96 ISSUE ANNUAL REPORT ON	7/31/97	7/31/97

7340-00-0565	ENVIRONMENTAL SURVEILLANCE CY96 ISSUE ANNUAL REPORT ON GASEOUS & LIQUID EFFLUENT DISCHARGE	7/31/97	7/31/97
7340-00-0380	ISSUE CY97 ANNUAL AIR EMISSIONS REPORT TO EPA	6/30/98	6/30/98
7340-00-0590	CY97 ISSUE ANNUAL REPORT ON ENVIRONMENTAL SURVEILLANCE	7/31/98	7/31/98
7340-00-0580	CY97 ISSUE ANNUAL REPORT ON GASEOUS & LIQUID EFFLUENT DISCHARGE	7/31/98	7/31/98
7340-00-0040	ISSUE CY98 ANNUAL AIR EMISSIONS REPORT TO EPA	6/30/99	6/30/99

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Funding at the Planning Case (Case I) level would continue to perform the tangible and intangible annual deliverables referenced above.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

Regulatory drivers include:

- ± The Clean Air Act, 40 CFR 61 Subpart A sections 61.01 through 61.19 and Subpart H sections 61.90 through 61.97, known as the National Emissions Standards for Hazardous Air Pollutants (NESHAP), places specific limits on the release of chemical compounds and radionuclides to the air and prescribes measurement of these releases.
- ± Safe Drinking Water Act,
- ± Occupational Safety and Health Administration (OSHA) requires a safe working environment.
- ± 40 CFR 265 Subpart F all sections, requires Liquid effluent monitoring to provide a check on releases of liquids to the soil.
- ± Data gathered supports permitting and investigations required by Tri-Party Agreement.

Safe access to the 200 Area via the 600 Area requires regular surveillance so that surface contamination does not spread into the access ways and cause unnecessary exposure of personnel to radiation. Near-field environmental monitoring and surveillance activities are planned, directed, and executed in accordance with DOE Orders.

REGULATORY KEY ISSUES:

NESHAP support is done in accordance with the Environmental Protection Agency (EPA) Compliance Order and Information Request; EPA Docket No.: 1092-01-23-113/114, dated February 3, 1993.

- ± The U.S. Department of Energy, Richland Operations Office (RL) will maintain milestones and activities to achieve compliance with applicable requirements of the Code of Federal Regulations (CFR) 61, Subpart H regarding the continuous measurement of point sources (stacks or vents) of radioactive emissions to the air.

DOE Orders and Clean Air Act drivers remain in place without additional or reduced requirements on the program. Work in the 200 and 600 Areas continues at the present level. The net effect of changes that will occur will be no change to the amount of activity required.

COMP/PROG BENEFITS AT PLANNING LEVEL:

The continued near-field monitoring will provide a check and oversight of the RCRA and operating facilities with record sampling and monitoring to assure a continued safe working environment within the Hanford Site. The program will continue to notify responsible parties and provide technical assistance in the event of a release or spread of contamination.

CONCERNS AT PLANNING LEVEL:

Although partial funding was reinstated in FY 1994 for compliance action

with NESHAP monitoring requirements it is certain that it will not be possible to complete the determination of required action and the actual upgrades within the one year required by the EPA Order. This delay has been exacerbated by the removal of capital equipment budget for planned acquisition of equipment in FY 93.

REQUIRED TECHNICAL DEVELOPMENT:
None.

THIS PAGE INTENTIONALLY LEFT BLANK

**THIS PAGE INTENTIONALLY
LEFT BLANK**

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

All Environmental Monitoring activities are performed in compliance with state and federal regulations as stated below in the regulatory drivers section. In addition, the RCRA and Operational Monitoring program must ensure adherence to the contractor requirements of:

- ± DOE Order 5400.1, General Environmental Protection Program
- ± DOE Order 5400.3, Hazardous and Radioactive Mixed Waste
- ± DOE Order 5400.5, Radiation Protection of the Public & Environment
- ± DOE Order 5480.1B, Environment, Safety and Health Program for Departmental Operations
- ± DOE Order 5484.1, Environmental Protection, Safety, and Health Information Reporting Requirements
- ± DOE Order 5820.2A, Radioactive Waste Management.
- ± WHC-CM-6-1, Standard Engineering Practices
- ± WHC-CM-7-4, Environmental Monitoring Manual
- ± WHC-CM-7-5, Environmental Compliance Manual
- ± WHC RCRA Project Management Plan and Quality Assurance Program Plan

The Environmental Monitoring Activity consists of 4 major elements as follows:

- 1 The objective of the Cribs, Ponds and Ditches Cost Account is to ensure that cribs, ponds and ditches which receive waste water are maintained and monitored. This cost account limits the spread of surface contamination or unintentional releases and maintains the areas safe for personnel entry. Activities include but are not limited to:
 - ± Provide operations, maintenance and engineering support for the separations areas cribs, ponds, and ditches. Performance of work will comply with WHC operations procedures.
 - ± Perform all surveillance of cribs, ponds and ditches to include:
 - ± Drywell monitoring of active sites
 - ± Pond level monitoring
 - ± Crib level monitoring
 - ± Effluent flow rate measurements
 - ± Perform maintenance of cribs, ponds and ditches to include:
 - ± Dredging of ditches and ponds (also drying out) as required to maintain flow and infiltration rate
 - ± Water meters
 - ± Prepare and/or revise procedures as required.
 - ± Provide surveillance data analysis and trend reporting.
 - ± Provide support for B Pond piezometer measurements.
 - ± Waste burial assessment will be change requested if needed.
 - ± Complete FY-1994 selective herbicide spraying.
- 2 The objective of the Seismic Monitoring Cost Account is to support and maintain a seismic monitoring surveillance program that encompasses the Hanford Site and Eastern Washington. Activities include but are not limited to:

- ± Maintain minimum required seismic monitoring capabilities for determining location and magnitude of local earthquakes to Hanford facilities.
- ± Maintain an historical seismic monitoring data base.
- ± Maintain ability to evaluate and report seismic activities.
- ± Interpret the continuing seismicity at and around Hanford.
- ± Perform overall technical, administrative, and seismic network maintenance and reporting to include:
 - ± Negotiation and monitoring of a yearly contract with the University of Washington for reporting all events recorded by the regional network via a yearly catalog. Quarterly 'preliminary' catalogs are also provided.
 - ± Interpretation of seismic data from the Hanford array and reporting all events recorded by the Hanford network via yearly catalog.
 - ± Maintain all seismic stations in the regional and Hanford arrays.
- ± Provide an annual schedule for planned maintenance and upgrade of seismic stations. Use this schedule to status the performance of this cost account.

Collection and analysis of seismic activity information is vital to the construction of environmental cleanup facilities and structures. The information to explain seismic events which may be felt at the Hanford site and vicinity is not available from other sources. Definitive information on changes in seismic activity over time is essential.

- 3 The objective of the Inactive Crib Monitoring cost account is to support startup of spectral gamma logging of inactive cribs per DOE directive to initiate vadose zone monitoring. Activities include but are not limited to:
- ± Update the Vadose Zone Monitoring Plan.
 - ± Calibrate the Radionuclide Logging System (RLS); A spectral gamma logging system.
 - ± Participate in CRADA for installation of the nuclear logging calibration model.
 - ± Refine the spectral gamma ray interpretation method.
 - ± Continue baselining active and inactive waste sites.

Vadose zone monitoring activity includes the final development stages of the Radionuclide Logging System (RLS), essential to better locate, identify and quantify radionuclide species in the vadose zone between ground surface and groundwater. Additional techniques have promise of direct measurement of soil moisture content and identification of chemical contaminants from the logging of boreholes.

- 4 The objective of the Environmental Surveillance cost account is to collect environmental air and water samples. Perform surveys of stabilized site, cribs, ponds and ditches to monitor and quantify contamination spreads.

This cost account funds weekly samples from various locations

throughout the 200 and 600 areas. Also, quarterly, semi-annual and annual surveys as well as special survey requests are performed. Surveys and sampling are done to ensure that Hanford complies with DOE Order 5480.11 and to quantify and mitigate any radioactive contamination. Personnel within this cost account are designated Health Physics emergency response personnel. Activities include but are not limited to:

- ± Complete bi-monthly road surveys inside 200 east and 200 west areas, perimeter roads and other special road surveys.
- ± Complete 35 quarterly, 6 semi-annual and 28 annual routine environmental surveys.
- ± Complete quarterly environmental Treatment, Storage, and Disposal (TSD) program.
- ± Collect weekly air and water samples (~13 water and ~50 air) from the 200 and 600 areas.
- ± Complete ~143 monthly environmental surveys of cribs, ponds, reverse wells, burial grounds, unplanned releases, retention basin and tank farm perimeters.
- ± Survey ~2000 acres annually of stabilized or remediated sites.

RELATED ACTIVITIES NARRATIVE:

These activities are supported by the RCRA & Operational Monitoring Program 'Program Management' activity as described in subactivity 734000AA.

Data gathered under this activity is used in regulatory required reports produced by subactivity 734000BA.

KEY ASSUMPTIONS:

The key assumptions in planning the Environmental Monitoring activity are:

- ± Facilities and areas requiring surveillance will remain near constant. As some are dropped others will be added.
- ± Legal and prudent monitoring and surveillance requirements will not be changed.
- ± When funds become available from discontinued monitoring activities, they will be used to fund activities whose scope was reduced based on available funding, where appropriate.

The Issues and Constraints are:

Inadequate funding could eliminate the possibility to explore more cost effective methods and equipment.

ACTIVITY BY PRIORITY:

Environmental Surveillance HPT activities are priority 'A2' because they are directly responsible for operating and maintaining safety related equipment that is essential to continued operational safety. Health

Physics Technicians directly support protection of plant workers, the public, and the environment through the identification of radioactive contamination in the environment.

The remaining 3 major elements are priority 'B1'. These activities ensure compliance with environmental laws and provide monitoring data for related regulatory required reports.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

The program has performed RCRA and Operational Surveillance to insure safe human activity can continue in the 200 and 600 areas since the early days of site activity. Years of development have resulted in a somewhat repetitive set of annual tangible deliverables as indicated below:

- ± Annual Hanford Seismic Network Catalog of Seismic Events

Other significant deliverables include:

- ± Remedial actions taken for vegetation.
- ± Cribs, ponds and ditches operated and maintained in a safe and cost effective manner.
- ± Replacing and upgrading equipment and vehicles used by the program.
- ± Radionuclide Logging System procured and tested.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7340-00-0155	ISSUE THE FY93 ANNUAL HANFORD NETWORK CATALOG OF SEISMIC EVENTS	12/31/93	12/31/93
7340-00-0050	CY93 ISSUE ANNUAL REPORT ON GASEOUS & LIQUID EFFLUENT DISCHARGE	7/31/94	7/31/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Funded at the Planning Case (Case I) level, the program would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

- ± Implementation of new cost / schedule savings efforts in Environmental Monitoring activities.
- ± Continue improvements in data analysis, reporting techniques, and reporting timeliness.

Funded at the Target Case (Case II) level, the program would include incremental changes to the Planning Case as follows:

- ± Regulatory monitoring, data collection, and reporting will likely suffer for the lack of adequate coverage.
- ± The frequency at which some data is collected may have to be reduced.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7340-00-0160	ISSUE THE FY94 ANNUAL HANFORD NETWORK CATALOG OF SEISMIC EVENTS	12/31/94	12/31/94

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Funded at the Planning Case (Case I) level, the program would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

- ± Implementation of new cost / schedule savings efforts in Environmental Monitoring activities.
- ± Continue improvements in data analysis, reporting techniques, and reporting timeliness.

Funded at the Target Case (Case II) level, the program would include incremental changes to the Planning Case as follows:

- ± Regulatory monitoring, data collection, and reporting will likely suffer for the lack of adequate coverage.
- ± The frequency at which some data is collected may have to be reduced.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7340-00-0165	ISSUE THE FY95 ANNUAL HANFORD NETWORK CATALOG OF SEISMIC EVENTS	12/31/95	12/31/95

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Funded at the Planning Case (Case I) level, the program would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

- ± Implementation of new cost / schedule savings efforts in Environmental Monitoring activities.
- ± Continue improvements in data analysis, reporting techniques, and reporting timeliness.

Funded at the Target Case (Case II) level, the program would include incremental changes to the Planning Case as follows:

- ± Regulatory monitoring, data collection, and reporting will likely suffer for the lack of adequate coverage.
- ± The frequency at which some data is collected may have to be reduced.

Funded at the Decrement Case (Case III) level, the program would include incremental changes to the Planning Case as follows:

- ± Serious reductions in available funding will be spread among the lower tier cost accounts. The Cribs, Ponds, and Ditches cost account (1R43V1), which performs all maintenance, monitoring, and surveillance of active cribs, ponds, and ditches on Hanford site, will go unfunded indefinitely unless some other Program Office is willing to pick up the funding responsibility.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7340-00-0170	ISSUE THE FY96 ANNUAL HANFORD NETWORK CATALOG OF SEISMIC EVENTS	12/31/96	12/31/96
7340-00-0175	ISSUE THE FY97 ANNUAL HANFORD NETWORK CATALOG OF SEISMIC EVENTS	12/31/97	12/31/97
7340-00-0120	CY97 TRANSMIT EIS/ODIS DATA TO INEL	3/31/98	3/31/98
7340-00-0180	ISSUE THE FY98 ANNUAL HANFORD NETWORK CATALOG OF SEISMIC EVENTS	12/31/98	12/31/98
7340-00-0045	CY98 TRANSMIT EIS/ODIS DATA TO INEL	3/31/99	3/31/99
7340-00-0060	CY98 ISSUE ANNUAL REPORT ON ENVIRONMENTAL SURVEILLANCE	7/31/99	7/31/99
7340-00-0055	CY98 ISSUE ANNUAL REPORT ON GASEOUS & LIQUID EFFLUENT DISCHARGE	7/31/99	7/31/99

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Funded at the Planning Case (Case I) level, the program would continue to perform the tangible and intangible annual deliverables referenced above.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

Safe access to the 200 Area via the 600 Area requires regular surveillance so that surface contamination does not spread into the access ways and cause unnecessary exposure of personnel to radiation. Regulatory drivers include:

- ± The Clean Air Act, 40 Code of Federal Regulations (CFR) 61 Subpart A sections 61.01 through 61.19 and Subpart H sections 61.90 through 61.97, known as the National Emissions Standards for Hazardous Air Pollutants (NESHAP), places specific limits on the release of chemical compounds and radionuclides to the air and prescribes measurement of these releases.
- ± Safe Drinking Water Act,
- ± Occupational Safety and Health Administration (OSHA) requires a safe working environment.
- ± 40 CFR 265 Subpart F, all sections, requires Liquid effluent monitoring to provide a check on releases of liquids to the soil.
- ± Data gathered supports permitting and investigations required by Tri-Party Agreement.

REGULATORY KEY ISSUES:

The U.S. Environmental Protection Agency is preparing regulations to require Vadose Zone Monitoring. It is believed that existing Hanford site capabilities and planned enhancements will help meet the new requirements.

COMP/PROG BENEFITS AT PLANNING LEVEL:

None

CONCERNS AT PLANNING LEVEL:

None.

REQUIRED TECHNICAL DEVELOPMENT:

None.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS: Safe access to the 200 Area via the 600 Area requires regular surveillance so that surface contamination does not spread into the access ways and cause unnecessary exposure of personnel to radiation. Regulatory drivers include:

- ± The Clean Air Act, 40 Code of Federal Regulations (CFR) 61 Subpart A sections 61.01 through 61.19 and Subpart H sections 61.30 through 61.97, known as the National Emissions Standards for Hazardous Air Pollutants (NESHAP), places specific limits on the release of chemical compounds and radionuclides to the air and prescribes measurement of these releases.
- ± Safe Drinking Water Act.
- ± Occupational Safety and Health Administration (OSHA) requires a safe working environment.
- ± 40 CFR 266 Subpart F, all sections, requires liquid effluent monitoring to protect the soil.
- ± Data gathered and reported by the Party Agreement.

THIS PAGE INTENTIONALLY LEFT BLANK

REGULATORY KEY ISSUES: The U.S. Environmental Protection Agency is preparing regulations to require Vadose Zone Monitoring. It is believed that existing vadose zone capabilities and planned enhancements will help meet the new requirements.

COMPARING BENEFITS AT PLANNING LEVEL: None

CONCERNS AT PLANNING LEVEL: None

REQUIRED TECHNICAL DEVELOPMENT: None

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7340 ADS SUF: 1 SUBACTIVITY: AG

SUBACTIVITY TITLE: RCRA GROUNDWATER MONITORING WELL INSTALLATION

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: 93D18000 TPC: 45500 TEC: 39200

DESCRIPTION: RICHLAND SITE SUPPORT-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
B&R		TOTAL
OE	EW3130030	0
LI	39EW31303	0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	0	600	0		0	636	655	675	695
LI	39EW31303	0	0	0		0	0	2000	1982	2000
TOTAL		0	600	0	0	0	636	2655	2657	2695
DIRECT FTE		0	4	0	0	0	4	4	4	4

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW3130030	0	2065	2125		2125	2189	2255	2323	2392
LI	39EW31303	0	12500	9000		9000	3018	2000	1982	2000
TOTAL		0	14565	11125	0	11125	5207	4255	4305	4392
DIRECT FTE		0	13	13	0	13	13	13	13	13

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

The objective of this effort is to install groundwater monitoring wells around the Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal (TSD) Facilities and the remaining operational facilities on the Hanford site. This includes the addition of RCRA wells at the rate specified in Tri-Party Agreement Milestone M-24-00.

This project coordinates all activities associated with the installation of RCRA compliant groundwater monitoring wells installed beginning in FY 93 under Line Item 93-D-180 (93W-GFW-152). Installation of RCRA compliant groundwater monitoring wells is part of the overall groundwater monitoring program which must be in place for waste management facilities to maintain RCRA Part B status compliance and hence, continue to operate. The Tri-Party Agreement stipulates that there will be up to 50 RCRA wells installed each year beginning with CY 91. Well installation is to continue until all operating facilities have monitoring systems that are approved by the regulators. This ADS also provides for additional wells required for assessment monitoring, RCRA and Operational Background Monitoring, and replacement of monitoring wells which go dry or are not useful for other reasons. The activity which supports this scope is described below:

AG - RCRA GROUNDWATER WELL INSTALLATION

- ± Preparation and issue of approved site specific groundwater monitoring plans.
- ± Preparation and issue of approved procedures and QA Plans.
- ± Performance of Cultural Resources Review.
- ± Preparation of approved data sheets to supplement groundwater well specifications.
- ± Material procurement.
- ± Actual drilling.
- ± Provide or procure qualified drillers.
- ± Field supervision of drilling, well installation, well completion and completion of all surface work.
- ± HPT and site safety support as required.
- ± All field geology/hydrology activities in support of site characterization, including aquifer testing at new wells.
- ± Sampling pump procurement, installation and testing.
- ± Preparation of all documentation resulting from drilling activities.
- ± Surface completion work required prior to turning wells over for routine monitoring.
- ± Completion and submittal to project files, all necessary data from groundwater monitoring wells installed under W-017H and W-152.
- ± Perform engineering studies to support optimum placement and construction of new RCRA wells.
- ± Provide soils laboratory analyses to support well completion.
- ± Dispose of wastes generated during well construction, completion and development.

Provision for 25 facility specific groundwater monitoring wells is included (10 in FY 93; five each in FY 94, 95, and 96) to provide monitoring prior to startup for new Treatment, Storage and Disposal facilities being built

as part of the Hanford environmental cleanup and to provide assessment monitoring for existing water disposal facilities as required by consent order.

Also, this activity includes the installation of an additional 15 deep wells (five in each FY 94/95/96) in response to Tiger Team finding GW/CF-2 concerning possible physical pathways between the first confined aquifer and the unconfined aquifer and their hydrostatic pressure relationship. Conditions resulting in flow only from the confined to the unconfined aquifer would obviate the necessity for extensive deep drilling at site operable units and RCRA facilities.

A Baseline Change Package for the project was submitted in November 1992 and subsequently approved, to reduce the project scope to the maximum M-24-00 requirement, up to 50 wells per year. The project would still encompass liquid disposal assessment, operational monitoring, permitting and Tiger Team wells if less than 50 wells per year are necessary for M-24-00 requirements.

RELATED ACTIVITIES NARRATIVE:

This activity is managed under activity AA (7340-0) and supports the groundwater sampling and analysis activity AC (7340-0).

KEY ASSUMPTIONS:

AG - RCRA Groundwater Well Installation activity assumptions:

- ± It will continue to be necessary to install up to 50 new RCRA wells per year.
 - ± Of these, 1/4 will be drilled under hazardous and radioactive conditions.
 - ± Typical well depths will be similar to those in the central plateau.
 - ± Fifteen deep characterization wells are estimated as non-hazardous, non-radioactive, but with extensive sampling during drilling.
 - ± Specific needs for FY 1994 are much less than 50 wells and the program will not proceed with the 15 deep wells in FY 1994.
- ± New facilities will require normal depth, non-hazardous, non-radioactive wells with sampling.
- ± Initially identified wells to be installed during 1994 include one (1) well at the Non-Radioactive Dangerous Waste Landfill (M-24-32), three (3) wells at the K West Irradiated Fuel Storage Basin, and as many as seven (7) assessment wells at effluent discharge locations. Washington State Department of Ecology may require additional wells.

ACTIVITY BY PRIORITY:

Priority 2A because this activity supports minimization of waste dispersion in the groundwater.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

The program has performed RCRA compliant Well Installation activities since FY 89 under two projects. Activities associated with 'Corrective Activities' provided 135 TPA required RCRA Well Installations under Project W-017H with expense funding from ADS 7350-0. Corrective Activities funding ceased in FY93 thus closing ADS 7350-0 and shifting the full responsibility to ADS 7340-1 for RCRA Groundwater Well Installation. The specific activities included in the installation of wells are those described and listed in the Technical Scope. Tangible deliverables relative to ADS 7340-1 and completed to date are as indicated below:

- ± A New line item (Project W-152) was approved, construction began and a total of ten wells were drilled in FY 93.
- ± The Tri-Party Agreement (TPA) was renegotiated resulting in a decrease in the maximum number of annual well drilling commitments to expect.
- ± TPA major annual milestone M-24-00E completed 12/31/93 with the successful completion of 3 TPA interim milestones M-24-30 through 32.
- ± Negotiations for TPA major milestone M-24-00F are ongoing and currently include one TPA interim milestone M-24-33.

Other significant intangible deliverables include:

- ± Program Management expense support required for interfacing with the Department of Energy (DOE), Environmental Protection Agency (EPA), and the Washington State Department of Ecology (WDOE).
- ± Replacing and upgrading equipment and vehicles used by the program.
- ± Utilization of FY93 carryover line item funding will enable continued well installation in FY-94.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7340-01-0065	M-24-00E INSTALL UP TO 50 RCRA GROUNDWATER MONITORING WELLS CY93	12/31/93	12/31/93
7340-01-0015	M-24-30 INSTALL 1 MORE RCRA WELL BY 1325-N CRIB	12/31/93	12/31/93
7340-01-0020	M-24-31 INSTALL 2 MORE RCRA WELLS BY LOW LEVEL BURIAL GROUNDS (81	12/31/93	12/31/93
7340-01-0025	M-24-32 INSTALL 3 MORE RCRA WELLS BY GROUT TEST FACILITIES (13)	12/31/93	12/31/93

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Funded at the Planning Case (Case I) level, the program would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

- ± Further utilization of FY93/FY94 carryover line item funding will enable continued well installation in FY-95.
- ± Work to satisfy TPA annual major milestone M-24-00F will complete 12/31/94 with the completion of interim milestone M-24-33 and any others agreed to.
- ± Negotiations and work to satisfy TPA annual major milestone M-24-00G will be ongoing through 12/31/95 with the completion of interim milestone(s) agreed to.
- ± Installing groundwater monitoring wells at the rate prescribed in the Tri-Party Agreement should result in a compliant network of groundwater monitoring wells for facilities at Hanford.
- ± Regulators may withhold approval of the network because of changes in the groundwater regime caused by ceasing most discharge of water to the soil on the site. These changes are causing lowering of the water table and changes in flow direction. Wells must be replaced or added as wells go dry or systems become inadequate.
- ± Insufficient numbers of downgradient wells to monitor the effect of facilities on groundwater is the frequent result of change in flow direction. Other wells become unusable for other reasons and must be replaced.
- ± Some wells will be required to track groundwater contamination from facilities impacting groundwater quality.
- ± Some wells we be required to obtain background concentrations for virtually all RCRA closure plans.
- ± Some deep wells will be required to address Tiger Team Finding GW/CF-2 and answer questions by the DOE Tiger Team, the United States Geologic Service (USGS), and the General Accounting Office (GAO) concerning contamination of confined aquifers.
- ± Some wells will be required to measure the concentrations of some naturally occurring or incoming constituents. Data from these latter wells will address Notices of Deficiency which Ecology has issued against some permitting applications.

Funded at the Target Case (Case II) level, the program would include incremental changes to the Planning Case as follows:

- ± The lack of operating expense funding necessary for project support activities will, negatively impact the ability to fully utilize the line item carryover, potentially impacting TPA M-24-00 annual milestones.
- ± The limited expense funding support for Tri-Party Agreement activities will, negatively impact the ability to install other non-TPA required wells as referred to in the planning case above. These wells would need to be pushed back as planning case activities in subsequent years.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7340-01-0070	M-24-00F INSTALL UP TO 50 RCRA GROUNDWATER MONITORING WELLS CY94	12/31/94	12/31/94

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Funded at the Planning Case (Case I) level, the program would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

- ± Further utilization of FY93/FY94 carryover line item funding will enable continued well installation in FY-95.
- ± Work to satisfy TPA annual major milestone M-24-00F will complete 12/31/94 with the completion of interim milestone M-24-33 and any others agreed to.
- ± Negotiations and work to satisfy TPA annual major milestone M-24-00G will be ongoing through 12/31/95 with the completion of interim milestone(s) agreed to.
- ± Installing groundwater monitoring wells at the rate prescribed in the Tri-Party Agreement should result in a compliant network of groundwater monitoring wells for facilities at Hanford.
- ± Regulators may withhold approval of the network because of changes in the groundwater regime caused by ceasing most discharge of water to the soil on the site. These changes are causing lowering of the water table and changes in flow direction. Wells must be replaced or added as wells go dry or systems become inadequate.
- ± Insufficient numbers of downgradient wells to monitor the effect of facilities on groundwater is the frequent result of change in flow direction. Other wells become unusable for other reasons and must be replaced.
- ± Some wells will be required to track groundwater contamination from facilities impacting groundwater quality.
- ± Some wells we be required to obtain background concentrations for virtually all RCRA closure plans.
- ± Some deep wells will be required to address Tiger Team Finding GW/CF-2 and answer questions by the DOE Tiger Team, the United States Geologic Service (USGS), and the General Accounting Office (GAO) concerning contamination of confined aquifers.
- ± Some wells will be required to measure the concentrations of some naturally occurring or incoming constituents. Data from these latter wells will address Notices of Deficiency which Ecology has issued against some permitting applications.

Funded at the Target Case (Case II) level, the program would include incremental changes to the Planning Case as follows:

- ± The lack of operating expense funding necessary for project support activities will, negatively impact the ability to fully utilize the line item carryover, potentially impacting TPA M-24-00 annual milestones.
- ± The limited expense funding support for Tri-Party Agreement activities will, negatively impact the ability to install other non-TPA required wells as referred to in the planning case above. These wells would need to be pushed back as planning case activities in subsequent years.

FY 1996 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Funded at the Planning Case (Case I) level, the program would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

- ± Work to satisfy TPA annual major milestone M-24-00G will complete 12/31/95 with the completion of interim milestone(s) agreed to.
- ± Negotiations and work to satisfy TPA annual major milestone M-24-00H will be ongoing through 12/31/96 with the completion of interim milestone(s) agreed to.
- ± Absorption of the need to install wells as stated in previous years resulting in an accumulation of important but previously unfunded well installations.
- ± The FY 93 Line Item expires in FY 96 and it is likely that initial monitoring system requirements will have been satisfied by then.

Funded at the Target Case (Case II) level, the program would include incremental changes to the Planning Case as follows:

- ± The lack of operating expense funding necessary for project support activities will negatively impact the ability to fully utilize the line item carryover and potentially impact TPA M-24-00 annual milestones.
- ± The limited expense funding support for Tri-Party Agreement activities will, negatively impact the ability to install other non-TPA required wells as referred to in the planning case above. These wells would need to be pushed back as planning case activities in subsequent years.

Funded at the Decrement Case (Case III) level, the program would include incremental changes to the Planning Case as follows:

- ± The lack of operating expense funding necessary for project support activities will terminate the ability to utilize the line item carryover and cease well installations of all categories. This would seriously impact TPA M-24-00 annual milestones and other non-TPA, but

potential, regulatory concerns.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
7340-01-0075	M-24-00G INSTALL UP TO 50 RCRA GROUNDWATER MONITORING WELLS CY95	12/31/95	12/31/97
7340-01-0080	M-24-00H INSTALL UP TO 50 RCRA GROUNDWATER MONITORING WELLS CY96	12/31/96	12/31/97
7340-01-0085	M-24-00I INSTALL UP TO 50 RCRA GROUNDWATER MONITORING WELLS CY97	12/31/97	12/31/97
7340-01-0090	M-24-00J INSTALL UP TO 50 RCRA GROUNDWATER MONITORING WELLS CY98	12/31/98	12/31/98
7340-01-0010	M-24-00 INSTALL UP TO 50 RCRA GW MONITORING WELLS PER CY AS NEED	12/31/99	12/31/99
7340-01-0005	M-24-00K INSTALL UP TO 50 RCRA GROUNDWATER MONITORING WELLS CY99	12/31/99	12/31/99

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Funded at the Planning Case (Case I) level, the program would continue to perform the tangible and intangible annual deliverables referenced above. Planning includes incremental changes as follows:

- ± Drilling is expected to continue at a rate equal to 80% of that in the last year of the four year Line Item.
- ± A new line item might be initiated to continue the support provided by the previous line item and address well installations that went underfunded in previous years.
- ± Negotiations and work to satisfy TPA annual major milestone M-24-00H through M-24-00K will be ongoing through 12/31/99 with the completion of interim milestone(s) agreed to.

Funded at the Target Case (Case II) level, the program would include incremental changes to the Planning Case as follows:

- ± The lack of operating expense funding necessary for project support activities will negatively impact the ability to fully utilize the line item carryover and potentially impact TPA M-24-00 annual milestones.
- ± The limited expense funding support for Tri-Party Agreement activities will, negatively impact the ability to install other non-TPA required wells as referred to in the planning case above. These wells would need to be pushed back as planning case activities in subsequent years.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

The Tri-Party Agreement allows the Hanford Site to continue to operate while facilities are out of compliance with State and federal RCRA regulations as long as the DOE continues actions to bring those facilities into compliance. Specific actions and schedules for those actions are detailed in the Tri-Party Agreement. One of those actions is the installation of groundwater monitoring wells at the rate of up to 50 per year until all facilities have a regulatory approved network of groundwater monitoring wells. Specific regulations are 40 CFR 265, Subpart F all sections, the RCRA Groundwater Monitoring Technical Enforcement Guidance Document (TEGD), and the related Washington State laws (WAC 173-303).

REGULATORY KEY ISSUES:

Major assumption used to formulate the funding requirements necessary for this activity is that the Tri-Party Agreement milestones remain unchanged. That up to 50 wells are installed in FY 1991 through FY 1997.

COMP/PROG BENEFITS AT PLANNING LEVEL:

The compliance benefit realized at the planning level is that the Tri-Party Agreement milestones to install groundwater monitoring wells is completed on time. More importantly that a RCRA compliant groundwater monitoring system is established at Hanford. This system is required for all RCRA treatment, storage and disposal operating permits and closure plans.

CONCERNS AT PLANNING LEVEL:

The planning cases presented for FY 1993 and FY 1994 reflect budgets that have been known to be inadequate for many months. Failure to meet Tri-Party Agreement Milestones is guaranteed if these mandated budgets are not adjusted. Target funding in the years beyond 1995 provides NO MONEY for well drilling to keep the monitoring system installed at great cost compliant with the laws now in place. No provision for vadose zone monitoring has been considered in the development of this ADS.

REQUIRED TECHNICAL DEVELOPMENT:

Existing drilling technology is adequate for future drilling. Methods which promise quicker, better, cheaper drilling may require applied technology to protect personnel and the environment if hazardous or radioactive contamination is encountered. No funding is budgeted to apply technology which promises to improve effectiveness or efficiency in the target cases.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

The Tri-Party Agreement allows the Hanford site to continue to operate while facilities are out of compliance with State and Federal RCRA regulations as long as the DOE continues actions to bring those facilities into compliance. Specific actions and schedules for those actions are detailed in the Tri-Party Agreement. One of those actions is the installation of groundwater monitoring wells at the rate of up to 50 per year until all facilities have a regulatory approved network of groundwater monitoring wells. Specific regulations are 40 CFR 305, Subpart 1, all sections, the RCRA Groundwater Monitoring Technical Enforcement Guidance Document (TEGD), and the related Washington State laws (WA 173-303).

REGULATORY KEY ISSUES:

A major assumption used to formulate the funding requirements necessary for this activity is that the Tri-Party Agreement milestones remain unchanged. That up to 50 wells are installed in FY 1991 through FY 1997.

COMPARED BENEFITS AT PLANNING LEVEL

The compliance benefit realized at the planning level is that the Tri-Party Agreement milestones to install groundwater monitoring wells is completed on time. More importantly, that a RCRA compliant groundwater monitoring system is established at Hanford. This system is required for all RCRA treatment, storage and disposal operating permits and closure plans.

CONCERNS AT PLANNING LEVEL

The planning cases presented for FY 1993 and FY 1994 reflect budget cuts that have been known to be inadequate for many months. Failure to meet Tri-Party Agreement milestones is guaranteed if these mandated budgets are not adjusted. Target funding in the years beyond 1995 provides NO MONEY for well drilling to keep the monitoring system installed at great cost. No provision for vadose zone monitoring has been considered in the development of this ADS.

REQUIRED TECHNICAL DEVELOPMENT

Existing drilling technology is adequate for future drilling methods which promise quicker, better, cheaper drilling and require special technology to protect personnel and the environment if hazardous or radioactive contamination is encountered. No funding is budgeted to apply technology which promises to improve effectiveness or efficiency in the target cases.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7360 ADS SUF: 0 SUBACTIVITY: AA

SUBACTIVITY TITLE: COAL - INVENTORY CHANGE

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: TEC:

DESCRIPTION: COMMON USE STORES

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE	EW3180010	0
	TOTAL	0
	DIRECT FTE	0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL	BUD	LEGAL	ESH	TOTAL			
OE	EW3180010	285		27		0	0	0	0	0
	TOTAL	285		27	0	0	0	0	0	0
	DIRECT FTE	0		0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL	BUD	LEGAL	ESH	TOTAL			
OE	EW3180010	285		50		0	0	0	0	0
	TOTAL	285		50	0	0	0	0	0	0
	DIRECT FTE	0		0	0	0	0	0	0	0

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

Increases/decreases to inventory levels for coal are used in processing steam to heat and to operate facilities in 200 and 300 Areas. The coal inventory is maintained at a minimum of five-months supply to minimize the impact of delivery delays as a result of poor weather, vendor labor strikes, or other unforeseen problems. Changes can result from production, scope requirements, delivery schedules, back-up supply, and severe changes in weather. The objective is to keep inventory levels as low as possible without impacting site operations. This activity has potential impact to Inventory Reserve account and requirements as stated in DOE Accounting Practices and Procedures. Periodic adjustments are made based on the results of physical inventory assessments. Ensure process and facility operations are not hindered by the unavailability of steam. Power house also provided process steam for and water plant back-up water pumps for drinking water and fire protection. The coal also provides steam as the primary source of heat which keeps the water towers in the 200 East/West from freezing.

RELATED ACTIVITIES NARRATIVE:

Startup of 300 Area Steam and Water will take place in calendar year 1994.

KEY ASSUMPTIONS:

It is assumed that testing and startup of 300 Area Powerhouse will take place as scheduled.

ACTIVITY BY PRIORITY:

Coal Inventory Change is a level 1 priority.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Increase coal inventory to provide startup capability for 300 Area Powerhouse.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Provide coal inventory to provide 300 Area Powerhouse.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Maintain coal inventory at appropriate level to meet site demand.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Maintain coal inventory at appropriate level to meet site demand.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

DOE/CR-0009 - DOE Accounting Practices and Procedures.

REGULATORY KEY ISSUES:

None.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Funding at planning level will ensure the 300 Area Steam plant will be restored to normal operation. All three coal fired boilers are expected to be operational by March 1994.

CONCERNS AT PLANNING LEVEL:

None.

REQUIRED TECHNICAL DEVELOPMENT:

None.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7360 ADS SUF: 0 SUBACTIVITY: AB

SUBACTIVITY TITLE: ESSENTIAL MATERIALS & CHEMICALS - INVENTORY CHANGE

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: TEC:

DESCRIPTION: COMMON USE STORES

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW3180010		TOTAL
TOTAL		21
DIRECT FTE		21
		0

TARGET CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
OE EW3180010		RL	BUD	LEGAL	ESH	TOTAL				
TOTAL		35	25	0	25	25	35	35	35	35
DIRECT FTE		35	25	0	25	25	35	35	35	35
		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
OE EW3180010		RL	BUD	LEGAL	ESH	TOTAL				
TOTAL		35	35	0	19	19	23	20	70	27
DIRECT FTE		35	35	0	19	19	23	20	70	27
		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

Manage inventory levels for chemicals and waste drums. Ensure an uninterrupted supply of chemicals and drums for safe and efficient operation at appropriate levels to support General Plant, Laboratories, and Waste Management activities. In order to achieve proposed levels a proper mix is necessary to efficiently utilize the inventory requirements. The amount needed is discounted for the necessary reserve requirement stated by DOE Accounting Practice and Procedures.

RELATED ACTIVITIES NARRATIVE:

Much of the Solid Waste Disposal activity requires additional drums to achieve site clean up. The continuation of these activities will give rise to additional increase to current inventory levels.

KEY ASSUMPTIONS:

Waste requiring containment in drums will continue to be generated.

ACTIVITY BY PRIORITY:

Essential Materials/Chemical Inventory Change is a level 1 priority.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

The change to the Hanford Site Mission from production to environmental has caused the need to excess many chemicals no longer required. In addition, there is a need to continue to establish new inventory items that are commensurate with new environmental requirements.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Continue to provide the needed inventory items when required.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:

An increase in inventory change is to establish sufficient inventory of drums for Solid Waste Disposal and other Waste Management customers. This is in line with the Site Wide clean up at Hanford. Much of the waste will be processed for disposal so the ability to meet the demand for drums is critical.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:

No major changes are foreseen.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

No major increases are foreseen except for escalation cost to replenish inventory levels and supply drums to meet additional cleanup campaigns.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

DOE/CR-009 - DOE Accounting Practices and Procedures

REGULATORY KEY ISSUES:

None.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Sufficient drum supply will be available to meet the demand.

CONCERNS AT PLANNING LEVEL:

Having an adequate supply of drums will prevent delays that would involve penalties or environmental impacts.

REQUIRED TECHNICAL DEVELOPMENT:

None.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7360 ADS SUF: 0 SUBACTIVITY: AC

SUBACTIVITY TITLE: GENERAL SUPPLIES & COMPUTERS - INVENTORY CHANGE

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: TEC:

DESCRIPTION: COMMON USE STORES

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE EW3180010		166
TOTAL		166
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3180010		200	215		195	195	315	315	315	315
TOTAL		200	215	0	195	195	315	315	315	315
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3180010		200	315		237	237	249	262	274	288
TOTAL		200	315	0	237	237	249	262	274	288
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

General Supplies Inventory provides 26 different commodity classes representing approximately 6600 line items valued at \$4 million. It provides support to the operation and continuity for all Hanford Site contractors and programs.

The objective is to provide general stores inventory items, computer hardware/software, and office furniture/machines per DOE-HQ direction, while maintaining inventory levels at a minimum.

Required reserves are accounted for in the materials function's operating budget. Scope relates to increases/decreases from beginning inventory balance only.

RELATED ACTIVITIES NARRATIVE:

General supplies supports many other site tasks in supplying needed items to accomplish their objectives.

This activity funds ongoing Hanford Site inventory items required to maintain safe conditions. Critical materials are required to maintain facilities, equipment and administration of the site in a safe operating condition. These activities if terminated, would result in a disruption to the Hanford Site operations.

KEY ASSUMPTIONS:

That the demand for computer hardware/software is dependent on the increase of staff to meet site demand and on the ever increasing pace of technology. Continued emphasis will be placed implementation of systems contracts to reduce the commodities currently provided by General Supplies Inventories.

ACTIVITY BY PRIORITY:

General Supplies Inventory is a level 2 priority.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

Converted Class 45 Plumbing Supplies, to Systems Contracting. The systems contract vendor is currently maintaining a 95.0% service level.
Converted Class 57 Laboratory Supplies to Systems Contracting. The systems contract vendor is currently maintaining a 95.0% service level.
Converted Class 77 Computer Supplies to Systems Contracting. The systems

contract vendor is currently maintaining a 95.0% service level.
In each of the three cases above, the customer service level was improved.

Reviewed many of the items in General Supplies that require Procurement Quality Support, to determine if the procurement requirements of these items were current with the site customer needs. The review included thirty percent of the inventory items and took six months to complete.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Implementation of the above inventory classes to Systems Contracting.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Continue to attend to site needs for General Supplies Inventories - general supplies, computer hardware/software, office furniture, and office business machines.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Continue to provide site needs for General Supplies Inventories - general supplies, computer hardware/software, office furniture, Patrol supplies, and office business machines.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Continue to provide site needs for General Supplies Inventories - general supplies, computer hardware/software, office furniture, and office business machines.

Growth areas include, recycled and recyclable products, hazardous/solvent replacements, safety equipment and apparel, and office furniture.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

None.

REGULATORY KEY ISSUES:

None.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Funding at the planning level provides the capability of meeting changing needs and demands for projects and facilities to accomplish the Hanford site Mission.

The requirement for computer purchases to support site mission and objectives will continue on an upward trend to meet the needs and demands for many projects and facilities. Ability to replenish and/or supplement general supplies would result in continuity of plant operations, waste management and environmental restoration activities, and the safe and timely operation of the site. Parts and materials would be available for maintenance, repairs and other upgrade activities that are being required by a dynamic regulatory arena. The ability to replenish and/or supplement general supplies ensures uninterrupted service to Waste Management and Environmental Restoration activities.

CONCERNS AT PLANNING LEVEL:

None.

REQUIRED TECHNICAL DEVELOPMENT:

None.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS

None

REGULATORY KEY ISSUES:

None

THIS PAGE INTENTIONALLY LEFT BLANK

COMPLEX BENEFITS
Funding at the planning
needs and demands for projects
site Mission
The requirement for computer purchases to support site mission and
objectives will continue on an upward trend to meet the needs and demands
for many projects and facilities. Ability to replenish and/or equipment
general supplies would result in continuity of plant operations, waste
management and environmental restoration activities, and the safe and
timely operation of the site. Parts and materials would be available for
maintenance, repairs and other upgrade activities that are being required
by a dynamic regulatory arena. The ability to replenish and/or equipment
general supplies ensures uninterrupted service to Waste Management and
Environmental Restoration activities.

CONCERNS AT PLANNING LEVEL

None

REQUIRED TECHNICAL DEVELOPMENT

None

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7360 ADS SUF: 0 SUBACTIVITY: AD

SUBACTIVITY TITLE: FUELS/MISCELLANEOUS - INVENTORY CHANGE

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: TEC:

DESCRIPTION: COMMON USE STORES

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996 TOTAL
OE EW3180010		0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL BUD	LEGAL	ESH	TOTAL				
OE EW3180010	21	0		0	0	0	0	0	0
TOTAL	21	0	0	0	0	0	0	0	0
DIRECT FTE	0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL BUD	LEGAL	ESH	TOTAL				
OE EW3180010	21	0		0	0	0	0	0	0
TOTAL	21	0	0	0	0	0	0	0	0
DIRECT FTE	0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

Provide fuels (gasoline and diesel), miscellaneous road materials sand, gravel, and rail ties to the entire Hanford Site. Maintain the proper balance of the above items at a minimum level without impacting Hanford Site Operations.

RELATED ACTIVITIES NARRATIVE:

This task supports many other site activities in supplying the necessary fuels, road materials to accomplish their objectives.

KEY ASSUMPTIONS:

Site needs related to fuels/miscellaneous inventory assumes no significant increases. Assumes no major event causing the sudden rise in fuel costs. Anticipates an escalation will be required to replenish inventory supply.

ACTIVITY BY PRIORITY:

Fuels/Miscellaneous Inventory is a level 2 priority.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

Provided fuels, road materials, railroad materials for continued safe operations.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Maintain inventory item at current levels. Continue to provide for site's safe operations. Inventory for herbicides is being closed out in FY 1994 with implementation of just-in-time purchasing method.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Maintain inventory items at current levels. Continue to provide for site's safe operations.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Maintain inventory items at current levels. Continue to provide for the site's safe operation.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Maintain inventory at current levels. Continue to provide for site's safe operations.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:
None.

REGULATORY KEY ISSUES:
None.

COMP/PROG BENEFITS AT PLANNING LEVEL:
None.

CONCERNS AT PLANNING LEVEL:
None.

REQUIRED TECHNICAL DEVELOPMENT:
None.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7360 ADS SUF: 0 SUBACTIVITY: AE

SUBACTIVITY TITLE: MISCELLANEOUS RADIO EQUIPMENT - INVENTORY CHANGE

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: TEC:

DESCRIPTION: COMMON USE STORES

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996 TOTAL
OE EW3180010		4
TOTAL		4
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL BUD	LEGAL	ESH	TOTAL				
OE EW3180010	15	5		5	5	5	5	5	5
TOTAL	15	5	0	5	5	5	5	5	5
DIRECT FTE	0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL BUD	LEGAL	ESH	TOTAL				
OE EW3180010	15	5		6	6	7	8	8	10
TOTAL	15	5	0	6	6	7	8	8	10
DIRECT FTE	0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

Items included in this activity are miscellaneous electronic parts, and batteries used to maintain/repair or replace defective radios and cellular phones providing efficient communications service throughout the Hanford Site.

RELATED ACTIVITIES NARRATIVE:

Site communications

KEY ASSUMPTIONS:

Site communications are critical to all activities involved in the Hanford Site Mission.

ACTIVITY BY PRIORITY:

Miscellaneous Radio Equipment Inventory is a level 3 priority.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

Continued to provide parts to maintain radios and phones in good working order.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

CURRENT YEAR (FY 1994) TASK NARRATIVE:
 Provide parts to maintain radios and phones in good working order.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:
 Provide parts to maintain radios and phones in good working order.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:
 Provide parts to maintain radios and phones in good working order.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:
 Provide parts to maintain radios and phones in good working order.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:
None.

REGULATORY KEY ISSUES:
None.

COMP/PROG BENEFITS AT PLANNING LEVEL:
Site communications are maintained.

CONCERNS AT PLANNING LEVEL:
None.

REQUIRED TECHNICAL DEVELOPMENT:
None.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7360 ADS SUF: 0 SUBACTIVITY: AF

SUBACTIVITY TITLE: PROCESS SPARES PARTS - INVENTORY CHANGE

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: TEC:

DESCRIPTION: PROCESS SPARES

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW3180040		TOTAL
TOTAL		339
DIRECT FTE		339
		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3180040		483	482		396	396	600	609	609	618
TOTAL		483	482	0	396	396	600	609	609	618
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3180040		483	839		1345	1345	1391	1614	1575	1645
TOTAL		483	839	0	1345	1345	1391	1614	1575	1645
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

Maintain current inventory and procure new and replacement parts to support continuity of operations of Waste Management inventories. This also includes procuring spares required as a result of new capital equipment and construction projects.

RELATED ACTIVITIES NARRATIVE:

Maintaining appropriate inventory for process spares is essential to ensure the continued safe operations of all Waste Management facilities.

KEY ASSUMPTIONS:

Assumes continued funding of projects related to Waste Operations supported facilities. Assumes that Project Engineering is identifying spares requirements at the conceptual/definitive design stage of each project. Assumes that this information is being transferred to the Maintenance Engineering organization for each facility, and that information is being rolled-up into the five-year plan as it is requested by the Project Control Analyst from the Cost Account Manager.

ACTIVITY BY PRIORITY:

Process Spares Inventory is a level 1 priority.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

Continued to review the inventory for obsolete, long supply and damaged material to ensure inventory levels are at a minimum. Continued to establish new inventory items as required to meet Environmental Restoration/Waste Management facility needs.

SCHEDULE INFORMATION

FY 1994 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Manage increases to the target for the process spares inventory. Support
the \$158 million in projects scheduled to be completed in FY94.

FY 1995 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Manage increases to the target for the process spares inventory. Support
the \$54.5 million in projects scheduled to be completed in FY95.

FY 1996 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Manage increases to the target for the process spares inventory. Support
the \$69.5 million in projects scheduled to be completed in FY96.

FY 1997-FY 2000 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Manage increases to the target for the process spares inventory. Support
the \$187 million in projects scheduled to be completed in the outyears.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

DOE Property Management regulations 109-27.5201 requires Inventory Spares be available for equipment in use for DOE programs. Non-compliance may result in extensive downtime or in an emergency situation.

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

Funding at the planning level would instill a level of confidence in the budget process that is currently lacking and provide the level of support deemed appropriate at the field/end user level of need.

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

None.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7360 ADS SUF: 0 SUBACTIVITY: AG

SUBACTIVITY TITLE: TELECOMMUNICATION SPARE PARTS - INVENTORY CHANGE

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: TEC:

DESCRIPTION: COMMON USE STORES

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE	EW3180010	44
	TOTAL	44
	DIRECT FTE	0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL	BUD	LEGAL	ESH	TOTAL			
OE	EW3180010	150	50			52	52	50	50	50
	TOTAL	150	50	0		52	52	50	50	50
	DIRECT FTE	0	0	0		0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL	BUD	LEGAL	ESH	TOTAL			
OE	EW3180010	150	50			85	85	85	85	85
	TOTAL	150	50	0		85	85	85	85	85
	DIRECT FTE	0	0	0		0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

Maintain telecommunication spare parts inventory at appropriate levels to support Waste Operations Workstation and Network Maintenance by providing spare parts for computers, radios, and microwave equipment.

RELATED ACTIVITIES NARRATIVE:

All site communications

KEY ASSUMPTIONS:

Technological improvements and requirements will continue to perpetuate the need to upgrade computer hardware and software.

ACTIVITY BY PRIORITY:

Telecommunication Spares Inventory is a level 2 priority.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

There was one major project that was completed within IRM to enhance HLAN performance, reliability, and support capabilities. This involved moving to Cisco routers as the basic active component in HLAN communications switching hubs.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Continuing to establish new items in inventory which support the site mission and is commensurate within the authorized budget level. In addition, inventories are reviewed for obsolescence, long supply and damage to ensure that inventories are maintained at minimum levels.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:

The Cisco router is currently being tested under active traffic situations. When in full operation, the Cisco units will be of critical importance to all HLAN communications.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Maintain spares to meet the demand for site telecommunications.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Maintain spares to meet the demand for site telecommunications.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

None.

REGULATORY KEY ISSUES:

None.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Provides the necessary funding to cover the site telecommunications requirements for Tank Waste data monitoring.

CONCERNS AT PLANNING LEVEL:

None.

REQUIRED TECHNICAL DEVELOPMENT:

None.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7360 ADS SUF: 0 SUBACTIVITY: BA

SUBACTIVITY TITLE: PROCESS SPARES AND CHEMICAL ADMINISTRATION

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: TEC:

DESCRIPTION: COMMON USE STORES

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
		TOTAL
OE EW3180010		337
TOTAL		337
DIRECT FTE		4

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3180010		343	385		396	396	408	420	433	446
TOTAL		343	385	0	396	396	408	420	433	446
DIRECT FTE		4	5	0	5	5	5	5	5	5

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3180010		343	385		410	410	422	435	448	461
TOTAL		343	385	0	410	410	422	435	448	461
DIRECT FTE		4	5	0	5	5	5	5	5	5

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

Provide all administrative activities associated with the management and control of the Waste Management of the process spares inventory. This includes: Requisition/procurement of inventory process spares/chemicals...Ensuring the availability of required inventory items/Purchases meet QA requirements and/or specifications...Excess/disposal of spares/chemicals exceeding shelf-life or obsolescence...Determine the need to discontinue items or procure new stock items...Proper documentation/filing of QA records and material safety data sheets (MSDS) to ensure traceability...Traceability of spare parts from purchase to installation...Planning and regular reporting to facility representatives...statuting inventory levels and use toward projected targets...Reports and variance explanation to program office...Interface between facility representative and program office...Training of facility personnel on inventory control...Manage and maintain accountability of inventory...Maintain working files/records...Review, approve, and maintain an approved nomenclature list for identifying spare parts and equipment stock numbers...Coordinate schedule for quality audits, surveillance, corrective actions, and property management related requirements...Interface with IRM for maintenance, modification, and assistance to the Hanford Inventory Program

The listed terms fall within the conjuncture of DOE Orders 4330.4A. Along with Federal Property Management Regulation 109.27, ASME NQA-2-1989, SARA and WAC for process inventory items, essential materials and chemicals.

Currently this ADS subactivity funds only 40% of the manpower to administer the inventory. The remaining funding comes from Facility Operations ADS 4130, 4150, and 4170. In light of Hanford's new mission from nuclear processing facilities to environmental site clean up and the increased activities in Waste Operations a change in mix is proposed. Beginning in fiscal year 1994 the funding request is for 60% of the material management activity to be funded by Waste Operation's ADS 7360 and 40% to be provided by Facility Operations (ADS 4130, 4150, and 4170). This does not change the overall staff required to administer and control the inventory.

RELATED ACTIVITIES NARRATIVE:

This sub-activity directly affects the inventory change account for process spares, and chemicals, as well as inventory reserve. Management and administration of the inventory change is necessary to achieve the desired levels.

KEY ASSUMPTIONS:

Currently Chemical Processing (ADS 4130, 4150, and 4170) and Waste Operations (ADS 7360) share in the funding of personnel related to the managing, warehousing and administration of the inventory (60 percent - 40 percent respectively). As a result of the change in the Hanford Mission

and the increased scope of Waste Operation's inventory needs, the current split is inequitable. Beginning in FY 1994 inventory personnel would be funded by Waste Operations at 60 percent and Chemical Processing at 40 percent. There is still a proposal for Waste Operations to fund all inventory personnel since Chemical Processing has now come under Waste Operations structure.

ACTIVITY BY PRIORITY:

Process Spares and Chemical Administration is a level 1 priority.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

Provide a monthly Process Spares Status Report by facility and variance explanation by 2nd Wednesday of each month. Point of contacts (POC) have been established for each facility using process spares inventory. Continue to maintain controls on chemicals and process spares. Excessing unneeded materials used in Production Facilities. Continuing to establish new items in inventory which support the Waste Management/Environmental Support/Hanford Mission.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Inventory emphasis is on the receipt, storage, and issuance of project material to support Tank Farms upgrades, WCSF, Solid and Liquid Waste programs. Continuing to excess materials and equipment no longer required to support Defense Production activities include the laundry facility which has been privatized. Time-phased deliveries and requirements contracts will also be expanded in an effort to further reduce or control inventory levels. Efforts are continuing towards developing an improved automated systems for tracking material. The use of bar coding to track inventory usage is also being investigated for some applications. Obtaining approval of outyears project plans to modernize the warehousing complex and centralize a major amount of the activity in the 600 area between 200 East and 200 West. Automate interfaces with other WHC Procurement and Financial Systems.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Excessing materials which are no longer required. Continue to support an effort to achieve modernization of warehousing system and centralization of warehousing facilities, and down-sizing of the inventory. Continue emphasis on new mission inventory needs. Continue efforts towards implementing an automated system for material tracking.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Continue safe operations and support of the Hanford Environmental Missions. Meet the increased demands and needs for the many projects and facilities. Manage inventory levels and categories to best support the site. Modernize system and centralize the Warehousing facilities. Improve the automated systems which interfaces Procurement and Program Management. Change the charging profile to 60% Waste Operations and Chemical Processing to 40% as an equitable method in line with the new Hanford Mission.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Reduce inventory categories related to the defense mission. Set up new inventory categories in support of the Environmental Management mission. Timely disposition and excess of a major portion of current inventory, and overall system modernization, centralization, and replacement of the aging warehousing complexes, and a shift to support Environmental Restoration programs.

Through proper inventory management assure continued safe and efficient operations are maintained.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

DOE Order 4330.4A, Maintenance Management Program Federal Property Management Regulations, 41 CFR, Chapter 101/DOE Property Management Regulations/41 CFR, Chapter 109
ASME NQA-2-1989
SARA, Emergency & Hazardous Chemical Inventory Reporting for Nuclear Facility Applications
WAC, Dangerous Waste Regulations

Many of the items stated in the technical scope narrative were taken directly or para-phrased from the DOE Orders. The other regulations relate to standards for materials and the purchasing, handling, and storing of chemicals.

REGULATORY KEY ISSUES:

One of the major issues is the ability to coordinate the needs of the facilities while maintaining a minimal supply. Planning for the site needs, availability of the product, items meeting specific standards, and the change in mission are challenges that require careful resolution. The facility representatives have only recently realized the importance to budget for inventory change on process spares. Many are new and so inventory stock needs to be established while others have programs/activities that are growing rapidly.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Cutting back on staff in support to inventories would be detrimental to the remaining staff to accomplish the scope outlined within DOE Orders 4330.4A. The inability to properly perform these activities could lead to mismanagement of the inventories. Examples would be improper supply of items required, unavailability of spares causing delay in repairs or missed milestones for the facility; also the possibility of severely overrunning the inventory change budget and many other related problems. Implementing the new split in funding between Waste Operation and Chemical Processing would not change the bottom line for the site, just the mix. As mentioned earlier the change would make the charging profile more equitable. If funded at target level the change could not occur.

It is very important to realize that funding to this programs sub-activity will actually be cost effective to prevent problems with Inventory Management.

CONCERNS AT PLANNING LEVEL:

None.

REQUIRED TECHNICAL DEVELOPMENT:
None.

LEFT BLANK

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7360 ADS SUF: 0 SUBACTIVITY: BB

SUBACTIVITY TITLE: PROGRAM SUPPORT

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: TEC:

DESCRIPTION: COMMON USE STORES

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE	EW3180010	39
	TOTAL	39
	DIRECT FTE	0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3180010	47	47	48		48	50	51	53	54
	TOTAL	47	47	48	0	48	50	51	53	54
	DIRECT FTE	1	1	1	0	1	1	1	1	1

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3180010	47	47	48		48	50	51	53	54
	TOTAL	47	47	48	0	48	50	51	53	54
	DIRECT FTE	1	1	1	0	1	1	1	1	1

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

Administrate a cost and schedule control system in accordance with DOE policy for the inventories program. This includes the following work scope:

Develop time-phased budgets and forecast costs to completion. Identify problems, analyze cost, schedule variance, and trends.

Relate cost, schedule, and technical accomplishments and problems to established baseline, plans, and forecasts.

Report performance measurement information monthly via SMS and PTS input.

Provide management with information at an appropriate level of summarization.

Assist in the development of end function work priority lists. Prepare estimates at completions (EACs) for inventory program. Interface with DOE monitors as required.

Preparation of Activity Data Sheets (ADSs) for submittal to Five-Year Plan.

Initiate and obtain approval of change requests to document changes as required.

The above work scope comprises continuing activities which meet compliance to DOE order 2250.1C, CSCSC and DOE Order 4700.1, PMS.

RELATED ACTIVITIES NARRATIVE:

Inventory Administration is related to the other tasks within this ADS. A Cost Account for each sub-activity is created which requires regular timely reporting, updating, and analysis. This sub-activity of this ADS funds .5 FTE.

KEY ASSUMPTIONS:

Continual reporting and analysis are required to meet Cost and Schedule Control System Criteria (CSCSC) and Project Management System (PMS) policies.

ACTIVITY BY PRIORITY:

Program Support is a Priority 3 activity.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

Monitored the Inventory Program and provided regular monthly reporting.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Continue to monitor the Inventory Program and regular monthly reporting.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Continue to monitor the Inventory Program and regular monthly reporting.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Continue to monitor the Inventory Program and regular monthly reporting.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Continue to monitor the Inventory Program and regular monthly reporting.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

DOE Order 2250.1C, CSCSC

DOE Order 4700.1, Project Management System

The above listed activities performed by the analyst meet the objectives of criteria policies stated in DOE Order 2250.1C section 5D and in attachment 2. They define the need to plan and time-phase the budget within the framework of the approved Work Breakdown Structure (WBS). It also states the need to do analysis on identified variances, along with document changes and accounting adjustments. Chapter IV Project Planning and Budget Process of DOE Order 4700.1 PMS states the coordinating and timing of activities involving in formulating the budget. Chapter VII deals with the controls, performing CSCSC Criteria, to integrate a cost and schedule baseline to measure performance and a system for Change Control. The activities within these DOE Orders directly involve this sub-activity for Inventories Management.

REGULATORY KEY ISSUES:

There are no issues which would prevent successful compliance to the DOE Orders. The systems in place effectively provides the necessary means to achieve the desired goals.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Funding this sub-activity at targeted levels would cause the activities stated above to be reduced, perhaps being late in reporting or not completed at all. This would also have a direct impact on the support given to other sub-activities within this ADS.

CONCERNS AT PLANNING LEVEL:

None.

REQUIRED TECHNICAL DEVELOPMENT:

None.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

DOE Order 2250 IC, CSCC
DOE Order 4700.1, Project Management System

The above listed activities performed by the analyst meet the objectives of criteria policies stated in DOE Order 2250 IC section 5b and its attachment. They define the need to plan and time-phase the budget within the frame work of the approved Work Breakdown Structure (WBS). It also states the need to do analysis on identified resources along with placement, timing and account. Planning and budget process of DOE Order 4700.1, Project Management System and timing of activities involving in formula. Chapter VII deals with the controls performing CSCC Criteria to integrate a cost and schedule baseline to measure performance and a system for Change Control. The activities within these DOE Orders directly involve this sub-activity for Inventory Management.

THIS PAGE INTENTIONALLY LEFT BLANK

REGULATORY KEY ISSUES:

There are no issues which would prevent successful compliance to the DOE Orders. The system in place effectively provides the necessary resources to achieve the desired goals.

COMPROB BENEFITS AT PLANNING LEVEL:

Funding this sub-activity at targeted levels would cause the following stated above to be reduced perhaps being late in reporting or not completed at all. This would also have a direct impact on the overall given to other sub-activities within this A02.

CONCERNS AT PLANNING LEVEL:

None.

REQUIRED TECHNICAL DEVELOPMENT:

None.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7360 ADS SUF: 0 SUBACTIVITY: BC

SUBACTIVITY TITLE: SPARES WAREHOUSE ADMINISTRATION

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: TEC:

DESCRIPTION: COMMON USE STORES

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW3180010		TOTAL
TOTAL		499
DIRECT FTE		499
		6

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3180010		572	563		584	584	602	620	639	658
TOTAL		572	563	0	584	584	602	620	639	658
DIRECT FTE		7	7	0	7	7	7	7	7	7

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3180010		572	563		716	716	738	760	783	806
TOTAL		572	563	0	716	716	738	760	783	806
DIRECT FTE		7	7	0	9	9	9	9	9	9

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

Work scope of this task are directed by DOE Orders and other regulatory drivers. Listed is a large part of the activities performed on an ongoing basis.

Make one drop deliveries/Receiving duties...Warehousing and handling activities...Keep materials segregated and orderly...Proper issuance to authorized personnel...Support in maintaining inventory records...Support the inventory shelf-life control program...Provide management and clerical support for maintaining records and supervision of the inventory warehousing activities...Provide documentation for the traceability of warehoused items.

The above listed items fall within the realm of DOE Order 4330.4A along with ASME NQA-2-1989, SARA, and WAC for inventory items (general, chemicals, and spares).

RELATED ACTIVITIES NARRATIVE:

This activity directly supports the inventory change for chemicals, spares, and convenience storage items in the 200 Area. It also indirectly supports other site activities which utilizes the inventory systems.

KEY ASSUMPTIONS:

Beginning in FY 1994 inventory personnel is funded by Waste Operations at 60 percent and Chemical Processing at 40 percent. There is still a proposal for Waste Operations to fund all inventory personnel since Chemical Processing has now come under Waste Operations structure.

ACTIVITY BY PRIORITY:

The Warehousing Administration TDD is a Priority 1 activity.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

Monthly reporting input and variance explanations have been regularly provided to the WHC Program Office. Continue safeguard of inventory materials.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Continue to provide a monthly reports to Program Office. Continue to safeguard inventory materials.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Continue to provide monthly reports to Program Office. Continue to safeguard inventory materials.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Continue to provide monthly reports to Program Office. Continue to safeguard inventory materials.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Continue to provide monthly reports to Program Office. Continue to safeguard inventory materials and the implementation of the proposed funding/changing change.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

DOE Order 4330.4A, Maintenance Management Program Federal Property Management Regulations, 41 CFR, Chapter 101/DOE Property Management Regulations, 41 CFR, Chapter 109

ASME NQA-2-1989

SARA, Emergency and Hazardous Chemical Inventory Reporting for Nuclear Facility Applications

WAC, Dangerous Waste Regulations

REGULATORY KEY ISSUES:

In order to comply with the above drivers it is necessary that appropriate funding be available to ensure such compliance. This requires storekeepers for all shifts at the warehouse, a truck driver to deliver goods to 2101-M warehouse facility, clerical support to process documentation of inventory goods, and management to supervise and control overall operation of this activity. Possible problems such as misappropriation/misuse of Government assets or unsafe condition is possible by not segregating or taking expired products of the shelf.

COMP/PROG BENEFITS AT PLANNING LEVEL:

In order to remain on target, staffing would be affected. The eventual reduction of staffing could result in consequences that are safety issues or material abuse which would prove to be very costly. Examples would be unauthorized personnel gaining access to inventory items. Safety issues could result from expired goods remaining on shelf, non-segregating chemicals, or inability to receive items in a timely fashion. These scenarios could occur if short-handed. Also the charging practice proposed earlier between Waste Operations and Chemical Processing could not be implemented.

CONCERNS AT PLANNING LEVEL:

None.

REQUIRED TECHNICAL DEVELOPMENT:

None.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7360 ADS SUF: 0 SUBACTIVITY: BD

SUBACTIVITY TITLE: ALLOWANCE FOR LOSS (RESERVES)

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: TEC:

DESCRIPTION: COMMON USE STORES

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE	EW3180010	81
	TOTAL	81
	DIRECT FTE	0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3180010	235	99	98		98	198	198	197	197
	TOTAL	235	99	98	0	98	198	198	197	197
	DIRECT FTE	0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3180010	250	214	300		300	300	483	325	300
	TOTAL	250	214	300	0	300	300	483	325	300
	DIRECT FTE	0	0	0	0	0	0	0	0	0

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

Provide a reserve for estimated losses of materials as a result of disposal, excess, shrinkage, deterioration, or damage. An allowance for loss is necessary to assure at least the minimum of usable material is available at all times. This also accounts for proper inventory value of coal, essential materials/chemicals, and process spares. The reserve amount is based on planned gross inventory change of coal, chemicals and process spares. Reserves are established at 5 percent for the amount of the coal and chemical inventory balances and 25 percent for process spares inventory balance. Any change to increase/decrease inventory balance would effect the inventory reserve. Any excessing or write-offs are accounted at 100 percent.

The allowances for loss activity will require support and compliance with DOE Accounting Practices and Procedures Handbook. This required accounting practice establishes the reserve rates for inventory set by ERDA in 1979. This practice assures inventories are properly accounted and reserves a minimum supply so safe operations are not impaired.

RELATED ACTIVITIES NARRATIVE:

The amount held in reserve is a direct result of the increase in inventory levels for coal, chemicals, and particularly process spares. As indicated by inventory change increases, estimates by the field establish the needed reserve amount.

KEY ASSUMPTIONS:

Based on prescribed amounts estimated by field Reps. Reserve amounts were calculated at 5 percent for coal and chemicals and 25 percent for spares as ordered by DOE/CR-009. Also accounted for in the reserve amount is any excess of material. If substantial amount of materials are determined to be obsolete in the future, it would require an adjustment to the reserve account. It is difficult at best to forecast the amount of inventory that will be dispositioned Excess, each budget year.

ACTIVITY BY PRIORITY:

The Inventory Reserve/Allowance for Loss TDD is a Priority 3 activity.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

Ongoing assessment and excessing of chemicals and process spares that are

no longer required or do not meet current site mission demands.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

CURRENT YEAR (FY 1994) TASK NARRATIVE:
Same as Tasks Completed to Date.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:
Maintain minimum balance required.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:
Maintain minimum balance required based on inventory change. Increases are a result in the rise of spare parts inventory and coal.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:
Maintain minimum balance required based on inventory change.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

DOE Accounting Practices and Procedures Handbook, DOE/CR-0009, Chapter 5.
Set by ERDA in 1979.

REGULATORY KEY ISSUES:

Non compliance would result in an audit finding and possible administrative retribution. Non compliance could also result in safety or missed TPA milestones if minimum reserves are depleted.

COMP/PROG BENEFITS AT PLANNING LEVEL:

This account/activity is directly based upon the Inventory change allowed with coal, chemicals/essential materials, or process spares. Any approved increase to those Inventory items would automatically result in a increase to this account in order to maintain compliance with DOE Accounting Practices and Procedures.

CONCERNS AT PLANNING LEVEL:

At the planning level compliance with DOE Accounting Practices and Procedures can be achieved.

REQUIRED TECHNICAL DEVELOPMENT:

None.

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 7360 ADS SUF: 0 SUBACTIVITY: BE

SUBACTIVITY TITLE: WAREHOUSE (OCCUPANCY)

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/17/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: TEC:

DESCRIPTION: COMMON USE STORES

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW3180010		TOTAL
TOTAL		703
DIRECT FTE		703
		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3180010		708	804	827		827	852	878	904	931
TOTAL		708	804	827	0	827	852	878	904	931
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3180010		708	804	805		805	829	854	880	906
TOTAL		708	804	805	0	805	829	854	880	906
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

Storage and protection of equipment, essential materials/chemicals and process spares. Warehousing includes the maintenance and upkeep of the facilities. This involves lighting, heating, custodial services and repair work done on the warehouse. The warehousing of items is necessary to provide for proper storage of items from weather and distribution to authorized personnel, thus safeguarding materials from theft and damage. The Warehouse Facility is a ongoing requirement as long as inventory items are necessary for operations on the Hanford Site. These costs are a site-wide assessment based upon the facility's square footage. The two buildings 2101-M and 275EA Facility are located in the 200 East Area. The current assessment for such Warehousing facilities are \$8 a square foot.

RELATED ACTIVITIES NARRATIVE:

The basis of future rate is determined by WHC Overhead Review Board.

KEY ASSUMPTIONS:

Those numbers are predicated that there are no additional increase to the site wide assessment (\$8 sq. ft) in future years. Although costs associated with the Occupancy Pool Assessment will increase in future years, it is anticipated that these would be offset by the additional base provided by new facilities. However future adjustments may be necessary if the above does not materialize.

ACTIVITY BY PRIORITY:

Warehouse Occupancy is a level 2 Priority.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

Inventories maintained in a safe protective environment.

SCHEDULE INFORMATION

FY 1994 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

CURRENT YEAR (FY 1994) TASK NARRATIVE:
Keep inventories in a safe protective environment.

FY 1995 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:
Keep inventories in a safe protective environment.

FY 1996 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE:
Keep inventories in a safe protective environment.

FY 1997-FY 2000 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

OUTYEAR (FY 1997-2000) TASK NARRATIVE:
Keep inventories in a safe protective environment.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

None.

REGULATORY KEY ISSUES:

None.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Ability to store and protect equipment, essential materials/chemicals and process spares.

CONCERNS AT PLANNING LEVEL:

None.

REQUIRED TECHNICAL DEVELOPMENT:

None.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8400 ADS SUF: 0 SUBACTIVITY: AA

SUBACTIVITY TITLE: REFRIGERANT REPLACEMENT PROGRAM

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: D VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECH RES-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996 TOTAL
B&R		
OE EW3130040		127
CE 35EW31304		173
TOTAL		300
DIRECT FTE		1

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130040	0	125	127		127	130	135	139	143
CE 35EW31304	0	30	173		173	178	183	189	195
TOTAL	0	155	300	0	300	308	318	328	338
DIRECT FTE	0	1	1	0	1	1	1	1	1

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130040	0	125	127		127	130	135	139	143
CE 35EW31304	0	30	173		173	178	183	189	195
TOTAL	0	155	300	0	300	308	318	328	338
DIRECT FTE	0	1	1	0	1	1	1	1	1

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

This activity will create a program for managing and phasing out the use of regulated refrigerants that are used in air conditioning and refrigeration equipment. The program will create an inventory of equipment and refrigerants, evaluate alternative refrigerants and/or equipment, establish replacement schedules and upgrade non-compliant refrigerant systems. This activity is required to comply with Title VI of the Clean Air Act and U. S. Department of Energy (DOE) Order 6430.1A.

RELATED ACTIVITIES NARRATIVE:

Air conditioning and refrigeration applications constitute a major area in which the DOE uses ozone-depleting substances. Being a user rather than a producer or consumer of ozone-depleting substances, DOE is not directly involved in meeting the production phaseout schedules in the Clean Air Act. However, the Federal Procurement Requirements (Section 613) of Title VI of the Clean Air Act, DOE Order 6430.1A (Section 1565) and Executive Order 12843 establish a policy for Federal agencies to maximize their use of safe alternatives, and minimize, where economically practicable, the procurement of class I ozone-depleting substances. In addition, the diminishing availability of chlorofluorocarbons (CFCs) as production is phased out supports the need to develop long-range plans for managing CFC refrigerant supplies.

In order to effectively plan for the phaseout of ozone-depleting substances in air conditioning and refrigeration applications, DOE facilities need to identify and prioritize their current applications and develop plans to replace or convert these uses.

This activity will create a program for managing and phasing out the use of regulated refrigerants that are used in air conditioning and refrigeration equipment serving building systems in the Laboratory's Hanford Support facilities. The program will create an inventory of equipment and refrigerants, evaluate alternative refrigerants and/or equipment, establish replacement schedules and upgrade non-compliant refrigerant systems. This activity is required to comply with Title VI of the Clean Air Act and U. S. Department of Energy (DOE) Order 6430.1A and Executive Order 12843.

The Clean Air Act, as amended by the Amendments of 1990, calls for the complete phaseout of CFCs by January 1, 1996. Under the current schedule, production of the ozone-depleting chemicals will be reduced to 25% of the 1986 levels by January 1, 1994, and cease entirely by January 1, 1996. That is, no new CFCs can be produced; the only CFCs that can be used will be recycled CFCs. Production levels of the interim substitutes, Hydrochlorofluorocarbons (HCFCs) will be frozen to the consumption level in 1996, that is, a cap will be established based on 3.1% of the 1989 CFC consumption plus 100% of the 1996 HCFC consumption.

Further phaseout reductions for the production and consumption of CFCs and HCFCs are as follows:

YEAR REDUCTION (%)

2004 35
2010 65
2015 85
2020 99.5
2030 100

Although the HCFC refrigerants are far less damaging to the ozone layer, because of their lesser chlorine content, they have other performance, safety and environmental impacts. Because the global-warming-inducing components of certain HCFCs survive in the atmosphere longer than do the components of other refrigerants, these chemicals are considered more harmful. The so-called long-lived HCFCs, most notably HCFC-22, could be banned sooner.

The federal regulations have also placed requirements for reducing the emission of Class I (CFC) and Class II (HCFC) refrigerants. Effective July 1, 1992, individuals servicing and disposing of air conditioning and refrigeration equipment are prohibited from knowingly venting refrigerant into the atmosphere. Furthermore, the regulations impose a certification program for refrigerant recovery and recycling equipment. The equipment is required to evacuate air conditioning and refrigeration equipment to established vacuum efficiency levels to minimize refrigerant releases. In addition, technicians handling refrigerants and firms recovering, recycling and reclaiming refrigerants have to be certified under the plan.

DOE Order 6430.1A provides guidance to reduce DOE dependence on regulated CFCs. The order, with few exceptions, limits refrigerants to HCFC-22.

The technical scope of this activity involves inventorying building system equipment that utilize refrigerants to classify the equipment (type, location and age) and list the refrigerant type and quantity contained in the refrigeration system. A database will be created and will be used to maintain an inventory of refrigerants. As systems are repaired, maintained or replaced the database will be updated to document any changes in the refrigerant inventory. The database will also record purchases of refrigerants.

Engineering evaluations, based on the inventory database, will be performed to evaluate substitute refrigerants and replacement equipment as they become available. The engineering evaluations will establish replacement schedules for aging equipment to meet the refrigerant phaseout schedule specified in the federal regulations and proposed amendments. Replacement refrigerants will be evaluated to determine if additional facility or equipment modifications or replacement equipment are needed to ensure personnel and environmental safety requirements are met. Non-compliant refrigerant systems will be upgraded.

The equipment currently used to recover and recycle refrigerants during maintenance and repair activities will be upgraded or replaced to meet federal regulation equipment certification requirements. The recovery and

recycling equipment and associated accessories will be installed in a new step-van service vehicle so they can be easily transported to the work site. The new vehicle will be equipped with a rear-mounted power-lift for safe loading and unloading of heavy refrigeration equipment and tools, an electrical generator for operating refrigerant recovery equipment and power tools, storage tanks for recovered refrigerant and oils, work benches and refrigeration hoses.

In addition, technicians who work on refrigeration equipment will receive training, as required, to satisfy the technician certification requirements.

KEY ASSUMPTIONS:

The key scope assumptions are: 1) The database, which contains the equipment and refrigerant inventories, will require periodic updates as systems are repaired, retrofitted or replaced, 2) The refrigerant equipment currently used to recover and recycle refrigerants will require replacement or upgrades in FY 95 and 3) the inventory of refrigerant systems, conducted in FY 95, will determine the number of refrigerant systems that require replacement refrigerants or equipment in later years. Until the inventory is conducted the number of systems containing regulated refrigerants will not be known.

The key cost assumptions are: 1) The estimated costs for installing replacement refrigerants and/or replacement equipment are based on several recently completed refrigeration system installation projects; however, these costs can vary considerably depending on the magnitude and scope of the project. For example, some replacement refrigerants may be drop-in substitutes that don't require system modifications, whereas other replacement refrigerants may require extensive system cleaning or modification for adaption. Other installations, when refrigeration equipment is replaced, may require system modifications to accept the new equipment. 2) The costs for replacement refrigerants and/or replacement equipment will be based on the lowest Life Cycle Cost of the alternatives available for each application 3) The estimated cost for the new service vehicle is based on an a budget estimate figure provided by a local dealer.

The key time assumptions are: 1) The activities performed in FY 95 will determine out-year commitments. If the number of refrigeration systems that require replacement refrigerants or equipment replacements exceeds the number expected, additional time and funding commitments will be required. The converse is also possible.

ACTIVITY BY PRIORITY:

This activity is Priority 2.

Ozone-depleting substances are regulated by the Clean Air Act and the Clean Air Act Amendments of 1990. This project will create a program for managing and phasing out the use of regulated refrigerants that are used in air conditioning and refrigeration equipment. This program will address the record keeping, refrigerant recovering and recycling standards, technician certification, recovery equipment certification, emission

reduction and maintenance practices that are required by the regulations.

DOE Order 6430.1A and Executive Order 12843 establish policy for maximizing the use of safe, alternative refrigerants and minimizing the procurement of Class I ozone-depleting substances. Substitute refrigerants and/or replacement equipment procured for this project will satisfy this policy.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

REFRIGERANT REPLACEMENT PROGRAM
REFRIGERANT REPLACEMENT PROGRAM
REFRIGERANT REPLACEMENT PROGRAM

TASKS COMPLETED TO DATE:
New activity.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:
 No work is planned or required in FY 94.

Maintenance activities and new installations of refrigeration equipment will follow the guidance in DOE Order 6430.1A for reducing DOE dependence on regulated refrigerants.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0030	UPGRADE REFRIG. RECOVER/RECYCLE EQUIP/INSTALL IN SERVICE VEHICLE	9/30/95	9/30/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:
 During the budget year, this activity will create a program for managing and phasing out the use of regulated CFC refrigerants used in air conditioning and refrigeration equipment serving building systems.

In FY 95, a database will be developed to create an inventory of building system equipment and refrigerants. Refrigerant recovery and recycling equipment will be upgraded or replaced. A new service vehicle will be purchased and outfitted with the required refrigerant recovery and recycling equipment and accessories. Technician training required for certification will be conducted, as required. Regulated CFC equipment will be maintained to comply with federal regulations.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0040	UPGRADE REFRIGERATION SYSTEMS	9/30/96	9/30/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:
 In FY 96, engineering evaluations will be conducted to establish replacement upgrades and schedules. Substitute refrigerants or replacement equipment, equivalent to about 50 tons of refrigeration, will be retrofitted to existing refrigeration systems. The database will be maintained to reflect all changes in the inventory of building system refrigeration equipment and refrigerants. Refrigerant recovery and recycling equipment and technician certifications will be maintained to comply with federal regulations. Regulated CFC equipment, still in operation, will be maintained to comply with federal regulations.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

In FY 1997 - FY 2000, engineering evaluations will be conducted to establish replacement upgrades and schedules. Substitute refrigerants or replacement equipment, equivalent to about 50 tons of refrigeration, will be retrofitted to existing refrigeration systems. The database will be maintained to reflect all changes in the inventory of building system refrigeration equipment and refrigerants. Refrigerant recovery and recycling equipment and technician certifications will be maintained to comply with federal regulations. Regulated CFC equipment, still in operation, will be maintained to comply with federal regulations.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

Title VI of the Clean Air Act (40 CFR Part 82) and the Clean Air Act Amendments of 1990.

DOE Order 6430.1A, Division 15, Section 1565.

Executive Order 12843, Procurement Requirements and Policies for Federal Agencies for Ozone-Depleting Substances.

REGULATORY KEY ISSUES:

If this activity is not funded, DOE could be fined by regulatory agencies. Revisions in Title VI and VII of the Clean Air Act, Amendment 7, allows the Environmental Protection Agency (EPA) to incorporate a wide range of enforcement and administrative strategies. Enforcement by EPA offices, state and local jurisdictions combined with bounties and fines, will ensure compliance with these regulations.

The phaseout schedule for regulated refrigerants is stipulated in the federal regulations, but may be accelerated. Certification requirements for technicians and refrigerant recovery and recycling equipment are now in effect.

DOE 6430.1A, Division 15, Section 1565, provides guidance to reduce DOE dependence on regulated CFCs as refrigerants in HVAC systems and specifies R-22 (HCFC-22) for new and replacement equipment, where feasible. If this ADS activity is not funded the facility refrigeration systems and equipment may be out of compliance with this DOE Order, which could result in an audit finding.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Additional activities above the Target Level will allow project participants to replace refrigerants and/or equipment for a larger number of refrigeration systems, thereby reducing the number of systems that contain regulated CFCs. The refrigeration systems that are analyzed under the proposed program and subsequently modified will achieve compliance with the applicable regulations; however, those systems that are not incorporated into the program could remain out of compliance and could continue to be an exposure for DOE.

CONCERNS AT PLANNING LEVEL:

None. All activities will be completed with funding at the planning level.

REQUIRED TECHNICAL DEVELOPMENT:

None. No EM-30 technology requirements, to be completed by EM-50, are

needed to complete this project.

THIS PAGE IS INTENTIONALLY LEFT BLANK

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8400 ADS SUF: 0 SUBACTIVITY: BA

SUBACTIVITY TITLE: STANDARDS/REQUIREMENTS IDENTIFICATION DOCUMENT (S/RIDS)

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: D VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECH RES-NFP

DECREMENT CASE (\$ IN THOUSANDS)

	FY1996 TOTAL
B&R	
OE EW3130040	0
TOTAL	0
DIRECT FTE	0

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130040	0	0	1089		1089	1214	1316	1324	1365
TOTAL	0	0	1089	0	1089	1214	1316	1324	1365
DIRECT FTE	0	0	6	0	6	7	8	8	8

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130040	0	0	1089		1089	1214	1316	1324	1365
TOTAL	0	0	1089	0	1089	1214	1316	1324	1365
DIRECT FTE	0	0	6	0	6	7	8	8	8

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

Development of a Standards/Requirement Identification Document (S/RID) to identify the specific standards/requirements that apply to PNL Category II Nuclear Facilities, assess the adequacy of those standards/requirements for protecting the health and safety of the public and facility workers, and making a determination as to the extent to which they are being implemented. Development of this process is in response to the Defense Nuclear Facility Safety Board (DNFSB) Recommendation 90-2.

The DOE Implementation Plan in response to Recommendation 90-2, clearly states that the DOE Standards/Requirements Program applies to all programs, activities, operations, sites, and facilities under the sponsorship or the direction of the Assistant Secretaries and Directors who manage new and existing DOE facilities.

PNL currently reviews requirement drivers and translates applicable requirements into the PNL Management Guide and Manuals. PNL maintains an extensive assessment program, in addition to receiving significant external oversight, of line management's implementation of the Manual requirements. However, this process does not provide the kind of documentational links between the requirement drivers and PNL policies and procedures required by the S/RID process. The major gap areas are that PNL does not maintain a formal compilation of the requirement drivers (called an S/RID), nor does PNL have traceable links between these drivers and the actual policies and procedures as established in the Management Guide and PNL Manuals.

This activity funds the development of the initial S/RID document and the business systems processes to maintain both the S/RID and policy and procedure links to underpin the operation of PNL's Category II Nuclear facilities in a manner compliant with the DOE Implementation Plan for responding to DNFSB's Recommendation 90.2. These activities are:

A. Develop a PNL Standards/Requirements Implementation Plan to:

- (1) Determine the optimal approach for implementation of the DOE Standards/Requirements Program and DOE Order 5700.6C.
- (2) Develop an efficient electronic process for the review of applicable standards and requirements.
- (3) Develop a cost effective process for the development of a formal S/RID document for PNL's Category II Nuclear Facilities (buildings 324, 325, and 327).
- (4) Develop a methodology of assessing compliance with identified standards and requirements.
- (5) Establish a PNL regulatory compliance organization to maintain full compliance with the DOE Standards/Requirements Program.

B. Develop a Facility S/RID for PNL's Category II Nuclear Facilities (currently 324, 325, and 327). This document will contain a listing of all

applicable standards and requirements necessary to operate these nuclear facilities in a manner that ensures the health and safety of the public and facility staff. Facility experts will make the first determination of adequacy based on their professional experience and knowledge of facility operations.

C. Perform an Adequacy Assessment of the S/RID and transmit the document to DOE for approval. This assessment will include an applicability and sufficiency evaluation of the identified standards and requirements. The adequacy of the S/RID will be determined by subject matter experts.

Upon completion of the Adequacy Assessment the S/RID will be submitted to DOE for approval. The facility S/RID will provide a contractual technical basis for operating PNL operated DOE facilities in compliance with all applicable Environment, Health, and Safety Laws, Orders and Standards.

D. Perform an Implementation Assessment of PNL Policies and Procedures for the operation of the PNL Category II Nuclear Facilities. The purpose of this step is to establish a baseline for compliance. This assessment will be documented in detail to ensure 5700.6C configuration control of the process.

E. Perform an Adherence Assessment to determine facility compliance with written policies, programs, and procedures. Corrective action will be developed and tracked for each non compliance identified during this assessment.

F. Ongoing Maintenance and Assessment of the implementation of the DOE Standards/Requirements Program.

RELATED ACTIVITIES NARRATIVE:

None.

KEY ASSUMPTIONS:

A. Develop Implementation Plan: Assumption: 1 FTE effort. Task to be completed in 6 months. Resources will be equivalent to PNL S/E-3s in the operating organization.

B. Develop Facility S/RID (Includes Adequacy Assessment): Cost assumptions are based on data received from Westinghouse Hanford that indicates that the S/RID document and adequacy assessment costs averaged between \$300K - \$500K per facility.

Since PNL operates three Category II Nuclear Facilities that are relatively similar it is anticipated that PNL can perform these processes for approximately \$300K per facility. This translates into approximately a 5 FTE over 6 months.

C. Implementation/Adherence Assessments: Cost assumptions are based on data received from Westinghouse Hanford that indicates that the Implementation/Adherence Assessments are anticipated to average between

\$400K - \$600K per facility.

Since PNL operates three Category II Nuclear Facilities that are relatively similar it is anticipated that PNL can perform these processes for approximately \$400K per facility. This translates into approximately a 6 FTE effort over 12 months.

D. Ongoing Maintenance and Assessment: A regulatory compliance organization will need to be established to formally evaluate all changes in regulatory standards and requirements on an ongoing basis. Funding will also be required for the continual assessment and revisions to PNL Policies and Procedures.

An organization capable of performing such functions would require approximately 10 FTE. This is approximately twice the effort that PNL currently devotes to these tasks. The S/RID maintenance increment is 5 FTE. These individuals would be PNL S/E-3 level. Additional costs associated with staffing include: Computer/software, phone costs, travel costs, etc.

ACTIVITY BY PRIORITY:

All activities are Priority 4.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

No directly-funded activity has been completed to date.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Monitor the S/RIDs process as rolled-out in the DOE HQ Implementation Plan's Phase 1. Participate in the development of Hanford Site processes to develop and maintain Hanford site-level generic S/RIDs.

Evaluate the future PNL organizational and staffing requirements to maintain full compliance with the DOE Standards/Requirements Program.

These current activities are funded from existing overhead funds.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

DOE Standards/Requirements Program processes will be incorporated into ongoing activities associated with DOE Order 5700.6C implementation and the PNL Policies and Procedure Improvement Program were possible. An evaluation of electronic document search capabilities and database systems will be performed. It is PNL's intent to electronically link PNL policies and procedures directly to the applicable standard or requirement. These initial efforts are planned for existing overhead funding.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0050	DEVELOP A FACILITY S/RID FOR PNL CATEGORY II NUCLEAR FACILITIES	9/30/96	9/30/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

A. Develop a PNL Standards/Requirements Implementation Plan to:

(1) Determine the optimal approach for implementation of the DOE Standards/Requirements Program, DOE Order 5700.6C and the upgrade of PNL Policies and Procedures.

(2) Develop an efficient electronic process for the review of applicable standards and requirements.

(3) Development of a cost effective process for the development of a formal S/RID document for PNL's Category II Nuclear Facilities (buildings 324, 325, and 327).

(4) Develop a methodology of assessing compliance with identified standards

and requirements.

(5) Evaluate the future PNL organizational and staffing requirements to maintain full compliance with the DOE Standards/Requirements Program.

B. Develop a Facility S/RID for PNL's Category II Nuclear Facilities (currently 324, 325, and 327). This document will contain a listing of all applicable standards and requirements necessary to operate these nuclear facilities in a manner that ensures the health and safety of the public and facility staff. Facility experts will make the first determination of adequacy based on their professional experience and knowledge of facility operations.

C. Commence an Adequacy Assessment of the S/RID.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0055	COMPLETE INITIAL ADHERENCE ASSESSMENT TO S/RIDS	9/30/97	9/30/97
8400-00-0065	REVISE S/RID DOCUMENTATION	9/30/98	9/30/98
8400-00-0085	PERFORM ADHERENCE ASSESSMENTS TO S/RIDS	9/30/99	9/30/99
8400-00-0090	REVISE S/RID DOCUMENTATION	9/30/00	9/30/00

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

A. Complete the Adequacy Assessment of the S/RID. This assessment will include an applicability and sufficiency evaluation of the identified standards and requirements.

Upon completion of the Adequacy Assessment the S/RID will be submitted to DOE for approval. The facility S/RID will provide a contractual technical basis for operating PNL operated DOE facilities in compliance with all applicable Environment, Health, and Safety Laws, Orders and Standards.

B. Perform an Implementation Assessment of PNL Policies and Procedures for the operation of the PNL Category II Nuclear Facilities. The purpose of this step is to establish a baseline for compliance. This assessment will be documented in detail to ensure 5700.6C configuration control of the process.

C. Perform an Adherence Assessment to determine facility compliance with written policies, programs, and procedures. Corrective action will be developed and tracked for each non compliance identified during this assessment.

D. Ongoing Maintenance and Assessment of the implementation of the DOE Standards/Requirements Program.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

- * Department of Energy Implementation Plan for the Defense Nuclear Facilities Safety Board Recommendation 90-2, Revision 4, July 1993.
- * Department of Energy Standards/Requirements Implementation Assessment Instruction, Revision 3 (Draft). Formerly DP-AP-202.
- * Environment Safety and Health Configuration Guide, Revision 0, July 30, 1993.

REGULATORY KEY ISSUES:

None.

COMP/PROG BENEFITS AT PLANNING LEVEL:

None.

CONCERNS AT PLANNING LEVEL:

PNL receives no operating funds for the special operating costs of the Category II Nuclear Facilities. Overhead funding limitations preclude PNL developing the S/RID documentation without direct funding. Without this direct funding PNL will not be able to implement DOE's Plan to respond to the Defense Nuclear Facility Safety Board Recommendation 90-2.

REQUIRED TECHNICAL DEVELOPMENT:

None.

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8400 ADS SUF: 0 SUBACTIVITY: BB

SUBACTIVITY TITLE: CULTURAL RESOURCES MANAGEMENT

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: D VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECH RES-NFP

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW3130040		TOTAL
		203
TOTAL		203
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130040	0	1940	1960		1960	1900	1800	1600	1600
TOTAL	0	1940	1960	0	1960	1900	1800	1600	1600
DIRECT FTE	0	8	8	0	8	7	7	6	6

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130040	0	1940	1960		1960	1900	1800	1600	1600
TOTAL	0	1940	1960	0	1960	1900	1800	1600	1600
DIRECT FTE	0	8	8	0	8	7	7	6	6

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

The Pacific Northwest Laboratory (PNL) operates and maintains the Hanford Cultural Resources Laboratory (HCRL) for the U.S. Department of Energy, Richland Operations Office (DOE-RL). The HCRL assists DOE-RL in complying with the numerous state and federal laws and regulations concerning the protection and management of cultural resources. These laws and regulations require DOE to identify, evaluate, and protect significant (eligible for the National Register of Historic Places) cultural resources under their jurisdiction and to consider the effects of their undertakings on these cultural resources.

This ADS covers the baseline programmatic activities necessary to attain compliance. These activities include identification and inventory of all cultural resources located on the Hanford Site, evaluation and determination of eligibility of these resources, nomination of potentially eligible resources, protection, preservation, and management of eligible resources, and repatriation of Native American artifacts.

The objectives of this program are to:

- 1) Identify, evaluate, and monitor cultural resources as specified in Section 110 of the NHPA,
- 2) Develop and implement cultural resource protection programs,
- 3) Collect information on the ethnohistory of the Hanford Site for use in compliance with AIRFA,
- 4) Provide DOE with information it needs to interact with federal, state, and tribal agencies on cultural resource issues.

The scope of this program is broken into the following principal tasks:

- Complete survey and inventory of Hanford cultural resources,
- Evaluation of potentially eligible properties for listing on the National Register of Historic Places (Including preparation of Multiple Property Documents),
- Protection and management of eligible cultural resource properties, and
- Project Administration.

A complete survey and inventory to locate and record prehistoric, historic, and traditional cultural properties on the Hanford Site will be conducted pursuant to Section 110 of the NHPA. This survey/inventory will be conducted in stages according to priority (earliest need relative to Tri-Party Agreement schedules) of selected areas (eg. 100, south 300 Area & 3000 Area, activity corridors, selected traditional cultural properties, etc.).

Historic contexts and/or multiple property documents will be prepared (eg. Prehistory, Pre-Hanford History, Manhattan Era, Cold War Era, etc.) to define the criteria for determining the eligibility of various property types for each of the historic themes. Based on these documents each of the potentially eligible cultural properties identified in the site surveys will be evaluated, again in phases by priority area.

Eligible cultural resource properties will be managed in accordance with the NHPA, APRA, and other requirements. This will involve the development and implementation of site/area protection and monitoring plans, e.g. for Rattlesnake Mountain, Gable Mtn., Hanford Reach, etc., implementation of mitigation options to reduce deterioration of threatened sites, historic building reuse plans, preparations for interpretive center(s) and/or museum curation.

RELATED ACTIVITIES NARRATIVE:

This is a new activity. Base funding for the cultural resources program has previously been funded under the Public Safety and Resource Protection Program ADS 8400-0-CA. These funds provide a base funding for operation of the Hanford Cultural Resources Laboratory after FY 1995. The HCRL base funding will be included in this ADS.

KEY ASSUMPTIONS:

The basic assumptions guiding preparation of this ADS are as follows:

- DOE orders, state and federal laws and regulations, and the Tri-Party Agreement require continued, identification, evaluation and treatment of prehistoric, historic, and traditional cultural resource properties at the Hanford Site. Environmental data, including cultural resources, must be distributed annually to the public in an Annual Environmental Report.
- Identification, evaluation, and treatment of cultural properties will continue to be required in the future as remediation is conducted. Cultural resources information will be needed to facilitate future uses of the Hanford Site, including possible transfers of land to other parties.
- The need for proper cultural site identification and protection will continue as a requirement in the future regardless of changes in the Hanford mission.

Some additional assumptions that are more directly related to the activities of the HCRL are discussed in the following paragraphs.

Regulatory compliance activities are prioritized as specified in the HCRMP. If high-priority activities, such as Section 106 compliance reviews, protection planning, or monitoring require a greater level of effort than estimated in this ADS, then the work activities on lower priority tasks, particularly Section 110 surveys, will be reduced.

The NHPA requires DOE to locate, inventory, and nominate all eligible historic or cultural properties under its jurisdiction and to consider the impact of their undertakings on any potentially eligible property. Thus, cultural resource reviews are to be conducted whenever a Hanford Site project or activity will potentially disturb the ground surface, will affect potentially historic structures (eg. Pre-Hanford, Manhattan, and Cold War structures), or will affect traditional cultural property.

Evaluation of prehistoric, historic and traditional sites for eligibility to the National Register of Historic Places may require test excavations. Because it is impossible to predict the number of sites and/or the effort required to evaluate these sites, the number and location of the sites to be evaluated will be determined later throughout the year.

Public education activities are specifically requested by DOE-RL to comply with the Archaeological Resources Protection Act. Staff will give lectures and offer classroom presentations at the invitation of schools and adult organizations. Commitments are made for completion of a traveling display and a number of presentations as requested by the public.

Archaeological surveys conducted under stipulations of Section 110 of the NHPA are given special emphasis in order to expedite the cultural resources review process. However, the amount of area to be surveyed annually is dependent on the number of sites found during these surveys and the resources available to conduct the surveys. Thus, higher priority areas such as the 100 Area, 300 Area, and 3000 Area will be surveyed first with lower priority areas completed as time and funding permit.

ACTIVITY BY PRIORITY:

Tasks related to the Cultural Resource Baseline Compliance Program fall under priority levels 2. The majority of the tasks are required by federal statutes or regulations that necessitate proper identification, evaluation, and protection of cultural resource properties, including archaeological, historical, and traditional Native American resources. FY95 tasks that will be completed under this priority level include:

- Survey and identification of cultural resource properties in the 100 and 300/3000 areas.
- Completion of multiple property documents for the prehistoric, historic, and Native American contexts at Hanford to facilitate site evaluations.
- Resource protection through preparation of a management plan for Gable Mountain traditional cultural property.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

This ADS is a new activity. However, the cultural resources program at Hanford has been in existence since 1987. Since its establishment, the program has conducted activities falling into the following categories:

- Conduct of NHPA Section 106 compliance reviews
- Verification, evaluation, and documentation of known sites (baseline management), followed by a monitoring program
- Development and implementation of protective measures for significant sites
- Implementation of curation program
- Evaluation of cultural resource properties for eligibility to the National Register
- Conduct a public education effort
- Evaluation and refinement of the predictive model of archaeological site distributions used for site planning.

To date, these activities have been completed in a successful and timely fashion under the Public Safety and Resource Protection Program ADS 8400-0-CA.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

The following list includes cultural resource activities that have been completed under the current work plan (ADS 8400-0-CA).

- NAGPRA Summary to DOE
- Programmatic Agreement to DOE
- Increased staffing to meet project needs
- Established curation facility
- Acquired Hanford Site artifact collections from outside repositories
- Initiated work on co-management agreement with affected Native American Tribes
- Developed cultural resources database
- Completed Manhattan Project historic context
- Completed Annual Report to DOE
- Conducted 435 Section 106 (NHPA) reviews

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0150	IDENTIFY CULTURAL PROPERTIES IN 100 AND 300 AREAS	9/30/95	9/30/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

In FY95, cultural resource compliance-related identification and evaluation of historic properties will be conducted and reported to meet applicable regulations. Those activities begun in FY94 that will be completed in FY95 include the co-management agreement with Native American Nations, multiple property documents for prehistoric, historic, and cold war resources at Hanford, site identification in the 100 and 200 areas, evaluation of sites in the 100 area, and evaluation Gable Mountain traditional cultural properties. Long-term management responsibilities for historic properties eligible for listing on the National Register of Historic Places will continue through FY95 by providing protection and preservation for these sites. Preparation of special management unit management plans will be completed for the Gable mountain area.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0360	IDENTIFY 200 AREA AND COLUMBIA RIVER REACH CULTURAL PROPERTIES	6/30/96	6/30/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Scheduled for completion in FY96 are the multiple property documents for prehistoric, historic, and cold war resources. Field surveys to identify and record cultural resources will be undertaken in the 200, 300, and 600 Areas, and along the Columbia River reach during FY96. Evaluation of identified cultural resource sites within the 100 and 300 Areas will be completed, and evaluations for those sites recorded in the 200 Area and the Columbia River reach will be initiated. Evaluations of additional traditional cultural properties will also be completed. Management of eligible cultural resource sites will again focus on providing protection and security throughout FY96. A special management unit plan will be completed for the 100 Area and Rattlesnake Mountain.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0415	IDENTIFY CULTURAL PROPERTIES IN THE 600 AREA	6/30/97	6/30/97
8400-00-0145	EVALUATE PREHISTORIC AND HISTORIC CULTURAL PROPERTIES	6/30/98	6/30/98
8400-00-0160	COMPLETE 600 AREA SPECIAL MANAGEMENT UNIT PLAN	6/30/99	6/30/99
8400-00-0165	COMPLETE REMAINING AREAS SPECIAL MANAGEMENT UNIT PLAN	6/30/00	6/30/00

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Management of cultural resources at Hanford will continue as required by DOE orders and state and federal historic preservation regulations. Between FY94 and FY98, the emphasis will be on resource identification and evaluation. Once this information is gathered and the National Register evaluations completed, the emphasis will shift toward long-term management of eligible prehistoric, historic and traditional cultural resources as outlined in the long-term strategy. The essential elements/tasks of the comprehensive long-term cultural resource effort will include:

- Storage/curation of artifacts, records management, database/GIS and reference library maintenance, and public education.
- Management of eligible cultural resources, including protection and security of resource properties, public education, interpretation, investigation of adverse effects, historic building re-use, and development of a visitor center/curation facility. Management will also include implementing the provisions of special management unit plans.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

E.O. 11593, Protection and Enhancement of Cultural Environment

Title 16 U.S.C. 470, The National Historical Preservation Act of 1966.

Title 3 CFR Part 800, Protection of Historic and Cultural Properties.

Title 016, U.S.C. 970-471, Archaeological Resources Protection Act.

Title 42, U.S.C. 1966, The American Indian Religious Freedom Act.

Collectively, these statutes and regulations to property identify, evaluate, and protect cultural resources and lands under the agency's administration. Included here are all types of cultural properties, prehistoric archaeological sites, historic structures and archaeological sites, and Native American traditional sites. Failure to comply with the regulatory requirements for identification, evaluation, and protection of those properties designated as significant places DOE in a non-compliance status and could have serious impacts leading to costly project delays.

Several issues have been raised by the Washington SHPO and the affected Native American Tribes about DOE's cultural resource compliance effort. These include the following:

- Both the SHPO and the Tribes have expressed concern about DOE's commitment to cultural resources at Hanford
- Concerns have also been voiced that the Hanford cultural resource program has been conducted in piecemeal fashion and is not holistic in scope
- The cultural resource program has, in the past, lacked the resources to undertake a comprehensive program
- Affected Tribes have not had an active role in the program.

REGULATORY KEY ISSUES:

The scope of the tasks defined in this activity are designed to attain DOE compliance with several state and federal regulations. Decreased or delayed funding will increase the potential for project delays or potential shut down of activities under the Hanford Mission. Timely scheduling and completion of the cultural resources objectives outlined in this ADS will attain successful resolution of these issues and will address questions raised by external parties.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Completion of the activities will yield significant benefits, both in the short term and the long term. Short term benefits include the following:

- Provide for expedited cultural resource clearances until long-term compliance is attained.
- Provide SHPO and Tribal support for the program
- Will shorten review process and acceptance by regulators of interim mitigation measures
- Addresses highest priority issues (e.g. 100 and 300/3000 areas) so that D&D Construction and ER projects can proceed on schedule.

Benefits to the Hanford Mission that fall into a long-term category include:

- Provides shorter review period for ground disturbing and building demolition activities
- Complies with DOE responsibility for long-term cultural resource protection and preservation of significant properties
- Reduces tribal concerns that may lead to project delays.

CONCERNS AT PLANNING LEVEL:

If the activities described in this ADS are not performed, DOE will be in violation of numerous state and federal regulations. The basic Hanford Site-wide cultural resource program is required by Sections 106 and 110 of the NHPA. Additionally, compliance with several other state and federal historic preservation laws and regulations (e.g. ARPA, AIRFA, and NAGPRA) will not be possible. Lack of funding or even reduced funding will create delays and/or halt of site remediation work required under the Tri-Party Agreement. In a worst case scenario, lawsuits could be effected by external parties (e.g. SHPO, the Advisory Council on Historic Preservation, the Society for American Archaeology, or Native American Nations) that are designed to bring the program into compliance with existing historic preservation laws.

REQUIRED TECHNICAL DEVELOPMENT:

N/A.

**THIS PAGE INTENTIONALLY
LEFT BLANK**

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

The Pacific Northwest Laboratory (PNL) conducts environmental surveillance of the Hanford Site for the U.S. Department of Energy, Richland Operations Office. The activities included in this ADS are incorporated into the PNL Public Safety and Resource Protection Program (PSRPP). This is the primary site-wide environmental surveillance program to document environmental status on and around the Hanford Site and to comply with DOE Orders, environmental regulations, and DOE agreements. The projects included in this activity are Hanford Environmental Oversight, which includes National Environmental Policy Act documentation and implementation, Surface Environmental Surveillance, Ground-Water Surveillance, Meteorology and Climatology, Wildlife Resources Monitoring, Cultural Resources, Ecological Compliance Assessment, and Dosimetry Coordination. These projects include joint plans, agreements, and sampling efforts with the states of Washington and Oregon, the U.S. Geological Survey, Native American groups, and other interested parties.

RELATED ACTIVITIES NARRATIVE:

Other activities that utilize the data, surveys, and reports of this subactivity include the Hanford D&D projects (Cultural and Ecological Compliance projects), ER projects and Columbia River Risk Assessment (Surface and Ground Water Surveillance project data), WHC effluent monitoring and NESHAPS reporting (Surface Surveillance project monitoring data and dose calculations).

Tank farm operations utilize the Meteorology and Climatology services extensively since there are restrictions on opening tanks when winds exceed 15 mph and if there are any thunderstorms in the area, or other inclement weather. There is frequent utilization of the 24-hour forecaster service during these operations.

KEY ASSUMPTIONS:

DOE Orders, federal environmental regulations, and environmental agreements (Tri-Party Agreement) require continued environmental surveillance, including the calculation of the radiological dose from Hanford activities. Environmental data on Hanford must be distributed annually to the public in an Annual Environmental Report.

Environmental surveillance will continue to be required in the future regardless of changes in the Hanford mission.

Identification and protection of cultural and wildlife resources will continue to be major concerns as remediation is conducted. Data will be needed to facilitate decisions on future uses of the Hanford lands, including possible release of land to other parties. Natural Resources Damage Assessment activities will need detailed Hanford monitoring data.

Meteorological and climatological services are needed to support waste tank

remediation. Information such as wind patterns and velocity, barometric pressures, fronts, and storms are critical to the planning of work on the tanks.

ACTIVITY BY PRIORITY:

The activities to be conducted are Priority 2. These activities are required to demonstrate that agreements with EPA and the State of Washington are met.

External Environmental Regulations:

Justification: 40 CFR 61, Subpart H

Activity: Dosimetry Coordination, Surface Environmental Surveillance, Meteorology and Climatology

Justification: 42 USC 4321

Activity: NEPA Characterization and Implementation

Justification: E.O. 11593, 16 USC 470, 36 CFR Part 800, 43 CFR Part 7, 42 USC 1996

Activity: Cultural Resources

DOE Orders:

Justification: DOE 5400.1

Activity: Surface Environmental Surveillance, Ground Water Surveillance, Meteorology and Climatology, Hanford Environmental Oversight, Wildlife Resources Monitoring, Dosimetry Coordination.

Justification: DOE 5400.5

Activity: Hanford Environmental Oversight, Dosimetry Coordination, Groundwater Surveillance, Meteorology and Climatology, Surface Environmental Surveillance

Justification: DOE/EH -- 173T

Activity: Surface Environmental Surveillance, Groundwater Surveillance, Meteorology and Climatology, Hanford Environmental Oversight, Wildlife Resources Monitoring, Dosimetry Coordination.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

PUBLIC SAFETY AND RESOURCE PROTECTION PROGRAM
PUBLIC SAFETY AND RESOURCE PROTECTION PROGRAM
PUBLIC SAFETY AND RESOURCE PROTECTION PROGRAM

TASKS COMPLETED TO DATE:

Environmental monitoring/surveillance has been conducted at Hanford since the project began in the mid-1940s. Results have been reported annually in the Hanford Site Environmental Reports. These reports has been expanded greatly to cover all Hanford environmental work and compliance status as required by DOE orders. A summary report written at the layman level was prepared in FY 93 and was widely distributed. Separate annual reports are

also prepared on ground-water surveillance, cultural resources, wildlife resources, and meteorology and climatology projects. The Hanford Site Environmental Monitoring Plan describing the scope and rationale for all Hanford environmental monitoring was initially prepared in FY91 and will be revised by this program in FY 94. Environmental information has also been documented through numerous PNL technical reports, data reports, brochures, videos, and presentations to the public. In FY 93 there were 47 presentations, 67 publications, and 64 letter reports prepared by the program. The number of cultural resource surveys continue to increase. In FY 93, 345 survey requests were processed. The increased number is due to the Hanford Site being nearly 50 years old, requiring building surveys for National Registry eligibility, and the increased amount of D&D, environmental restoration, and construction all of which require surveys for compliance. Monitoring of the Columbia River and shoreline has increased because of the potential for more public access to these areas. Detailed reports on a survey of shoreline vegetation and a report of shoreline exposure rates and radionuclide and trace element concentrations were issued. The issue of the transport of tritium offsite into the area of the Richland drinking water supply wells was studied in detail through monitoring and modelling. Briefings were provided to city and state officials on results and projections. Ground water modelling to meet Tiger Team findings were continued and reports issued on the three-dimensional conceptual model for the unconfined aquifer system. A number of other reports on flow dynamics of the Hanford site were issued.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0035	COMPLETE HANFORD SITE ENVIRONMENTAL REPORT FOR PREVIOUS	6/01/94	6/01/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

In FY 1994, the comprehensive monitoring and surveillance of the Hanford environment will continue. The following activities are included.

- Prepare Hanford Site Environmental Report for CY 1993. Incorporate the environmental monitoring data collected by WHC in their near-field monitoring program, other environmental programs, and the site compliance information.
- Monitor the air, water, vegetation, farm products, soil and wildlife, and radiation dose to the public from Hanford operations.
- Monitor ground water, characterize the Site's hydrogeology, model ground-water flow and transport, and design and maintain sampling wells. Continue the hydrogeologic characterization of the site to meet Tiger Team finding.
- Conduct annual wildlife census of fish, bird, and animal species which are future candidates as endangered or threatened.
- Provide meteorological and climatological services for the Hanford Site.
- Coordinate, review, and upgrade the application of dose codes used at Hanford for evaluating Hanford impacts and regulatory compliance.
- Maintain and upgrade NEPA automated tracking system.
- Conduct the surveys of Hanford cultural resources and prepare reports as required by regulations. Coordinate efforts with the Native American tribes in the Hanford vicinity.
- Implement the Ecological Compliance Assessment project that will conduct NEPA ecological surveys for threatened and endangered species for all proposed construction, D&D, restoration activities at Hanford. (These will be transferred to ADS 8400-00-CB in FY95.)
- Develop a grant for cooperative work with the Nature Conservancy for their work on ecological resources at Hanford.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

In FY 1995, the scope of the monitoring and surveillance activities will

continue as described for the current year (FY94). All site-wide and offsite environmental monitoring will be conducted and reported to meet applicable regulations. The determination of the impact of Hanford activities will be expanded beyond the reporting of radiation doses to include the estimation of risk. Risk will be expanded to hazardous chemicals and when applicable, combined risk from chemical and radiological exposures determined. RLID 5400.5 requires that once a record of decision regarding remediation of waste site operable units are successfully implemented, responsibility for all subsequent long-term environmental surveillance will be transferred to PNL as part of this program. This will require additional surface and ground water surveillance. The cultural resources and ecological resources surveys that must be completed for NEPA will be conducted for all Hanford construction, D&D, and restoration work to determine the impact on these resources. Appropriate documentation will be prepared for NEPA and the State Historic Preservation Office. Revisions to DOE 5400.1 are expected to require ecological risk assessment to be performed for the entire Hanford site. These will be conducted following technical guidance from EH. Field measurements and ground-water modeling will continue to be used to characterize the hydrogeologic regime to address the Tiger Team finding GW/CF-2. Cooperative work with the Nature Conservancy will be continued through a cooperative agreement and grant. A management plan for the ecological resources of the Hanford Site will be prepared. As directed by RL, portions of the monitoring at off-site locations will be converted to community monitoring activities.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

In FY 1996, the scope of monitoring and surveillance activities will continue as described in FY 94 and FY 95. The impacts of Hanford operations will be evaluated using risk assessment techniques in addition to the radiation dose assessments. The ASSP will continue to provide management of environmental samples for PNL and Westinghouse. The monitoring of air, water, food products, and wildlife will include the measurement of hazardous chemicals. Additional monitoring will be conducted of land areas where the public may have greater access, particularly the Columbia River shoreline. Monitoring will be conducted around remedial action sites to evaluate the impact of clean-up actions. Long term monitoring around waste sites will continue to be transferred to this program to meet the requirements of the ROD. Measurements will be made and models used to evaluate the ground-water plume contaminated with tritium that is approaching the boundary of the Hanford site and the Richland water supply wells. Evaluation of Hanford building to meet National Historic Preservation Act requirements will be expanded and appropriate documentation and criteria developed for determining eligibility to the National Register. Integration with Native American groups around Hanford will expand as they have expanded rights to review actions on DOE site that impact their cultural heritage. Monitoring data will be collected and packaged in a manner to be used in Natural Resources Damage Assessment claims.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID TITLE

PLANNING

TARGET

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

The environmental surveillance of Hanford and vicinity will continue as required by DOE Orders and state and federal environmental regulations. The program will be modified as needed to monitor restoration activities that could have an environmental impact. The elements of a comprehensive environmental monitoring program will include:

- ± surface and ground water monitoring
- ± wildlife resources monitoring
- ± meteorology and climatology services
- ± dosimetry coordination
- ± NEPA documentation
- ± environmental oversight
- ± analytical support services

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

The regulatory drivers are listed below. The DOE Order 5400.5 will be issued in FY94 as 10 CFR 834.

Driver: DOE 5400.1
Affected Scope/Cost/Schedule:
Surface Environmental Surveillance
Ground Water Surveillance
Meteorology and Climatology
Hanford Environmental Oversight
Radiation Standards
Wildlife Resources Monitoring
Dosimetry Coordination

Consequence: Compliance with DOE ES&H requirements will not be met if these activities are not funded.

Driver: 5400.5
Affected Scope/Cost/Schedule
Hanford Environmental Oversight
Dosimetry Coordination
Ground Water Surveillance
Meteorology and Climatology
Surface Environmental Surveillance

Consequences: Compliance with DOE ES&H requirements will not be met if these activities are not funded.

Driver: DOE/EH-0173T
Affected Scope/Cost/Schedule
Surface Environmental Surveillance
Ground Water Surveillance
Meteorology and Climatology
Hanford Environmental Oversight
Radiation Standards
Wildlife Resources Monitoring
Dosimetry Coordination

Consequences: Compliance with DOE ES&H requirements will not be met if these activities are not funded.

Driver: 40 CFR Part 61, Subpart H
Affected Scope/Cost/Schedule
Dosimetry Coordination
Surface Environmental Surveillance
Meteorology and Climatology

Consequences: These activities are needed for RL to comply with CAA NESHAPS regulations.

Driver: 42 USC 4321
Affected Scope/Cost/Schedule

NEPA Characterization and Implementation

Driver:

E.O. 11593

16 U.S.C. 470

36 CFR Part 800

43 CFR Part 7

42 U.S.C. 1996

Affected Scope/Cost/Schedule

Cultural Resources

Consequences: Non-compliance with these Federal regulations if these activities are not funded.

Drivers:

16 U.S.C. 661

16 U.S.C. 1531

Affected Scope/Cost/Schedule

Wildlife Resources

Consequences: Non-compliance with these Federal regulations if these activities are not funded.

PNL conducts environmental surveillance and oversight activities for the DOE to identify the status of radiological and nonradiological discharges to the environment. The environmental or human risk of Hanford operations and existing environmental contamination would not be known if these activities were not completed. The radiological dose from Hanford activities must be documented because of the implications to human health.

REGULATORY KEY ISSUES:

Issues that impact the implementation of these activities in FY95 and beyond are:

- . Integration or clarification of areas of responsibility of the environmental surveillance conducted by WHC and PNL, and the ERMAC contractor.
- . Conduct of long-term monitoring to meet CERCLA and RCRA requirements after ROD's are completed.
- . The DOE Orders affecting ES&H are being revised and will be issued in the Federal Register as regulations. The impact of the changes and new requirements are not known.
- . Implementation of the PNL Ecological Compliance Assessment Project to meet NEPA requirements.

COMP/PROG BENEFITS AT PLANNING LEVEL:

These activities provide RL with compliance with Federal Regulations and ES&H requirements. The monitoring data are used for evaluating impacts of

Hanford activities and serve as a baseline for initiating detailed RI/FS studies. Past and current data on the Columbia River will be used in the Columbia River Risk Assessment. The data are continually used for answering inquiries about Hanford impacts and for briefing the public on the environmental impact of Hanford. Without these activities, there will be no technical basis for describing the environmental status of Hanford and the surrounding area. The forecasting service provided by the Meteorology and Climatology project are extensively used by the O&M contractor when any work is performed on the Hanford waste tanks.

CONCERNS AT PLANNING LEVEL:

At the planning level, all regulatory requirements that exist at this time and that pertain to the environmental programs described in this Task Description Document will be met.

REQUIRED TECHNICAL DEVELOPMENT:

Not applicable.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8400 ADS SUF: 0 SUBACTIVITY: CB

SUBACTIVITY TITLE: HANFORD ECOLOGICAL COMPLIANCE ASSESSMENT

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: D VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECH RES-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE	EW3130040	0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL	BUD	LEGAL	ESH	TOTAL			
OE	EW3130040	0	193	208			208	792	815	840
TOTAL		0	193	208	0		208	792	815	840
DIRECT FTE		0	1	1	0		1	5	5	5

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL	BUD	LEGAL	ESH	TOTAL			
OE	EW3130040	0	193	769			769	792	815	840
TOTAL		0	193	769	0		769	792	815	840
DIRECT FTE		0	1	5	0		5	5	5	5

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

The Pacific Northwest Laboratory (PNL) established the Hanford Ecological Compliance Assessment Project to provide an efficient and effective mechanism for RL/contractor compliance with federal and state environmental laws and regulations, and DOE Orders during the Operations of the Hanford Site. The U.S. Department of Energy (DOE) is required to protect sensitive ecological resources, to consider potential impacts on such resources from DOE activities, and to conduct such activities in a manner that protects the long-term maintenance and enhancement of species listed for protection under the Endangered Species Act (ESA).

In order to provide an accurate evaluation of the presence of sensitive species, areas must be surveyed during appropriate times of the year. The Hanford Ecological Compliance Assessment Project will implement routine baseline surveys in areas where the majority of reviewed projects would be expected to occur. The majority of assessment requests involve projects in the 100, 200, and 300 Areas. Consequently, the Ecological Compliance Assessment Project will conduct baseline surveys of these areas. These baseline surveys will be conducted in abandoned buildings and all outdoors-ports of the designated areas except within Surface Contamination Areas (SCAs) or High Radiation Zones (HRZs).

Projects requesting reviews that fall outside the baseline surveyed area will provide funds (via work order for intercontractor reviews or work packages for intracontractor reviews) when field work, extensive library research, or interaction with state, tribal, or non-DOE federal officials is required.

HECA Project Objectives

The Hanford Ecological Compliance Assessment Project assures the Department of Energy, Richland Operations Office (RL) that actual and potential impacts of site operations on sensitive ecological resources at Hanford are identified and evaluated, and that impacts to protected species are evaluated and documented in the manner required by NEPA and the Endangered Species Act (ESA). In addition, the Hanford Ecological Compliance Assessment Project provides RL with information it needs to interact with federal, state, and tribal agencies on ecological resource issues, thereby helping RL maintain positive working relationships with other governmental organizations concerned with the ecological resources of the Hanford Site. The Project also provides RL with the information it needs to evaluate the cumulative impacts of all Hanford projects on the ecological resources of the Site.

Baseline Environmental Surveys: This work element will provide the baseline ecological data for ecological compliance reviews in the non-SCAs and HRZs of the 100, 200, and 300 Areas. The surveys will be conducted during the winter period for the 100 and 300 areas to obtain information on protected species use of these habitats during the winter months. The 100, 200, and 300 Areas will be again surveyed in the spring and early summer to evaluate these areas for the presence of protected plants and wildlife. All requests for ecological compliance reviews received for activities in these areas will be evaluated against the ecological baseline obtained

under this task. Other requests for reviews in SCAs, HRZs, and the 400 and 600 Areas, will require site-specific surveys funded by the projects with the proposed action.

Ecological Compliance Assessments: After receiving requests for ecological compliance reviews, project staff will conduct an initial screen to determine if the proposed action could have direct ecological impacts. Criteria to be used in this review include examination of the location of the proposed action with regard to the ecological environment, a literature and database review to determine whether the area of the proposed action had a recent survey to evaluate ecological resources. The review will include literature on related surveys in the area or nearby within the recent (1 yr.) past. If records are inadequate for determining whether protected ecological resources would be affected by the proposed, staff will conduct field surveys of the proposed action site(s). Any protected ecological resources encountered will be spatially mapped in the field for inclusion in the ecological resources database. A letter report will be completed for all reviews documenting survey methods, results, findings, and recommendations regarding impact and possible mitigation. Specific information on sensitive ecological resources, habitat descriptions, and species lists will be included as appropriate to the proposed action.

Impact Management: This work element includes providing direct technical support to RL and WHC during the planning phases of specific proposed actions for the purposes of protecting ecological resources and minimizing impacts through early project planning. As part of that support, the project will maintain a database of site information on ecological resources. Work on this task is essential in an overall resource management framework.

Database Management: This task will encompass development, data acquisition, and management of the Hanford Ecological Compliance Assessment Project data. Data to be included in the database will encompass project records (e.g., training, milestones, summary reports), action-specific records (e.g., maps, assessment requests), and ecological resource baseline data (e.g., species lists associated with spatial coordinates in a map-based interface system, nesting locations of protected birds). The database system is expected to have a map-based interface, with accessibility limited to PNL project staff and the RL sponsor.

Annual Reporting: An annual report of FY 1994 activities will be prepared and published. This report will describe in summary the ecological reviews that occurred in the FY and detail the cumulative direct impacts to ecological resources from Hanford activities that were reviewed under the Project. A description of ecological compliance assessment activities will be provided to the manager of the Surface Environmental Surveillance Project for inclusion in the annual report. Environmental Monitoring at Hanford.

RELATED ACTIVITIES NARRATIVE:

The HECA Project is closely integrated with the Hanford Site Cultural Resources Project (8400-0-BB) since the drivers for cultural resources reviews are generally the same as the ecological reviews. The HECA Project

shares their database information with the Wildlife Resources Project (8400-0-CA) and vice versa.

KEY ASSUMPTIONS:

- DOE Orders and federal and State environmental laws and regulations will continue to require ecological compliance assessments prior to initiating new activities on Site.
- Identification and protection of ecological resources will continue to be major concerns as remediation is conducted.

ACTIVITY BY PRIORITY:

All activities are Priority 2.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

During the first half of FY94, full implementation of the HECA has been delayed by difficulties in transferring resources from WHC to PNL. However, significant progress was attained with base funding from 8400-0-CA (\$200K). The database management system was procured and is operational. Minor modifications of the system continue. Approximately 25 high priority review requests were processed during the quarter using work order funding, with over 150 review requests yet to be processed. The window for the Site winter survey was missed because of lack of funds transfer. The summer survey will begin in May. The Hanford Ecological Compliance Assessment Management Plan is presently being drafted. Project staff have also been assisting RL in developing the scope and requirements for the Hanford Site integrated biological resource mitigation policy, which will be documented in a Resource Enhancement Plan to be developed this fiscal year.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0095	SUBMIT ANNUAL REPORT OF ECOLOGICAL COMPLIANCE ASSESSMENT ACTIVITI	9/30/94	9/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

During FY-94, the Hanford Ecological Compliance Assessment Project was established at the direction of RL to consolidate site ecological resources and provide ecological assessments in support of site's NEPA requirements. Considerable effort has been directed towards identifying funds to be transferred from WHC. The Hanford Ecological Compliance Assessment Management Plan is presently being drafted, with the completion date for this plan being delayed pending receipt of complete funding from WHC and other program elements. Staff have also been assisting RL in developing the scope and requirements for the Hanford Site integrated biological resource mitigation policy, which will be documented in a Resource Enhancement Plan to be developed in draft form this fiscal year.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

In FY95 HECA Project will continue to support the Department of Energy, Richland Operations Office (RL) in assuring that actual and potential impacts of site operations on sensitive ecological resources at Hanford are identified and evaluated, and that impacts to protected species are evaluated and documented in the manner required by NEPA and the Endangered Species Act (ESA). Specific activities will include project management, conducting baseline and special surveys, maintaining the project database, and supporting DOE-RL in their interactions with state and federal regulatory agencies. The project will also provide RL with the information it needs to evaluate the cumulative impacts of all Hanford projects on the ecological resources of the site.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

In FY96, HECA Project will continue to support the Department of Energy, Richland Operations Office (RL) in assuring that actual and potential impacts of site operations on sensitive ecological resources at Hanford are identified and evaluated, and that impacts to protected species are evaluated and documented in the manner required by NEPA and the Endangered Species Act (ESA). Specific activities will include project management, conducting baseline and special surveys, maintaining the project database,

and supporting DOE-RL in their interactions with state and federal regulatory agencies. The project will also provide RL with the information it needs to evaluate the cumulative impacts of all Hanford projects on the ecological resources of the site.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

In outyears, HECA Project will continue to support the Department of Energy, Richland Operations Office (RL) in assuring that actual and potential impacts of site operations on sensitive ecological resources at Hanford are identified and evaluated, and that impacts to protected species are evaluated and documented in the manner required by NEPA and the Endangered Species Act (ESA).

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

Endangered Species Act (ESA) of 1973, 16 USC 1531-1543; 50 CFR 10, 13, 17, 222, 226-227, 402, 424, 450-453

The ESA makes it illegal to kill, collect, remove, harass, import, export, or conduct either interstate or international commerce in an endangered or threatened species without a permit from the Secretary of the Interior. The ESA also requires that all federal agencies shall use their authorities to carry out programs that conserve endangered or threatened species. Violation of the ESA is a criminal offense punishable by fine and/or imprisonment. Compliance with the ESA is set forth in DOE Order 5482.1B, Environment, Safety, and Health Appraisal Program.

National Environmental Policy Act (NEPA) of 1969, 42 USC 4321-5361; 40 CFR 1500-1508; Executive Order 1154-14, as amended by Executive Order 11991.

NEPA requires federal agencies to identify and develop methods and procedures to insure that environmental amenities and values are given appropriate consideration in decision making. DOE's procedures for compliance with NEPA are set in DOE Order 5440.1E, National Environmental Policy Act Compliance Program. To implement these procedures, a biological characterization is required at proposed activity locations. Additionally, DOE's regulations implementing NEPA (10 CFR 1021, Appendix B) specify that any action proposed for categorical exclusion be without impact to federal threatened, endangered, or candidate species, or state-listed endangered or threatened species.

Migratory Bird Treaty Act (MBTA), 16 USC 703-712; 50 CFR 10, 13, 21

The MBTA makes it illegal to take, capture, kill, etc. any migratory bird, or any part, nest, or egg of any birds included in the terms of the conventions between the United States and Great Britain for the protection of migratory birds concluded August 16, 1916, and the United States and the United Mexican States for the protection of migratory birds and game mammals concluded February 7, 1936. Violation of the MBTA is a criminal offense punishable by fine and/or imprisonment. Compliance with the ESA is set forth in DOE Order 5482.1B, Environment, Safety, and Health Appraisal Program.

Bald And Golden Eagle Protection Act (BGEPA), 16, USC 668-668d; 50 CFR 10, 13, 22

The BGEPA makes it illegal to take any bald or golden eagle, or any part, nest, or egg of these eagles. Take is defined to include pursue, wound, kill, molest, or disturb. Provisions of the BGEPA are enforced through the Secretary of the Department of Interior. Violation of the BGEPA is a criminal offense punishable by fine and/or imprisonment. Compliance with the ESA is set forth in DOE Order 5482.1B, Environment, Safety, and Health Appraisal Program.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC 9601-9657, 40 CFR 300 and 302; as amended by Superfund

Amendments and Reauthorization Act (SARA) of 1986, Public Law 99-499

The National Contingency Plan, under CERCLA and the Clean Water Act, identifies responsibility for natural resource trusteeship, which was delegated by CERCLA 107(f)(2) and Executive Order 12580 to designated federal officials: the Secretaries of Defense, Interior, Agriculture, Commerce, and Energy. CERCLA and the NCP (Subpart G) authorize the designated natural resource trustees to assess damages for injury to, destruction of, or loss of natural resources on lands managed or protected by them. Identification of natural resources present, including biological resources, is required as part of the damage assessment process. DOE's implementation of CERCLA is set forth in DOE Order 5400.4, Comprehensive Environmental Response, Compensation, and Liability Act Requirements.

Clean Water Acts (CWA) of 1977, 1978, and 1987; 40 CFR 110, 112, 116, 117, 122-125, 129, 131.

The CWA sets forth requirements for the delineation and protection of wetlands. Filling or alteration of wetlands require a permit from the US ACOE.

REGULATORY KEY ISSUES:

None.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Current Target Level funding is not sufficient to provide the project elements necessary to assure that DOE-RL is in compliance with the various elements necessary to assure that DOE-RL is in compliance with the various federal and state environmental laws and regulations. The alternative to attempt to fund the various activities through the work order process has proven to be unworkable in site-wide activities such as the HECA Project. No one project or program is willing to fund area-wide surveys at 'appropriate' times of the year. Thus, Planning Level funding is necessary to assure full regulatory compliance.

CONCERNS AT PLANNING LEVEL:

Not applicable.

REQUIRED TECHNICAL DEVELOPMENT:

None.

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

This is a continuing activity which includes all operational activities (acceptance, handling, storage, packaging and shipment) needed to dispose of the Pacific Northwest Laboratory's (PNL) Resource Conservation and Recovery Act (RCRA), and Toxic Substances Control Act (TSCA) waste. In addition, the management, review and coordination for the acceptance of all of PNL's low-level, mixed and transuranic (TRU) waste. Included in the technical scope is the compliant operation of the 305-B permitted hazardous waste storage unit and the <90 day MRC storage area. This activity also includes regulatory oversight, inspection, review, and waste management assistance needed for compliance in all 300 Area PNL facilities as well as several 600 Area, 100 Area and 200 Area facilities. This activity has responsibilities for management and oversight of compliance related activities associated with hazardous, radioactive and mixed waste in support of defense and multi-program laboratory (MPL) waste operations and continuity of operations ongoing over 150 buildings. New projects, proposals and test plans numbering up to 1000 per year, are also reviewed by this activity for compliance and waste disposal issues. This project has approval and shutdown authority if projects or facilities do not meet current waste disposal or environmental regulations.

ADS 8400-00-DA includes recycling efforts, training, spill control and cleanup, continuity of operations, and supports the permitting and closure activities for Part B RCRA permits covered by the Tri-Party agreement (see TPA milestones M-20).

The technical scope of this ADS also includes auditing of offsite Treatment, Storage, Disposal (TSDs) facilities and the technical administration of waste disposal contracts. Also included is the management of RCRA waste in compliance with the land disposal restrictions (LDR) as noted at 40 CFR 268.50.

PNL Operations currently generated between 20-40,000 Kgs. of hazardous waste, 10-25,000 cu. ft. of low-level waste, 200-500 cu. ft. of mixed waste, and 100-300 cu. ft. of TRU waste annually. Hazardous waste is generated in quantities of 800-900 fifty-five gallon sized containers annually. This is principally lab packed or 'bulked' chemicals generated in R&D activities.

All types of hazardous waste are generated including acids, alcohols, aldehydes, carbonates, caustics, cyanides, ester, ethers, fluorides, hydrocarbons, ketones, nitrates, peroxides, PCB's, phenols, sulfides, explosives, flammables, combustibles, oxidizers, asbestos, reactives, carcinogens, corrosives, etc. Approximately 4000 individual hazardous waste designations must be completed annually.

RELATED ACTIVITIES NARRATIVE:

This activity supports all DOE activities at PNL which produce a waste stream or need an environmental permit to operate. In this sense, any and all activities of this nature are related.

KEY ASSUMPTIONS:

The basic assumptions that are key to successful completion of milestones are that no major changes will be made in Federal, State or local regulations, budgets will be fully funded, and that external costs not controlled by DOE programs (e.g., offsite TSD fees) remain relatively consistent with normal inflation. It is also assumed that work scope at PNL facilities will remain constant and that no major new programs will generate waste volumes or types in quantities significantly larger than historical practices. PNL has been growing at a 10% rate; this growth is expected to continue. It is also assumed that existing permit applications will be the only ones needed over the next five years.

This activity also assumes there will be no significant budget impacts as a result of LDR on waste disposal costs. It also assumes the current DOE-HQ moratorium on 'suspect' waste will not result in a decision to include more PNL waste into the 'mixed waste' category.

This activity also assumes the Washington State Department of Ecology will not require increased analytical verification of RCRA waste beyond what is currently anticipated in the draft 305-B permit application. Other assumptions are that there will be no major impacts due to the new DOE performance oriented packaging (POP) regulations. An extensive phase in with DOE-HM-181 rules began 10/1/91 and will continue until 10/1/96.

ACTIVITY BY PRIORITY:

The activities of this project are principally Priority 1. These are ongoing waste disposal operations required to maintain safe conditions. By proper disposal of existing and as generated hazardous and radioactive waste, the potential for spread of contamination and release to the environment is minimized.

Priority 2 activities include the preparation of necessary permit documents to meet the requirements of the Tri-Party Agreement. Activities supporting the operation of the 305-B interim status hazardous RCRA waste storage facility are included here.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

WASTE MANAGEMENT OPERATIONS (PNL)
WASTE MANAGEMENT OPERATIONS (PNL)
WASTE MANAGEMENT OPERATIONS (PNL)

TASKS COMPLETED TO DATE:

All hazardous materials have been inventoried, and a major clean out of potentially shock sensitive or explosive chemicals has been completed.

essentially all of PNL's RCRA non-mixed legacy waste has been disposed. At the 1234 yard the treatment of legacy hazardous waste was completed, the treated waste disposed, and the site closure plan has been submitted to Ecology for approval. The storage facility (305-B) for RCRA hazardous and mixed waste has been upgraded to meet interim status standards; the Part B permit application has been submitted on schedule and is being incorporated into the site-wide permit. All RCRA and TSCA annual reports have been submitted to EPA and Ecology per Federal and State requirements.

The 305-B facility and MRC facility are fully functional and handling all PNL RCRA hazardous waste. Radioactive and mixed waste certification plans are written, and radioactive waste disposal operations are ongoing. All waste that can be disposed has been disposed per scheduled commitments. PNL radioactive waste is being routinely shipped to onsite facilities operated by WHC per approved certification plans.

The 305-B waste minimization plan has been implemented and is being followed. Facility inspection programs are ongoing. Approximately 25 PNL-operated facilities are inspected annually with approximately 150 individual buildings potentially involved. All scheduled offsite TSDF inspections have been met per ADS scope.

Phase in with new HM-181 rules (see 49 CFR 171.14 [c] [3]) has been initiated and will continue through 10/1/96. Equipment has been procured and installation is underway to allow performance oriented packaging testing.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0070	COMPLETE SUCCESSFUL ANNUAL DISPOSITION OF HAZARDOUS & RMW	9/30/94	9/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

This ADS activity is divided into four operational components or tasks. Each task will be discussed separately.

Waste Operations - All non-radioactive hazardous waste will be properly collected, stored, packaged and shipped for disposal. Limited quantities of mixed waste are also managed as well as assistance to generators for infield management of low-level and mixed waste. Costs for operating and maintaining the RCRA permitted waste storage unit as well as offsite waste disposal costs are collected here. All PNL operations must meet the regulatory drivers outlined in the Washington State Dangerous waste regulations (WAC-173-303). Annual quantities of RCRA waste totaling 20-40,000 kgs will be managed. Other lab waste such as animal waste, and other non-RCRA regulated solid waste are managed in this task. Waste verification sampling and analytical activities are coordinated in this task. Sampling must be done per Federal EPA requirements outlined in SW-846 (test methods for evaluating solid waste). Data for RCRA and TSCA annual reports (Generator Annual dangerous Waste Report - Form 4, and Waste Management Facility Annual Dangerous Waste Report - Form 5) required by the EPA and the Department of Ecology are prepared by this task.

Staff also perform the waste designation for thousands of RCRA waste streams generated annually by PNL staff. Approximately 4000 hazardous waste designations are done annually.

Recycling activities are coordinated by this task. In FY94, efforts to recycle all possible excess chemicals, waste materials, paper, etc. will be made. Waste minimization and recycling is required per Federal regulations for anyone manifesting hazardous waste. Spill cleanup assistance is provided by this task. Trained staff respond to small chemical spills generally less than 5-gallons in size. Spill response to larger spills is beyond the scope of this task and would involve the Hanford Hazmat Team.

Technical Services - This activity will maintain the technical interface between PNL and WHC to assure Storage Disposal Approvals Requests (SDARs) are prepared for all radioactive waste streams. This includes LLW, TRU, and RMW waste. Hundreds of SDAR's are prepared annually.

The management and oversight of PNL's certification programs for low-level and transuranic waste are coordinated in this task including the necessary quality assurance activities. LLW certification training must be conducted as well as annual audits. Management of limited amounts of special case waste, spent fuel, and high level waste also occurs. Pending DOE-HQ comments, a revised performance objectives documents will be completed and implemented. The operational oversight and approval for disposal of ~2-5,000 gallons annually of radioactive liquid waste through PNL's radioactive liquid waste system will be managed. This also includes

training and inspections, record keeping and providing approval authority to discharge to the system.

Packaging and Transportation - This task will provide the guidance and oversight for the packaging and transportation of all hazardous waste and materials subject to Department of Transportation (DOT) requirements. All regulated waste managed in the waste operation task is subject to DOT requirements. This task also includes oversight of both exporting and importing activities of hazardous materials at PNL. Specific activities will include:

- update shipping manuals to comply with phase in of the Federal performance oriented packaging criteria (HM-181)
- setup and operate a facility (332 Building) to perform physical tests on selected shipping packages to assure compliance with DOT
- provide annual training and surveillance for shipping representatives in all PNL facilities.
- submit and maintain all licenses and certifications required by NRC and DOE for shipping containers.

PNL utilizes 12 casks which are covered by Safety Analysis Reports for Packaging (SARPs). These SARPs must be routinely updated.

Cask certification will continue in FY94. Safety analysis will be necessary to qualify some casks, such as the EBR-II casks to move TRU waste to disposal sites.

The shipping manual will be updated to include additional information concerning performance oriented packaging pertaining to the transport of hazardous material in aircraft.

A Transportation Safety Manual will be drafted that will delineate the methods used to show how an equivalent degree of safety is achieved in transporting hazardous materials in areas where the public does not have access. These requirements are expected to become mandatory as the State agencies have become more involved with hazardous waste management.

QA programs will be developed to more specifically address requirements for design, fabrication, and operation and maintenance of packaging that will have to meet international requirements. It is expected that in 1994 the U.S. regulations will be changed to be the same as the international regulations.

Packaging tests will be enhanced to determine how packages resist shock and crush. It is anticipated that other environmental conditions will have to be evaluated such as temperature, humidity. PNL is expanding its capabilities to perform these types of tests.

Training will be expanded to reflect the phase-out of the pre-HM-181 requirements. Staff will be educated on how the HM-181 rulemaking will influence shipments by surface. It is anticipated that in 1994 most companies involved in shipping hazardous materials will be fully converted

to the requirements spelled out in the HM-181 docket.

Permitting and Inspection - During FY94, this task will coordinate the RCRA Part B permitting for the 305-B hazardous waste storage unit. The Hanford Site-Wide Permit will be reissued by the State of Washington for additional public comments in early CY 1994. The 305-B permit chapter will be incorporated into the site-wide permit per TPA schedules outlined in milestone M-20. This task will also provide technical review and coordinate the submittal of the 325 Building and 3100 Building hazardous waste treatment permit which was submitted to the State in April 1992. Guidance will be given to laboratory staff initiating other RCRA permits as needed and defined in TPA milestone M-20.

A minimum of 25 of PNL's hazardous waste generating facilities including all interim status facilities will be inspected for compliance with Federal (EPA) and State (Ecology) requirements for hazardous waste generation, storage, and/or treatment.

All PNL proposed projects identified during the year will be reviewed to assure any waste generation, disposal or permit issued are evaluated for Federal, State, and local requirements. Offsite TSDFs accepting PNL hazardous waste will be audited for compliance prior to and after accepting PNL waste.

Closure of 1234 yard waste treatment unit and administrative closure of two other units may be initiated in FY94 pending Ecology approval of the previously submitted Closure Plan.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:

The scope of Waste Operations and Technical Services activities will continued essentially the same as described for FY94.

During FY95, the Packaging and Transportation task will continue to provide guidance and oversight involving the shipping of hazardous materials both on and offsite. This also includes the exporting and importing of hazardous materials. Some specific actions include the following:

A comprehensive review will be taken to ensure that the Shipping Manual incorporates all the requirements specified in the HM-181 docket. Based on that review changes will be made to the manual as needed.

A packing catalog will be produced to list the types of packages that have been tested to meet the performance oriented packing tests. The catalog will enable staff to select the type of container that will enable them to ship hazardous materials.

Packaging testing will continue based on the PNL shipping needs. Annual training of hazardous material packagers will be completed.

Certification tasks will be performed to maintain the licenses for shipping casks.

The permitting and inspection task will focus on permit activities.

The State approved Part B Permit for the 305-B waste storage unit should be in place as part of the site-wide permit. Operations of the unit in full compliance with the State dangerous waste regulations defined in WAC-173-303 for operating fully permitted facilities rather than interim status will be in effect. Efforts will focus on additional recycle activities with a goal of further reducing disposal costs via reuse and recycle. Increased wet chemistry analytical activities in support of Hanford tank waste and site restoration activities is expected to increase the volume and types of wastes generated at PNL making cost-effective waste management critical to assure site cleanup and tank safety issue resolution remain on schedule.

At least 25 of PNL's hazardous waste generating facilities including permitted and interim status facilities will be inspected for compliance with Federal (EPA) and State (Ecology) requirements for hazardous waste generation, storage, and/or treatment. All PNL proposed projects will be reviewed to assure any waste generation is evaluated for Federal, State, and local requirements. Offsite TSD's will be inspected to assure compliance with applicable regulations.

The Thermal Treatment Test Facility Part B Permit applications will be in the NOD review cycle with Ecology. Support will be provided for the preparation and submittal of the Physical/Chemical Treatment Test Facilities Part B Permit application. Support will also be provided for the preparation of the Biological Treatment Test Facilities Part B Permit application. Technical support will be provided to the SHLWS closure effort.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0075	COMPLETE ANNUAL INSPECTION AND REVIEW OF WASTE GENERATING FACIL	9/30/96	9/30/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

The scope of Waste Operations and Technical Services, Packaging and Transportation, and permitting and inspection tasks will continue much the same as described in FY 94 and FY 95. This is a continuity of operations project.

During FY 96, the packaging and transportation group will continue to provide guidance and oversight involving the shipping of hazardous materials both on and offsite in compliance with the continued phase in of HM-181 regulations. This also includes the exporting and importing of hazardous materials.

At least 25 of PNL's hazardous waste generating facilities including interim status facilities will be inspected for compliance with Federal (EPA) and State (Ecology) requirements for hazardous waste generation,

storage, and/or treatment. All PNL proposed projects will be reviewed to assure any waste generation is evaluated for Federal, State, and local requirements. Offsite TSD's will be inspected to assure compliance with applicable regulations.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0080	REVISE RCRA PERMIT APPS FOR PNL WASTE TREATMENT/STORAGE OPS	9/30/97	9/30/97

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

By the end of FY 2000, all PNL waste treatment or storage operations will be fully permitted per TPA scheduled milestones. All operations not requiring environmental permits will be governed by approved procedures and certification plans. All closure activities will be completed including the 1234 simulated high level waste treatment unit and the administrative closure of both the 332 and 324 units. All operations will be conducted in compliance with the letter and spirit of applicable ES&H requirements.

Full compliance with Performance Oriented Packaging Program should be achieved. Routine support for waste disposal from Hanford tank waste characterization analytical activities will be achieved. Hazardous material shipping support for the Medical Isotope Program, Environmental Surveillance Program, Material Characterization Program, and Military Weapons Program will be in full compliance.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

Hazardous waste activities are driven by the requirements of RCRA as defined in the 40CFR and the dangerous waste regulations defined by the State of Washington in WAC-173-303. Radioactive and mixed waste are defined by the above as well as drivers in 10CFR.

Transportation and shipping of waste and hazardous materials are driven by the requirements in 49CFR and the new HM-181 regulations.

PCB and asbestos waste management is driven by the federal Toxic Substance Control Act (TSCA).

Permitting requirements are driven by the Tri-Party Agreement and the Hanford Facility RCRA Permit.

There are other governing regulations that apply to a lesser extent including NEPA, CAA, CWA, etc.

This activity has been classified as Priority 1C due to maintaining ongoing activities (continuity of operations) that if terminated could result in significant EM program and/or resource impacts. Activities include management of regulated waste, including all hazardous and toxic waste, LLW, Mixed Waste, TRU, TRU Mixed Waste, greater than Class C waste, HLW, and other solid waste. Also included are support for permitting, closure plans, and management and oversight of compliance activities. If hazardous and radioactive wastes is not properly managed, environmental damage will result, personnel exposure and/or injury will result, and major economic expenditures would be required to recover. Failure to fully fund this activity could result in noncompliance with numerous environmental and safety requirements and subsequent delay in meeting numerous Tri-Party Agreement milestones. This activity provides the overall support that allows other projects to operate and manage their environmental and waste management activities in compliance with federal and state regulations.

REGULATORY KEY ISSUES:

Issues revolve around the assumptions made, as shown in Key Assumptions Section, which are key to the success of this activity. The assumption that no major changes will be made in Federal, State or Local regulations and that budgets will be fully funded. External costs not controlled by DOE programs (e.g., offsite TSD fees) will remain relatively consistent with normal inflation. Costs have historically risen at higher than inflation. The specific impacts of the Federal Facility Compliance Act, specifically with regards to mixed waste management, is an uncertainty. If RCRA authorization occurs, higher costs will be incurred. Offsite disposal costs per drum can vary as much as a factor of 10-15X depending on the specific waste type. With PNL's waste streams being entirely non-uniform, disposal costs can be inconsistent from year-to-year.

The assumption that work scope at PNL facilities will remain relatively constant and that no major/new program will generate waste volumes or types

in quantities significantly larger than historical practices. If the DOE-HQ moratorium on 'suspect' waste results in a requirement to include more waste into the 'mixed waste' category costs will escalate.

The ability to completely dispose of several of PNL's highly radioactive waste streams is uncertain. Special case waste, greater than Category 3 waste and certain remote handled wastes cannot be accepted by Hanford's operational engineering contractor. PNL must maintain these wastes in a safe condition until a disposal or approved long-term storage pathway is available.

It is also assumed that existing permit applications will be the only ones needed over the next five years. At issue is the current conflict of opinion among Ecology, EPA, and DOE regarding the Hanford Site-wide Permit details. The Washington State Department of Ecology has indicated increased analytical verification of RCRA waste beyond what is currently planned and defined in the draft 305-B Permit application. If requirements are expanded and becomes part of the final permit, analytical costs will escalate drastically.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Additional funding above the target level would provide more expedient disposal of waste streams. It would also allow for procurement of more sophisticated equipment to analyze and/or screen potential mixed waste for waste minimization opportunities. More detailed and frequent inspections of facilities could be done and more in depth reviews of projects, a more 'proactive' waste management approach would be achieved. Enhanced efforts to dispose of legacy and problem waste streams would be initiated.

CONCERNS AT PLANNING LEVEL:

Verbatim compliance with DOT regulations can not be met at the current planning level. In early FY93, DOE removed security forces from the 300 Area. This now subjects this area to full compliance with DOT regulations. Delays in offsite shipping, reviews, inspections, and waste pickups must occur as a cost tradeoff.

Since it is not practical or cost-effective or in some cases possible to meet verbatim compliance, alternate transportation methods such as barricading roads, to avoid DOT regulations are necessary. These methods are not the most effective utilization of staff resources.

REQUIRED TECHNICAL DEVELOPMENT:

None.

in quantities significantly larger than historical practices. If the DOE-
HD moratorium on "suspect" waste results in a requirement to include more
waste into the "mixed waste" category costs will escalate.

The ability to completely dispose of several of RWL's highly radioactive
waste streams is uncertain. Special case waste greater than Category 3
waste and certain remote handled wastes cannot be accepted by licensed
operational engineering contractor. RWL must maintain these wastes in a
safe condition until a disposal or approved long-term storage facility is
available.

It is also assumed that existing permit applications will be the only ones
needed over the next five years. An issue in the current conflict of
interest among Ecology, EPA, and DOE regarding the Hanford Site-wide Permit
exists. The Washington State Department of Ecology has not yet
increased analytical verification of RCRA waste beyond what is currently
planned and defined in the draft 305-B Permit application. If requirements
are expanded and become part of the final permit, analytical costs will
escalate drastically.

**THIS PAGE INTENTIONALLY
LEFT BLANK**

CONCERNS AT PLANNING LEVEL
Additional funding above the target level would provide more expansion
of waste streams. It is assumed that the program of more
 sophisticated operations, materials and program expansion
of facilities could be achieved. Enhanced efforts
to dispose of legacy and problem waste streams would be initiated.

CONCERNS AT PLANNING LEVEL
Verify compliance with DOE regulations can not be met at the current
planning level. In early FY93, DOE removed security forces from the DOE
Area. This now subjects this area to full compliance with DOE regulations.
Delays in offsite shipping, reviews, inspections, and waste permits will
occur as a cost tradeoff.

Since it is not practical or cost-effective to increase capacity to
meet verbatim compliance, alternate transportation methods such as
paracardine roads, to avoid DOE regulations are necessary. These methods
are not the most effective utilization of staff resources.

REQUIRED TECHNICAL DEVELOPMENT
None.

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

Past 324 Building programmatic activities have left legacy nuclear fuel rods, samples, structural material, research equipment, vitrified waste in canisters, and contamination within D-Cell, A-Cell, and SMF South Cell; a contaminated shielded glovebox in Room 3G; and contaminated process equipment from past lithium loop operations. The objective of this project will be to complete packaging of fuel, samples, structural material, and decontamination waste; size reduce equipment; procure and load burial boxes and cask(s); ship the material for disposal as Low Level Waste or dry storage and decontaminate D-Cell and A-Cell (and associated gallery areas), Room 3G, and the lithium loop scrubber pad and associated equipment as required.

Legacy nuclear fuel rods, samples, non-fuel bearing hardware, structural material, processed radioactive fission products in glass canisters, and research equipment in 324 Building D-Cell, A-Cell, SMF South Cell, Room 3G, and an abandoned backup off-gas treatment system for the Lithium Loop, create a potential environmental, health, and safety liability for DOE and PNL. Clean out of A-Cell and D-Cell legacy waste and equipment will require the bulk of the effort under this program. Waste resulting from NE and EM waste glass and fuel characterization programs and the Federal German Republic (FRG) waste canister project have been left in D-Cell and A-Cell, respectively. Some of these wastes were left when the BWIP and SRP programs were terminated, others are programmatic wastes from NE. Most of the waste glass is associated with the FRG project (32 canisters). Other legacy material in D-Cell includes a manipulator, furnaces and other miscellaneous experimental support equipment, miscellaneous TRU waste material, and two containers of thorium nitrate solution. Removal of programmatic supporting equipment in D-Cell and A-Cell galleries will also be part of this activity. This project will also include identifying and shipping appropriate MCC samples for archiving at the 327 Building, procuring necessary transport containers, size-reducing and packaging waste material equipment, shipping the material according to its appropriate waste classification (e.g., special case waste, LLW), procuring and modifying decontamination equipment, and decontaminating the SMF, D- and A-Cells as required to make them available for future use and/or facilitate current use of the hotcells.

The SMF has been used to analyze and store irradiated structural samples for many years. Currently, there are several hundred samples and a sodium cleaning station that have been abandoned by past R&D programs. The samples require sorting and dose profiling to identify those still needed for research (archiving), those requiring disposal, and the disposal pathway for the highly radioactive material. This activity will support the required sorting, dose profiling, and packaging as waste those samples not required, and shipping the material for disposal and/or archiving, size reducing and/or removing the sodium cleaning station, and removing contamination.

An abandoned shielded glovebox, the legacy of a PNC sponsored program which operated over the 1978-1985 period, occupies Room 3G of the 324 Building. This glovebox was used to disassemble and package for shipment, special

sodium filter systems designed to trap residue from failed fuel elements. The disposal of this equipment will require an engineering study to determine the proper dismantling procedure, dismantling the glovebox in a greenhouse environment, procuring the required disposal containers (LLW, MW), packaging the glovebox remains and decontamination waste in containers, shipping the waste for disposal, and final decontamination of Room 3G.

The abandoned lithium loop off-gas treatment system, located immediately adjacent to the 324 Building, is expected to be slightly contaminated and require disposal as LLW or RMW. The system is still connected to the building ventilation system and consists of several stages of HEPAs, a scrubber, water separator, heaters, exhaust fan, and associated ductwork. In addition, the drain line from the system is connected to the 300 Area Radioactive Liquid Waste System (RLWS). The planned effort will include preparation of a decommission work plan, appropriate sampling to identify the required disposal path for the equipment, removal of all legacy equipment, packaging the equipment into suitable LLW/MW waste disposal containers, decontaminating the immediate area occupied by the equipment as required, and shipping the containers for disposal. In addition, the drain line to the RLWS and all interties to the existing EDL 101 ventilation system will be removed and the lines sealed, and the site made available for productive use.

RELATED ACTIVITIES NARRATIVE:

Clean out of D-Cell is dependent upon timely completion of the Hanford dry storage facility. The shipment of fuel from D-Cell and glass canisters from A-Cell are integrated with the shipment of nuclear fuel from B-Cell under the Safety Cleanout Program (ADS 8410-00-AA). This will allow the use of common equipment (e.g., casks, loadout equipment, and operating systems), and assure the most efficient use of resources. Similarly, the loadout of size-reduced equipment in D-Cell will be integrated with the loadout of similar equipment in B-Cell, utilizing the same grouting equipment and procedures. Cleanout of D-Cell is also dependent on the timely removal of cesium capsules, presently scheduled to occur in FY94 under the CsCl Legacy Safety Program 8400-00-SA. Timely consolidation of fuel in D-Cell to reduce the dispersibility of the radioactive inventory in the cell under the 324 Building Surveillance and Maintenance Project, ADS 8400-TA will assure that the material is packaged and shipped at the appropriate time.

KEY ASSUMPTIONS:

Loadout of special case waste and size reduced equipment and decontamination waste from D-Cell and A-Cell will be integrated with B-Cell waste removal activities to the maximum extent possible. Integration of B-Cell/D-Cell cleanout activities for special case waste (includes nuclear fuel) will allow some cost sharing for the dry storage system option and other disposal approaches and preclude having to procure separate systems and special load out equipment for D-Cell and A-Cell cleanout only. (The B-Cell Safety Cleanout Project budget includes funding for a dry storage

system to handle D-Cell Special Case Waste. This project includes funding to procure a dry storage system to provide interim dry storage for the A-Cell canisters.) Shipment assumes that WHC can complete all the arrangements to implement the dry storage system in a timely manner. If this disposal option is not available on a timely basis, the use of the EBR-II cask may be explored for D-Cell materials. It is assumed that disposal of all D-Cell and A-Cell waste via existing mechanisms within B-Cell can be accomplished without impacting the B-Cell cleanout schedule. The cost estimates for disposing of the Lithium Loop legacy equipment assume that the equipment will be mixed waste.

ACTIVITY BY PRIORITY:

All activities in this project are Priority 4.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

New activity.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:
No activity.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:
No activity.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:
No activity.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0005	COMPL NEPA DOCUMENTATION TO SUPP REMOVAL OF SCW FROM D & A CELLS	9/30/97	9/30/97
8400-00-0120	COMPLETE CLEANOUT ACTIVITIES IN THE 324 BUILDING SMF	9/30/98	9/30/98
8400-00-0125	COMP REMOVAL OF SIZE-REDUCED PROGRAMMATIC EQUIPMENT FROM D-CELL	9/30/99	9/30/99
8400-00-0135	COMP CLEANOUT AND DECONTAMINATION OF 324 BUILDING A-CELL	9/30/00	9/30/00

OUTYEAR (FY 1997-2000) TASK NARRATIVE:
FY97 Activity:

The activities in FY97 will be focused on project planning and design and initiating procurement of transfer, transport, and storage systems (e.g., dry storage casks for FRG canisters) and decontamination equipment. Appropriate NEPA/safety documentation will be revised/prepared as required and operational readiness activities will begin. Engineering studies will be initiated to support the planned decontamination and disposal activities. Preparation of procedures and training programs to support the cleanup activities will be started.

FY98 Activity:

Necessary NEPA/Safety documentation and operational readiness actions initiated in FY97 to support removing special case and RHTRU from D-Cell

and A-Cell will be completed. Activities will include completing the consolidation, packaging, and transfer to B-Cell of the nuclear fuel, fuel samples, and other radioactive material in D-Cell and the FRG Canisters from A-Cell consistent with the B-Cell schedule for disposal of Special Case Waste at the proposed Dry Waste Storage Facility (DWSF). As a part of this effort, a thimble to be used for packaging loose fuel rods in D-Cell for disposal will be designed and fabricated. Size reduction of residual equipment (furnaces and other programmatic equipment) in D-Cell will begin. Decontamination equipment for use in D-Cell will be procured and tested.

An engineering study to determine the disposition of material samples in the SMF storage vaults (e.g., MOTA, Monju) will be performed. Dose profiling of the SMF samples will be performed. Archive samples and material no longer needed will be removed from their present containers, packaged for disposal, and shipped. Dismantling of the sodium cleaning station in the SMF, South Cell will be completed, packaged and shipped. This will conclude cleanout activities in the SMF.

FY99 Activity:

Size reduction of programmatic equipment in D-Cell will be completed and shipped to disposal. Packaging of the programmatic equipment in A-Cell will also be initiated. Decontamination equipment will be modified for in-cell operations, and decontamination of the interior of D-Cell will begin. Contaminated programmatic equipment in D-Cell Gallery will be packaged and shipped. The associated D-Cell gallery area will be decontaminated.

FY 2000 Activity:

Size reduction of all equipment and decontamination of A-Cell will be completed. All equipment outside of A-Cell, but supporting previous A-Cell activities will be removed and disposed of as solid, low-level, or mixed waste (e.g., canister cooling loop). Cleanout of A-Cell will be complete. After there is no further need for the decontamination equipment in D-Cell, it will be size reduced and transferred to B-Cell for disposal in a grout container or disposed of via another route. Decontamination of the interior of D-Cell will be completed and all decontamination waste removed and shipped to disposal.

An engineering work plan will be prepared to determine the optimum decontamination and size reduction approach, and the required disposal path for the shielded glovebox in Room 3G. The plan will be implemented, disposal containers procured, the glovebox size reduced, loaded into disposal containers and shipped as LLW/MW as required. The duct port to the building ventilation system will be closed and the room decontaminated as required.

Activities on the Lithium Loop will include sampling the abandoned equipment to determine the correct disposal path, procuring the necessary disposal containers, size reducing the equipment, shipping for disposal and decontaminating the area occupied by the equipment as required.

This completes all work under this activity.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

The regulations, etc. most pertinent to this activity are as follows.

40 CFR 61, Subpart H: Outlines standards for governing air emissions of radionuclides.--WAC 246-247: 173-400 State regulations pertaining to Air emissions of radionuclide and pollution sources (40 CFR 261.3, 20, and WAC 173-3-3-140: Define the general characteristics of hazardous waste.--29 CFR 1910: Defines safe storage, control and disposal of nuclear materials.--DOE Order 5480.2a: Establishes minimum DOE requirements for managing its radioactive waste and contaminated facilities.

REGULATORY KEY ISSUES:

The legacy nuclear fuel, equipment, contamination and radioactive material inventory in the 324 Building creates a liability to DOE/PNL. The nuclear fuel and glass canisters must be removed and stored in an approved interim storage facility. Similarly the contaminated equipment and legacy contamination must be removed consistent with DOE guidelines for disposal of this material. The potential of RMW in the shielded glovebox and Lithium Storage Loop require that this abandoned equipment be removed in a timely manner. The hot cells within the 324 Building are research facilities and not storage facilities for radioactive material or RMW.

COMP/PROG BENEFITS AT PLANNING LEVEL:

None.

CONCERNS AT PLANNING LEVEL:

The thirty-two (32) canisters containing 8.4 MCi in A-Cell are a potential significant liability to DOE. The original plan was to ship the canisters to Germany for testing several years ago. The test program in Germany was cancelled. A-Cell was not designed as a storage facility and continued storage of this material in A-Cell will result in continued degradation of the hot cell and associated equipment and may lead to a safety problem.

Activities to be completed in this project are considered to be a high priority since comprehensive radiological cleanup of the 324 Building is necessary prior to facility turnover for further use in support of Hanford Site cleanup. Only by complete removal of the legacy radioactive materials, equipment, and contamination can staff and public safety, as well as the prevention of radionuclide releases to the environment be assured.

The legacy nuclear material/waste in D-Cell is a continuing environmental, health and safety concern. Current operating limits require that dispersible radioactive material in the 324 Building be reduced substantially below current inventories to minimize the risk to staff and public. Other than B-Cell, D-Cell has the only potentially significant

inventory of in-cell dispersible material. This existing inventory is in the process of being assessed under the current Surveillance and Maintenance Project (8400-00-TA). In addition, the nuclear fuel in D-Cell has been identified as a vulnerability to DOE under the recent EM-37 Spent Nuclear Fuel Vulnerability Assessment. Failure to proceed with removal of the Special Case Waste and the dispersible material in D-Cell could perpetuate an identified vulnerability/liability to DOE. The presence of the remaining contaminated equipment/material precludes the use of the cell for any other significant program. Finally, failure to integrate the removal of Special Case Waste and other contaminated material from D-Cell with B-Cell cleanout activities, will increase the cost of D-Cell cleanout substantially.

The disposal of the legacy structural material samples in the SMF will free sample storage space for future programmatic activity and help maintain exposures ALARA for technicians who enter the South Cell for contact maintenance. This effort is consistent with proposed FFTF and Cesium programs (ADS 8400-00-SA) to remove legacy material from SMF South Cell so that the facility can be restored to a more usable condition, and to minimize the potential for a release to the environment and staff exposure.

In its present condition, the abandoned shielded glovebox in room 3G effectively precludes the use of this valuable working area for productive activity and represents a potential ongoing source of contamination to staff. Failure to remove this equipment will perpetuate the continued liability to DOE of this abandoned equipment within an operating facility (324 Building) and the uncertainty of future disposal due to changing disposal criteria and hazardous waste regulations.

The lithium offgas cleanup system has been abandoned for years. It's continued presence creates a safety/RCRA and operational liability to DOE and PNL. Failure to remove the abandoned and deteriorating Lithium Loop off-gas treatment system equipment will perpetuate the present congestion in the immediate vicinity of the West side of the 324 Building and the potential for environmental and personnel contamination resulting from degrading equipment. In addition, there are continuing occupational, industrial hygiene safety hazards resulting from deteriorating and potentially contaminated equipment adjacent to operating systems. Finally, the equipment occupies prime space that could be put to better use to support present and future research or building upgrades. Activities to be completed in this project are considered to be a high priority since comprehensive radiological cleanup of the 324 Building is necessary prior to facility turnover for further use in support of Hanford Site cleanup. Only by complete removal of the legacy radioactive materials, equipment, and contamination can staff and public safety, as well as the prevention of radionuclide releases to the environment be assured.

REQUIRED TECHNICAL DEVELOPMENT:
None.

THIS PAGE INTENTIONALLY
LEFT BLANK

**THIS PAGE INTENTIONALLY
LEFT BLANK**

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

Perform remote tank integrity assessments on highly radioactive hazardous waste tanks in the 300 Area as required by federal and state Dangerous Waste Regulations for tanks, 40 CFR 264.190 and WAC 173-303-640 respectively. Closure plans will be prepared for the hazardous waste tanks for which the integrity cannot be certified.

The technical scope of this activity consists of those actions which are necessary to bring the tank system used to collect liquid radioactive mixed waste from hot cell operations in the 300 Area into compliance with federal and state Dangerous Waste Regulations for tanks, 40 CFR 264.190 and WAC 173-303-640 respectively; perform the required tank integrity assessments, determine integrity of secondary containment, and perform other minor upgrades to the tanks such as improved instrumentation, to bring these tanks into compliance with the stated regulations. The objective of the project is to have the PNL portion of the 300 Area hazardous waste tank system in compliance with state and federal regulations either by upgrading or closure of the tanks. This project started at the beginning of FY92 and is expected to be completed at the end of FY 2000 if funded at the requested level.

The PNL portion of the 300 Area tank system consists of 20 tanks located in 5 vaults and 2 shielded rooms. The volume of the tanks range from approximately 270 gallons to 17,500 gallons. These tanks supported hot cell operations and have very high levels of radioactivity associated with them. Standard tank integrity assessment techniques are not applicable to these tanks because they are sealed in vaults, not visible from safe areas and cannot be approached or entered because of the high radiation levels.

The work planned for this activity will include an assessment of the current condition of the tanks, an inventory of wastes that have been collected in the tanks, and an engineering evaluation of the PNL portion of 300 Area waste tank system in order to develop alternate techniques for performing tank integrity assessments on these tanks. Corrective actions necessary to bring the tank system into compliance will be proposed based on information developed by this activity. Tank integrity assessments and minor upgrades will be completed for selected tanks and liquid transport casks. Closure plans will be prepared for tanks not brought into compliance. This activity will be coordinated with other permitting and treatment activities to increase the effectiveness of the overall compliance effort within the 300 Area.

RELATED ACTIVITIES NARRATIVE:

None.

KEY ASSUMPTIONS:

This activity is limited to the PNL operated portions of the 300 Area hazardous waste tank system, as currently defined.

Tank integrity assessments are required for each tank.

Remote observation and measuring equipment will be installed in each vault or room housing the tanks.

Tank integrity assessments can be performed on the tanks and no new technology will have to be developed to perform these assessments.

The existing vaults and other secondary containment will comply with requirements for secondary containment in 40 CFR 194.193 and WAC 173-303-640 (4).

Not all tanks and vaults will be upgraded for compliance. Those tanks not brought into compliance will undergo administrative closure and remain in place.

No new tanks will be constructed.

The engineering assessment, tank integrity assessment and closure plans will be performed by a subcontractor and the same subcontractor will perform all of these activities.

Close liaison will be maintained between PNL staff and the subcontractor to assure that the unique problems associated with these tanks are considered while performing the various subcontracted activities.

Construction work will be performed by the Hanford construction contractor, currently KEH.

Work will be performed on one vault at a time.

A PNL Operational Readiness Review and Evaluation of Unresolved Safety Questions will be sufficient safety documentation.

The funding listed above is a level of effort estimate. More accurate estimates will be developed as the engineering evaluation proceeds.

The Radioactive Mixed Waste became subject to RCRA regulation on November, 1987.

The project will be categorically excluded under NEPA, no environmental assessment or environmental impact statement will be required.

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

Funding for this activity was received in October, 1991. A historical profile of the waste stored in the tanks and major projects that contributed this waste was completed in FY92. An engineering assessment of the 300 Area tank system and a plan for performing remote integrity assessments of the hazardous waste tanks was completed in early FY93.

An integrity assessment was performed on the least radioactive of the hazardous waste tanks in late FY93. The results of this integrity assessment showed that this tank was leaking as a result of generalized pitting corrosion. The results of this integrity assessment suggest that other tanks within the system could also be corroded since this tank had similar service history to other tanks. This tank was the newest tank in the system, but was constructed of thinner material.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0100	COMPLETE VISUAL INSPECTION OF HAZ WASTE TANKS ROOM 40A, 325 BLDG	9/30/94	9/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Activities planned for FY94 include completing the remote visual inspection of the tanks in Room 40A in the 325 Building. This room contains three hazardous waste tanks. These tanks are slab tanks three inches thick, six feet high and eight feet wide. All of the piping associated with these tanks is located above the tanks and all pipe-tanks connections are through the top of the tanks.

Prior to starting the remote inspection the conditions within Room 40A will be determined. These conditions include the dose rates associated with the tanks, the level of surface contamination, the presence of debris on the floor that could interfere with the robots and the presence of flammable gasses. Additionally, a PNL readiness review will be conducted prior to starting the inspection.

The remote visual inspection will be conducted using a number of camera systems following the ASME pressure vessel inspection code as a guide. The inspection will be capable of detecting a 1/32-inch wide defect at two feet. This inspection will document on video tape the condition of the hazardous waste tanks, associated piping and the secondary containment pan for the tanks. A leak test of the tanks will be conducted during this visual inspection.

An engineering evaluation of the tanks will be conducted based on the drawings, specification, and service history of the tanks. This evaluation will look for effects of corrosion and stress that may have occurred over the service life of the tanks as well as overall structural soundness of the tanks.

Ultrasonic techniques for acquiring information on the inside surface of tank walls that are surrounded by cooling jackets, and a novel ultrasonic technique called electromagnetic acoustical transmission (EMAT) will be demonstrated. Development of the robot delivery systems for the visual inspections and nondestructive testing (NDT) inspection will begin.

One bowling ball cask used to transport liquid wastes from the 300 Area Tank System to the 200 Area Double-Shelled Tanks will be upgraded to meet the current SARP requirements.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0105	COMPLETE NDT OF HAZ WASTE TANKS IN ROOM 40A, 325 BLDG	9/30/95	9/30/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Activities planned for FY95 include procurement of an NDT delivery robot system, completion of automated NDT scanners and NDT systems, performing remote NDT of the tanks within Room 40A, preparation of the integrity assessment report for these tanks, preparation for entering the Low Level Vault (LLV) in the 324 Building and performing the visual inspection of the tanks within the LLV, initial preparation of tank closure plans, and upgrading a second bowling ball cask.

A robot delivery system that is capable of delivering the NDT system on the outside surface of the tank walls up to the high liquid level will be procured. In addition to gross positioning of the NDT system on the tank wall, this robot will be capable of scanning an area of the tank with sufficient precision so that a computerized image of the interior surface of the tank wall can be constructed, and marking the inspected area for future reference.

Final optimization and calibration of the NDT system used to collect information on tank defects will be completed. Three NDT techniques will be used, piezoelectric ultrasonics, EMAT, and eddy currents, depending on the thickness and configuration of the tank wall. Scanners to deliver the NDT system to the bottom of the tanks and piping will be completed and integrated with a robot delivery system.

Prior to starting the remote NDT of the tanks in Room 40A, the necessary RWPs, safe operating procedures, QA procedures and detailed inspection procedures will be prepared. A PNL readiness review will be conducted prior to conducting the NDT.

The NDT of the tanks will be performed on those locations on the tanks that were selected based on information gathered during the engineering assessment and the visual inspection of the tanks. Areas of interest include the liquid high level point on the tank walls, the bottoms of the tanks, points of high stress, and areas with visual anomalies such as streaks, or discolorations.

The integrity assessment report will be prepared using information gathered from the engineering evaluation, visual inspection, leak test, and NDT of the tanks. The report will detail the techniques used to gather the data, the condition of the tanks and contain a schedule for future integrity assessments as required by WAC 173-303-640(2)(e). The report will contain the certification required by WAC 173-303-810(13)(a).

Preparations for entering the LLV for the remote visual inspection includes completion of the structural analysis of the vault, selection of the appropriated cutting technique for penetrating the vault roof, construction of the plug to close the vault after the inspection, and initial preparation of procedures and plans.

Tank closure methods for hazardous waste tanks that either fail the integrity assessment or are not assessed will be investigated. A generic approach to tank closure will be established that can be applied to specific hazardous waste tanks as required.

One bowling ball cask used to transport liquid wastes from the 300 Area

Tank System to the 200 Area Double-Shelled Tanks will be upgraded to meet the current SARP requirements.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0110	COMPLETE VISUAL INSPECTION OF HAZ WASTE TANKS LOW LEVEL VAULT, 324	9/30/96	9/30/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Activities planned for FY96 include opening the LLV in the 324 Building, completing the remote visual inspection of the tanks within the LLV, modifications to the NDT delivery robot and NDT system, and preparation of specific closure plans for tanks in the 325 Building. The LLV is located below grade, shielded with 2 feet of concrete overhead and contains four hazardous waste tanks from approximately 3,500 to 5,300 gal capacity. All of the piping associated with these tanks is located above the tanks and all pipe-tanks connections are through the top of the tanks.

Prior to starting the remote visual inspection of the tanks in the LLV, the necessary RWP's, safe operating procedures, QA procedures and detailed inspection procedures will be prepared. Lessons learned from the NDT performed in Room 40A will be incorporated into these documents. The inspection will be conducted using the ASME pressure vessel code as a guide. A PNL readiness review will be conducted prior to conducting the NDT.

A greenhouse will be constructed over the LLV at the point where the opening into the vault will be cut. An opening will be cut into the north-east corner of the top of the vault. Currently two cutting techniques are under consideration for opening the vault, core drilling and wet abrasive jet. Both of these techniques can be employed remotely.

The remote visual inspection will be conducted using a number of camera systems following the ASME pressure vessel inspection code as a guide. The inspection will be capable of detecting a 1/32-inch wide defect at two feet. This inspection will document on video tape the condition of the hazardous waste tanks, associated piping and the secondary containment pan for the tanks. A leak test of the tanks will be conducted during this visual inspection.

Two robot delivery systems will be used for this inspection. A high-resolution color camera with zoom lens, lighting system, and tilt and pan mechanism will be mounted to a bi-stem system. This bi-stem system can produce a small diameter column up to 20 feet long from a solid-rectangular shaped chassis that is no more than 1.5 feet in diameter. The bi-stem will be located over the opening in the vault and column with the camera system and a flammable gas survey instrument will be lowered into the vault. The area in the vicinity of the camera will be surveyed for flammable gasses prior to energizing the camera or lights.

This bi-stem mounted camera system will be able to inspect the overhead piping, the tank tops and the east sides of the tank walls and most of the stainless steel pan in the bottom of the vault as it is raised and lowered

from the top of the vault to the vault floor. The bottoms and west sides of the tank walls will be inspected using a second camera system with a smaller lens attached to an Inuktun Variable-Geometry-Tracked-Vehicle (VGTV) which will be able to drive into the three inch space between the tank bottoms and the vault floor to inspect the bottoms of the tanks and the portions of the tank walls that are up against the vault wall. Additionally this VGTV will be able to inspect the remainder of the pan and the sump that is located along the west side of the vault.

An engineering evaluation of the tanks will be conducted based on the drawings, specification, and service history of the tanks. This evaluation will look for effects of corrosion and stress that may have occurred over the service life of the tanks as well as overall structural soundness of the tanks.

Based on the results of the visual inspection the NDT delivery robot, automated scanners for the tank bottoms and pipes, and NDT systems will be modified as needed to complete the NDT of the tanks in the following year. Anticipated modifications include changes in the NDT delivery robot and NDT automated scanner to adapt them from the flat slab tanks encountered in room 40A to vertical circular tanks. The NDT transducers will be changed to adapt to the different material thicknesses and tank configuration, which include tank cooling jackets, that will be encountered in the LLV tanks.

Tank specific closure plans will be prepared for any 325 Building hazardous waste tanks that did not pass the integrity assessment completed the previous year. These closure plans will be based on the general closure approach developed in FY95.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0115	COMPLETE NDT OF HAZ WASTE TANKS IN LOW LEVEL VAULT 324 BLDG	9/30/97	9/30/97
8400-00-0380	COMPLETE REMOTE VISUAL INSP. OF HAZ WASTE TANKS 324 BLDG HL VAULT	9/30/98	9/30/98
8400-00-0385	COMPLETE NDT OF HAZ WASTE TANKS IN HIGH LEVEL VAULT, 324 BLDG.	9/30/99	9/30/99
8400-00-0010	COMPLETE FINAL REPORT ON RMW STORAGE TANK INSPECTIONS	9/30/00	9/30/00

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Activities planned for FY97 include the NDT of LLV tanks and preparation for opening the High-Level Vault (HLV) in the 324 Building.

The NDT of the tanks will be performed on those locations on the tanks that were selected based on information gathered during the engineering assessment and the visual inspection of the tanks. Areas of interest include the liquid high-level point on the tank walls, the bottoms of the tanks, points of high stress, and areas with visual anomalies such as streaks, or discolorations.

Preparations for entering the HLV for the remote visual inspection includes

completion of the structural analysis of the vault, selection of the appropriated cutting technique for penetrating the vault roof, construction of the plug to close the vault after the inspection, and initial preparation of procedures and plans.

Activities planned for FY98 include the remote visual inspection of the HLV tanks and preparation of specific closure plans for LLV tanks.

The remote visual inspection will be conducted using a number of camera systems following the ASME pressure vessel inspection code as a guide. The inspection will be capable of detecting a 1/32-inch wide defect at two feet. This inspection will document on video tape the condition of the hazardous waste tanks, associated piping and the secondary containment pan for the tanks. A leak test of the tanks will be conducted during this visual inspection.

Tank specific closure plans will be prepared for any LLV hazardous waste tanks that did not pass the integrity assessment completed the previous year. These closure plans will be based on the general closure approach developed in FY95.

Activities planned for FY99 include the NDT of HLV tanks.

The NDT of the tanks will be performed on those locations on the tanks that were selected based on information gathered during the engineering assessment and the visual inspection of the tanks. Areas of interest include the liquid high-level point on the tank walls, the bottoms of the tanks, points of high stress, and areas with visual anomalies such as streaks, or discolorations.

Activities planned for FY 2000 include preparation of the final report and preparation of specific closure plans for HLV tanks.

The final report will detail compliance of the tanks with 40 CFR 264.190 et seq and WAC 173-303-640 or closure, recommendations for future activities to enhance the operation of the PNL portion of the 300 Area hazardous waste tank system if appropriate, and technology transfer to other DOE sites with similar tanks.

Tank specific closure plans will be prepared for any LLV hazardous waste tanks that did not pass the integrity assessment completed the previous year. These closure plans will be based on the general closure approach developed in FY95.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:
40 CFR 264.190 et seq
WAC 173-303-640
TPA Milestone M-10

Explanation of changes from FY95 ADS submittal:

There are substantial changes in the yearly scope and milestones in this ADS Work Plan from the one submitted for FY95. The overall project scope has not changed, however the schedule has been extended. The funding level originally requested for FY95 has been reduced slightly, however the extended schedule will result in an overall increase in project costs. Some of the increased project cost shown in this submittal is actually shifted funding due to a \$700 K funding reduction that occurred in FY92. These changes have been caused by several factors including the need to conduct readiness reviews for each major step of the project, extremely long lead times required by the subcontracting process, and increased technical difficulties.

The original project submittal assumed that only a routine risk assessment would be required for the project. Recent events on Hanford have created a climate that has elevated the profile of all waste tank work. As a result, this project has received numerous redundant reviews of all operations. These reviews have slowed the progress of the work and required a significant increase in the amount of formal documentation that is required.

The project schedule submitted in FY95 was prepared before the engineering evaluation was completed and technical requirements of performing remote tank inspections had been completely explored. The time required to adapt the technologies needed to collect the necessary data to the conditions encountered in the project is greater than originally anticipated. Additionally, finding a leaking tank during the first inspection suggests that the inspection of the tank system will have to be more extensive than originally planned, particularly for the associated piping.

REGULATORY KEY ISSUES:

The tanks will continue to not comply with the regulation; a waiver must be granted by Washington State Department of Ecology; the only waivers allowed are for equivalent levels of protection for secondary containment; part of this activity is to identify where waivers might be needed and to demonstrate equivalent level of protection if appropriate.

The integrity of the tank system and the secondary containment cannot be demonstrated, with the one leaking tank that has been discovered to date, the safety of the environment cannot be assured.

This tank system is used to manage waste from the analysis of SST/DST core samples for TPA milestone M-10, timely completion of this milestone cannot be assured.

COMP/PROG BENEFITS AT PLANNING LEVEL:
Not applicable.

CONCERNS AT PLANNING LEVEL:
Not applicable.

REQUIRED TECHNICAL DEVELOPMENT:
None.

THIS PAGE INTENTIONALLY
LEFT BLANK

**THIS PAGE INTENTIONALLY
LEFT BLANK**

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

The task scope of work under this activity includes the surveillance and maintenance (S&M) of the 242B/BL and 2718E Facilities. These facilities are unoccupied and no longer support PNL's mission. These facilities still house contaminated equipment and packaged waste which require surveillance until their final disposition or the facilities are transferred. With increasing age, these buildings become an increased safety hazard and must be maintained in a safe condition. Funding for characterization, deactivation, clean up and waste disposal in preparation for transfer to the Site M&O contractor of these facilities has been requested through ADS 8400-JA.

The 242B/BL Facility, the Radioactive Particle Research Building, supported defense programs related to B-Plant tank farm, corrosion tests, ruptured fuel studies, and aerosol and stack-monitoring safety studies. 242B/BL is 2,700 square feet in size and now contains old equipment such as hoods, vessels, etc, piping and a transfer basin which still holds some liquid. 242B/BL does not contain PNL-accountable fissionable materials.

The 2718E Facility, the Critical Mass Fissile Storage Building, provided storage to support defense programs in the Critical Mass Laboratory in 209E. 2718E is 1,700 square feet in size and now stores low-enriched uranium fuel rods. The rods are stored in 43 110-gallon drums.

2718E's fissionable materials are 2,652,929 g LEU fuel rods in 43 FL-10 containers that have been declared as scrap available for recovery processing.

Surveillance and maintenance services for these facilities are provided by several laboratory line organizations, including the Materials and Chemical Sciences Center, the Earth and Environmental Sciences Center, the Engineering Technology Center, and the Facilities and Operations Directorate which provides radiation protection, crafts services, environmental compliance, criticality safety, security and safeguards, and building management support.

Surveillance activities are repetitive for each week, month, quarter and year, as described below in the task descriptions. Maintenance is conducted routinely and on an as needed basis. Corrective compliance activities are done as required.

Radiation Protection Tasks. Radiation protection technicians provide monitoring support for all staff accessing the facilities for all activities. In addition, they perform weekly building contamination surveys. Each response/activity is documented.

Safeguards and Security Tasks. Monthly holding reports, quarterly inventory and accounting inspections, tamper-indicating verification, material balance area checks and DOE-witnessed safeguards audits are conducted by staff in safeguards and security. Each response/activity is documented and a specific inspection/verification report completed.

Environmental Compliance and Criticality Safety Tasks. An annual criticality safety audit to verify compliance is conducted. Bi-annually, an environmental compliance inspection for management of hazardous and radioactive mixed waste and to check radiation safety protocols is conducted. Labeling, packaging, marking and disposal status of stored hazardous wastes are checked, floor drain protection and labeling is verified, and compliance of septic tanks status is also checked. Environmental staff provide guidance, coordination and assistance in response to identified compliance issues.

Effluent Monitoring Task. An annual inspection of effluent and air release points is conducted.

Programmatic Tasks. Programmatic staff from the organizations responsible for the facilities provide assistance to all inspections, audits, verifications and checks. These organizations provide the detailed information to Facilities staff, as needed to support the development of activity plans to meet the regulatory drivers of the S&M work tasks and prepare cost estimates.

Facilities and Operations Tasks. Weekly checks are made for access control and facility condition/maintenance status, and quarterly safety and housekeeping inspections are conducted. Facilities staff arrange, plan and coordinate all work in the facilities, including inspections, maintenance and repairs, and occurrence responses. Crafts services staff provide appropriate maintenance and repair services as planned or required by the facilities manager. Facilities staff develop the project management plan for the S&M activities covered under this ADS, implement the plan and manage it. Monthly reports are compiled and submitted. An annual report is compiled at the end of each fiscal year.

RELATED ACTIVITIES NARRATIVE:

This ADS for surveillance and maintenance will be required until these facilities are characterized, deactivated, cleaned up, the wastes disposed of and the facilities transferred to the Site M&O contractor. ADS 8400-JA has been submitted requesting funding to meet this requirement. If ADS 8400-JA is fully funded in all requested budget years, funding under this ADS for surveillance and maintenance will no longer be required.

KEY ASSUMPTIONS:

DOE Orders, and state and federal regulations continue to require facilities to be maintained in a safe condition to protect workers from environmental and industrial safety hazards. Consequences of non-performance are clear risks to workers, non-compliance with basic DOE safety directions, failure to learn from publicized lessons from other sites and facilities and exposure to fines and criminal penalties.

The outlined tasks are planned and costs estimates prepared using these orders and regulations, and with the assumption that these orders and regulations will not require more work than currently interpreted.

The outlined tasks are planned assuming only the 242B/BL and 2718E Facilities will remain under the EM-30 guidance/funding avenue as surplus facilities requiring S&M.

As all tasks under this ADS are directly driven by specific drivers, other than maintenance and repairs, the planning and target funding levels are the same.

ACTIVITY BY PRIORITY:
All tasks are Priority 1.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

Activities in FY94 have been according to the submitted S&M task plan, including all scheduled inspections and safety checks. Actions as a result of compliance issues identified during the annual environmental compliance inspection at 231Z were initiated as required. (The 231Z Facility is covered under the FY94 funded ADS Task Plan.) In January of 1994, the PNL space in the 231Z Facility was transferred to WHC. The activities planned for the remainder of FY94 for 242B/BL and 2718E include all planned and scheduled surveillance and maintenance tasks as outlined in the ADS.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0130	ISSUE SURVEILLANCE AND MAINTENANCE ANNUAL REPORT	9/30/94	9/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

The tasks planned for this year are as described in detail in the Technical Scope, Section 1, above. These tasks include:

- Monthly Radiation Protection Monitoring
- Quarterly Criticality Inspections
- Bi-Annual Environmental Inspections
- Monthly Safeguards and Security Reviews
- Quarterly Facility Inspections
- Facilities Operations Management and Staff Technical Supervision and Coordination as Required
- Repairs and Maintenance as Required
- Monthly Reporting
- Annual Report

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

All surveillance activities described in the task scope, including criticality inspections, environmental inspections, safeguards and security verifications and facilities support inspections will be conducted. Maintenance activities will be conducted by craft services on a routine and as needed basis to maintain the facilities in a safe condition.

These activities ensure adequate management and control of potential environmental and industrial safety hazards for the protection of onsite workers, the environment and general public.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Surveillance and maintenance activities in FY96 will continue as described for FY95 and in the Technical Scope section above.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Surveillance and maintenance activities in these outyears will continue as described for FY95 and in the Technical Scope section above, or until the facilities are characterized, deactivated, cleaned up, wastes disposed of and transferred to the Site M&O Contractor.

 DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

Driver: 5480.11 Radiation Protection for Occupation Workers, 9.g (3) and (4) requires contamination monitoring, controlled entry procedures, costing, record keeping and reporting.

Consequences: Clear risks to workers, non-compliance with basic DOE safety directions and failure to learn from publicized lessons from other sites and facilities.

Driver: 5480.5 Safety of Nuclear Facilities, 9.g; 9.h (5); 9.h (8) requires contractors to maintain internal safety review systems for nuclear facilities. Requires overall appraisal programs performed at least annually.

Consequences: Clear risks to workers, non-compliance with basic DOE safety directions and failure to learn from publicized lessons from other sites and facilities.

Driver: PNL MA-25

Driver: PNL MA-821 Effluence Compliance Plan

Driver: PNL MA-8 Waste Management and Environmental Compliance Driver: Clean Water Act, as amended

Driver: 40 Code of Federal Regulations 260-265, Resources Conservation and Recovery Act, as amended

Driver: DOE Order 5400.1 General Environmental Protection Program

Driver: DOE Order 5400.6 Radiation Effluent Monitoring and Environmental Surveillance

All of the above drivers require verification of flood drain protection and labeling.

Driver: Washington Administrative Code 248-096, On-Site Sewage Disposal

Driver: Washington Administrative Code 173-240, Submission of Plans and Reports for Construction of Wastewater Facilities

Driver: Washington Administrative Code 172-216, Permitting Requirements

Driver: DOE Order 6430.1A, Section 0270-0273, General Design Criteria

Driver: Sanitary Wastewater Collection and Stormwater Management Systems

All of the above drivers require inspection for septic tank compliance.

Driver: Washington Administrative Code 173-303, Dangerous Waste Regulations

Driver: 40 Code of Federal Regulations 260-265, Resources Conservation and Recovery Act, as amended

Driver: PNL MA-43, Health and Safety Management, Section 22.0

Driver: PNL MA-8, Waste Management and Environmental Compliance

All of the above drivers require verification of waste management

Driver: 4330.4A Maintenance Management Program, 3.2.1, and 3.2.2 requires facilities be maintained in the condition consistent with long-term missions and planning, i.e., orphaned facilities should not be used for hazardous material storage.

Driver: Atomic Energy Act of 1954, as amended

Driver: PNL MA-6 Radiation Protection
Driver: DOE 5400.3 Hazardous and Radioactive Mixed Waste Program
Driver: DOE 5400.XY Radiological Effluent Monitoring and Environmental Surveillance
Driver: DOE 5820.2A Radioactive Waste Management

All of the above drivers require meeting standards for monitoring radiation safety protocols for radioactive mixed waste.

Consequences: Clear risks to workers, non-compliance with basic DOE directives, failure to learn from publicized lessons at other sites and facilities, exposure to fines, and criminal penalties.

REGULATORY KEY ISSUES:

None.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Funding above the target level, which is the same as the planning level for this ADS, could be utilized to begin characterization, deactivation and clean up activities. This would improve the hope to achieve the clean up for the facilities and the Site.

CONCERNS AT PLANNING LEVEL:

Unexpected failures of mechanical systems, or other building deficiencies, could quickly deplete this small budget.

This ADS does not fund clean up activities except in a non-compliance situation. Routine inspections could detect a change in hazards and result in a non-compliance situation requiring immediate clean up action, depleting budget dollars.

REQUIRED TECHNICAL DEVELOPMENT:

None.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8400 ADS SUF: 0 SUBACTIVITY: JA

SUBACTIVITY TITLE: CLEANUP OF PNL LAB IN 242 B/BL AND 2718E

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: D VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECH RES-NFP

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996 TOTAL
OE EW3130040		0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130040	0	0			0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0
DIRECT FTE	0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130040	0	0			839	818	818	818	0
TOTAL	0	0	0	0	839	818	818	818	0
DIRECT FTE	0	0	0	0	0	0	0	0	0

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

This activity provides for the decommissioning and decontamination (D&D) of the 242B/BL and 2718E Facilities in support of the Hanford Site's primary mission to clean up the Site and eliminate potential risks to the public, environment and work force. These facilities are unoccupied and no longer support PNL's mission. These facilities still house contaminated equipment and packaged waste which require surveillance until they are cleaned up. With increasing age, these buildings become an increased safety hazard and must be maintained in a safe condition. The surveillance and maintenance activities for 242B/BL and 2718E are funded through ADS Number 8400-00-FA.

The 242B/BL Facility, the Radioactive Particle Research Building, supported defense programs related to B-Plant tank farm, corrosion tests, ruptured fuel studies, and aerosol and stack-monitoring safety studies. 242B/BL is 2,700 square feet in size. One section is a reinforced concrete structure and the other is a steel prefabricated building on a concrete foundation and floor. 242B/BL and now contains old equipment such as hoods, vessels, etc., piping and a transfer basin which still holds some liquid. 242B/BL does not contain PNL-accountable fissionable materials.

The 2718E Facility, the Critical Mass Fissile Storage Building, provided storage to support defense programs in the Critical Mass laboratory in 209E. 2718E is 1,700 square feet in size. The facility is an all metal, steel frame building, erected on a concrete pad. 2718E and now stores low-enriched uranium fuel rods and three drums of low-level waste. The rods are stored in 43 110-gallon drums.

2718E's fissionable materials are 2,652,929 g LEU fuel rods in 43 FL-10 containers that have been declared as scrap available for recovery processing.

The technical scope of this activity includes disconnection, disassembly and disposal of all remaining hoods, vessels and other laboratory equipment, both fixed and moveable. Disposal includes waste materials previously removed from service and waiting disposal.

The disposal method for large equipment is to cut it up for packaging into 55-gallon drums, or plywood or metal boxes, as required for waste burial. Disposal of asbestos floor material is also required along with miscellaneous piping and electrical equipment.

The work scope includes initiation of NEPA documentation, facility characterization and project management plan development.

RELATED ACTIVITIES NARRATIVE:

Surveillance, monitoring and maintenance activities for these same facilities are funded through ADS 8400-FA. Surveillance, monitoring and maintenance must continue until these facilities are characterized, deactivated, cleaned up and transferred to the Site M&O contractor. Full funding of this ADS would eliminate the need for S&M funding.

KEY ASSUMPTIONS:

It is assumed the contaminated equipment and hazardous wastes must be cleaned out before the facilities are transferred to the Site M&O contractor. The cost assumptions are based on two major elements of cleanup, the labor to chop up equipment for packaging into drums or boxes and the disposal of the drums and/or boxes as waste. Estimates were obtained from informal walk-throughs of the facilities. Standard containment greenhouses are required for each cell or room of 242B/BL. It is also assumed the waste from the transfer basin, which still holds some liquid, are LLW. Characterization may determine this waste to be transuranic, TRU. If so, the costs for handling and disposal would greatly increase.

The DOE orders, and state and federal regulations will continue to require facilities to be maintained in a safe condition to protect workers from potential environmental and industrial safety hazards. The costs associated with this surveillance and maintenance, and the inspection and access control efforts, would be eliminated if the facilities were cleaned up for transfer and ultimate reuse or demolition and site restoration.

Cleanup is necessary to eliminate adverse impact to workers, the public or the environment, and is part of the Hanford Mission Plan. If cleanup is not performed, unmanned, temporary conditions will continue to store hazardous materials. Consequences of not performing the work is potential non-compliance.

The characterization, deactivation, clean up and waste disposal activities under this scope of work for the 242B/BL facility is planned for a four year period, FY96 through FY99, assuming manpower availability precludes an accelerated schedule.

ACTIVITY BY PRIORITY:

All activities are Priority 4.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

FY94 funding was not available for this activity.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:
 FY94 funding was not available for this activity.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

The planned work activities for FY95 will include characterization, project management plan development, initiation of all necessary documentation such as NEPA, radiation work permits, etc., and will begin and complete the cleanout of 2718E. The tasks involved in cleanout will include as necessary:

- Facility characterization
- Initiate NEPA documentation
- Prepare demolition design and project management plan. - Coordinate with other Hanford contractors
- Initiate Modification Permit
- Obtain Radiation Work Permit
- Issue Letter of Instruction to the Hanford Construction Contractor to begin work
- Designate a person as Waste Generator to be responsible for SDAR and packaging requirements
- Coordinate with Site M&O Contractor
- Purchase drums
- Start D&D
- Complete D&D, complete waste packaging
- Ship waste
- Transfer building over to Site M&O contractor

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY96 will see the design and project management plan for 242B/BL completed and cleanup activities begin. The tasks involved in the cleanout of 242B/BL will be similar to those in 2718E and will vary to the specific needs of the facility. Cleanout is expected to carry on into the outyears.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Cleanup, complete waste packaging and shipment, and facility transfer to the Site M&O contractor of 242 B/BL is planned to occur in the outyears, with all tasks complete by FY 2000.

 DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

- Driver: 5820.2A, Radioactive Waste Management, II.2.b.
Requires disposal of TRU and LLW wastes.
Consequences: Non-compliance and long-term ES&H risks.
- Driver: 5480.11, Radiation Protection of Occupational Workers
Requires reduction of risks to as low as reasonably achievable (ALARA).
Consequences: Non-compliance and long-term ES&H risks.
- Driver: 5400.1, General Environmental Protection Program
Requires facilities comply with applicable Federal, State and local environmental protection laws and regulations, Executive Orders and internal DOE Departmental polices.
Consequences: Non-compliance with DOE requirements.
- Driver: 4330.4A, Maintenance Management Program, 3.2.1 and 3.2.2.
Requires facilities be maintained in the condition consistent with long term missions and planning, i.e., orphaned facilities should not be used for hazardous material storage. Consequences: Non-compliance
- Driver: 5440.1A, Implementation of the National Environmental Policy Act at the Richland Operations Office
- Driver: 5480.4, Safety of Nuclear Facilities
- Driver: 5420.2A, V.3.c., Radioactive Waste Management
- Driver: 29 CFR 1926.58, Asbestos, Tremolite, Anthophyllite and Actinolite
- Driver: WAC 296-62-077, Asbestos, Tremolite, Anthophyllite and Actinolite
- Driver: 5400.5, Radiation Protection of the Public and the Environment
- Driver: Federal Facility Compliance Act of 1992, Solid Waste Act, Title

I.

REGULATORY KEY ISSUES:

At the target level of funding of zero dollars, no activities can take place. Characterization, deactivation, clean up and disposal of wastes cannot occur. Unmanned, temporary conditions will continue to be the type of space in which we will continue to store hazardous contaminated materials. Surveillance, maintenance and monitoring will be required to continue.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Under the planning level of funding, the Hanford Site will be able to clean up and dispose of hazardous and contaminated equipment and materials in a timely manner consistent with its hazardous restoration and waste management mission to clean up the Site. Clean up will reduce the risks to workers from the storage of LLW and TRU wastes in unmanned temporary conditions. Funding above target level, but below planning level, will slow the clean up significantly, but will allow progress towards achieving

compliance in these facilities.

CONCERNS AT PLANNING LEVEL:

The funding request under this ADS is for characterization, deactivation, clean up, disposal of wastes and preparation of the facilities for transfer to the Site M&O contractor. This ADS does not include funding for the demolition and removal of these facilities, or site restoration.

REQUIRED TECHNICAL DEVELOPMENT:

None.

THIS PAGE INTENTIONALLY
LEFT BLANK

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8400 ADS SUF: 0 SUBACTIVITY: KA

SUBACTIVITY TITLE: POLLUTION PREVENTION PROGRAM

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: D VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECH RES-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
B&R		TOTAL
OE	EW3130040	435
CE	35EW31304	100
TOTAL		535
DIRECT FTE		3

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW3130040	0	415	435		435	460	475	500	525
CE	35EW31304	0	50	100		100	125	150	175	200
TOTAL		0	465	535	0	535	585	625	675	725
DIRECT FTE		0	3	3	0	3	3	3	3	3

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EW3130040	0	415	435		435	460	475	500	525
CE	35EW31304	0	50	100		100	125	150	175	200
TOTAL		0	465	535	0	535	585	625	675	725
DIRECT FTE		0	3	3	0	3	3	3	3	3

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

This activity will provide pollution prevention planning and progress reporting to comply with RCRA regulations (40 CFR 260 et seq.), the Pollution Prevention Act (PPA), and Washington Administrative Code (WAC) 173-307. These regulations require an ongoing and proactive program to minimize, reduce and/or prevent generation of hazardous wastes. This activity will limit Department of Energy's (DOE) long-term liability under CERCLA by reducing the volumes and types of waste streams generated by PNL operations. The program will identify and evaluate waste streams to achieve percentage waste reductions; document waste generation and pollution prevention activities across PNL; apply pollution prevention technology to targeted opportunities; evaluate projects/programs for pollution prevention compliance; report pollution prevention program results pursuant to federal, state, and DOE requirements; and provide training for pollution prevention and a formal technology transfer network between similar prevention and a formal technology transfer network between similar facilities in the DOE complex (i.e., national laboratories).

This activity will achieve compliance with elements of the DOE-wide Waste Minimization Crosscut Plan as directed by SEN 37-92. This includes detailed and lengthy annual reporting requirements.

RELATED ACTIVITIES NARRATIVE:

None.

KEY ASSUMPTIONS:

Key scope assumptions are based upon the scope and coverage of regulatory-required pollution prevention activities remaining fairly constant over the time period described in this ADS. Specific examples of such assumptions would include continued limited coverage under the regulations for waste streams from laboratory activities; no major changes in the definition of hazardous waste; and no extension of scope to include such issues as process reviews for determination of hazardous materials use reduction.

Key cost assumptions are that reasonable levels of operations staff support will be made available to support implementation efforts in the field, and that program materials and labor cost will not rise significantly faster than the cost of living.

Key time assumptions are that sufficient funding and staffing levels are made available to perform the work in the time frames indicated in the milestone description section of this ADS.

The assumption that research laboratory waste streams will continue to remain unaffected by various reporting regulations is an issue. If research waste streams become affected by these regulations, the scope of the program will be increased dramatically.

If the scope of the program is increased, this will directly affect staff availability to adequately cover program requirements. Therefore, funding and staffing levels would increase as well.

ACTIVITY BY PRIORITY:

Activities in this project are Priority 2. By implementing waste minimization techniques, less hazardous and radioactive waste will be generated and the potential for contamination and release to the environment of these wastes will be minimized.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

POLLUTION PREVENTION PROGRAM
POLLUTION PREVENTION PROGRAM
POLLUTION PREVENTION PROGRAM

TASKS COMPLETED TO DATE:

This activity has not been directly funded to date.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

This activity is supported by existing activities under 8400-00-DA (Waste Management Operations) by documenting compliance with RCRA waste minimization requirements. Waste generators are required by RCRA regulations to certify, on each hazardous waste shipping manifest, that a program is in place to reduce the quantity and toxicity of hazardous wastes generated. PNL TSD facilities (such as the 305-B Storage Unit) are also required to maintain waste minimization programs.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0200	IMPLEMENT WASTE GENERATION DATABASE	9/30/95	9/30/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Documentation and Reporting: Prepare and submit reports for the State of Washington documenting progress in the Laboratory's pollution prevention program as required by WAC 173-307. Implement a waste generation database to track waste streams for individual facilities and target various waste streams for waste minimization opportunities. Implement the Pollution Prevention Opportunity Assessment (PPOA) software (developed by DOE) by conducting PPOAs on PNL waste streams. This mechanism will be used to track laboratory-wide pollution prevention activities.

Technology Transfer: Institute a laboratory wide incentive program for pollution prevention projects. Purchase and install waste minimization technologies for targeted waste streams. Investigate the implementation and use of micro-scale chemistry technology in PNL R&D applications. Develop a formal network for sharing technology and pollution prevention techniques with other similar facilities in the DOE complex, i.e., national laboratories.

Pollution Prevention Awareness: Institute a pollution prevention newsletter to highlight waste minimization success throughout PNL and to promote ongoing staff awareness of pollution prevention in achieving DOE's environment, safety, and health objectives. Review and provide guidance for research Center pollution prevention plans. Develop (or further enhance) a chemical exchange program between research Centers. Investigate material substitution and offsite chemical exchange. Develop a recycling program for aluminum, cardboard, glass, and plastic, and continue to upgrade and enhance the existing paper recycling. Develop an affirmative procurement program for high-recycled content and other environmentally-preferable products. Develop goals for reductions in toxic releases and hazardous, radioactive, mixed and sanitary wastes.

Capital Equipment to be purchased in FY 95:

Cardboard Bailer - \$10,000
 Solvent Recovery Still - \$10,000
 Microscale Scintillation Counters (\$6K each) - \$30,000

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0205	DEVELOP DATABASE TO TRACK WASTE MINIMIZATION ACTIVITIES	9/30/96	9/30/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

In FY 1996, the planning work is to increase the implementation of PPOA software by conducting additional PPOAs on PNL waste streams. This is in addition to the continuation of the activities described under FY 1995 above.

Capital Equipment to be purchased in FY 96:

Cardboard Bailer - \$10,000
 Microscale Scintillation Counters (\$6K each) - \$6,000
 Microscale ION Chromatograph (\$15K each) - \$30,000
 Microscale Liquid Chromatograph \$15K each) - \$30,000
 Recycling drop of stations (\$7K each) - \$14,000
 Photovoltaic/Battery Utility Vehicle - \$10,000

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0210	CHARACTERIZE LAB-WIDE WASTE STREAMS	9/30/97	9/30/97
8400-00-0215	IMPLEMENT GENERATOR-SPECIFIC POLLUTION PREVENTION TRAINING	9/30/98	9/30/98
8400-00-0495	ACHIEVE VERIFIABLE WASTE REDUCTION GOAL	9/30/99	9/30/99
8400-00-0500	OPERATE WASTE MINIMIZATION TECHNOLOGY TRANSFER NETWORK	9/30/00	9/30/00

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

In FY 1997-2000, the planning work is to continue the ongoing pollution prevention program begun in FY 1995. In FY 1997, conduct PPOAs on the larger Lab-wide waste streams. pollution prevention achievements will be tracked by the PPOA software. In FY 1997, achieve a verifiable waste reduction goal. Reductions will be technically defensible and demonstrable from the baseline characterizations achieved in previous years. In FY 1999, operate a technology transfer network for pollution prevention in DOE laboratories. In addition, PNL participation in waste chemical reutilization network with regional governments and educational institutions.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

Resource Conservation and Recovery Act

- 40 CFR 260
- of 1976, as amended, Paragraph 3002(a) (6) (b), Paragraph 3003(a) -40 CFR 262, Appendix
- 56 FR 31114, May 28, 1993
- 58 FR 31114, May 28, 1993
- Paragraph 1003(a) (6)

Pollution Prevention Act

- of 1990, Paragraph 6602(b)
- paragraph 6607

Washington Administrative Code

- WAC 173-307
- WAC 173-307-015
- WAC 173-303
- WAC 173-303-806

Comprehensive Environmental Response, Compensation, & Liability Act - of 1980, Paragraph 107(a)

SEN 37-92

Waste Management Operations

- 8400-00-DA

Emergency Preparedness and Community Right-To-Know Act

- of 1986, Paragraph 313; 40 CFR 372

DOE Order

- 5400.1, General Environmental Protection Program
- 5820.2A, Radioactive Waste Management

Hanford Facility Dangerous Waste Permit (issued pursuant to the Tri-Party Agreement and WAC 173-303-806), Permit #WA7890008967 (draft 1/92), Section 11.J.1.

REGULATORY KEY ISSUES:

Driver: RCRA of 1976, as amended, Paragraph 3002(a) (6) (b), Paragraph 3003(a); 40 CFR 262, Appendix; 56 FR 31114, (May 28, 1993)

Impact: RCRA requires that hazardous waste manifests contain certification that a program is in place to reduce the volume and toxicity of the facility's hazardous wastes, and that the manifest is utilized for all wastes shipped offsite for treatment, storage or disposal. In addition, EPA guidance found at 58 FR 31114, May 28, 1993, outlines the elements of a satisfactory pollution prevention program. These elements include:

- Top Management Support;
- Characterization of waste generation and management costs;
- Periodic waste minimization assessments;
- Cost allocation systems;
- Technology transfer;
- Program implementation and evaluation.

Consequences: If this activity is not funded, DOE will be unable to demonstrate that a comprehensive program is in place to minimize wastes. As a result, DOE cannot sign the RCRA hazardous waste manifest, and thus, will be unable to ship hazardous and radioactive mixed waste to disposal/storage facilities.

Driver: PPA of 1990, Paragraph 6602(b); RCRA Paragraph 1003(a)(6)

Impact: RCRA and PPA establish a national policy that pollution should be prevented at the source whenever feasible.

Consequences: If this activity is not funded, then DOE will be unable to demonstrate viable efforts to prevent pollution at the source.

Driver: PPA, Paragraph 6607; Emergency Preparedness and Community Right-To-Know Act (EPCRA) of 1986, Paragraph 313; 40 CFR 372.

Impact: The PPA requires any facility (such as Hanford) to file toxic chemical release reporting under EPCRA Paragraph 313 to include comprehensive waste minimization reporting as outlined in Paragraph 6607 of the PPA and in 40 CFR 372.

Consequences: If this activity is not funded, DOE will not be able to accurately collect and provide the data required under this reporting requirement to the regulatory agencies.

Driver: DOE Order 5400.1, General Environmental Protection Program.

Impact: Order 5400.1 establishes environmental protection program requirements and responsibilities, and institutes the requirements for PPOAs. This Order requires Waste Minimization Program Plans, an Annual Waste Reduction/Minimization Report, and a Pollution Prevention Awareness Program.

Consequences: If this activity is not funded, DOE will be unable to demonstrate compliance with DOE Order 5400.1.

Driver: DOE Order 5820.2A, Radioactive Waste Management.

Impact: Order 5820.2A establishes policies, guidelines, and radioactive, mixed waste, and contaminated facilities requirements. It requires Waste Management Plans with indication of actions to minimize hazardous waste generation and establish an annual waste reduction report.

Consequences: If this activity is not funded, DOE will be unable to demonstrate compliance with DOE Order 5820.2A.

Driver: CERCLA of 1980, Paragraph 107(a)

Impact: CERCLA establishes liability for cleanup of hazardous wastes which pose a threat to human health or the environment. This liability is extended to all persons or entities (including instrumentalities of the Federal Government) disposing of hazardous wastes.

Consequences: If this activity is not funded, DOE will continue to incur increased liabilities for future cleanup of hazardous wastes being generated, and hence, disposed of to the environment.

Driver: WAC 173-307-015

Impact: WAC 173-307-015 establishes waste minimization reporting requirements similar, but not identical, to those established by the PPA. The reporting requirement applies to all waste generators in the State of Washington. By letter, RL has instructed all Hanford contractors to comply with this rule.

Consequences: If this activity is not funded, DOE will not be able to accurately collect and provide the data required under this reporting requirement to the regulatory agencies.

Driver: Hanford Facility Dangerous Waste Permit (issued pursuant to the Tri-Party Agreement and WAC 173-303-806), Permit #WA7890008967 (draft 1/92), Section 11.J.1.

Impact: Establishes a Hanford site-specific requirement to report on the status of RCRA permittees' waste minimization programs by March 31 of each year, pursuant to authority granted under WAC 173-303.

Consequences: If this activity is not funded, DOE will not be able to accurately collect and provide the data required under this reporting requirement. Noncompliance with the permit can result in stipulated penalties and in inability to manage hazardous wastes.

Driver: TPA Milestone M-20-00.

Impact: The milestone requires that permit applications be submitted for all TSD units on the Hanford Facility, and anticipates that permits will be issued. The draft permit for the Hanford Facility includes requirements for waste minimization reporting (see under Drivers above).

Consequence: If this activity is not funded, DOE's ability to accurately collect and provide the data required will be impaired. Noncompliance with the permit can result in assessment of stipulated penalties and possibly in suspension of Hanford's ability to receive, store, process, or dispose of hazardous wastes.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Planning level is the same as the target level.

CONCERNS AT PLANNING LEVEL:
None.

REQUIRED TECHNICAL DEVELOPMENT:
None.

THIS PAGE INTENTIONALLY
LEFT BLANK

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8400 ADS SUF: 0 SUBACTIVITY: LA

SUBACTIVITY TITLE: NEPA COMPLIANCE PROGRAM

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: D VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECH RES-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE	EW3130040	576
TOTAL		576
DIRECT FTE		5

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL	BUD	LEGAL	ESH	TOTAL			
OE	EW3130040	545		560	576		576	593	611	629
TOTAL		545		560	576	0	576	593	611	629
DIRECT FTE		5		5	5	0	5	5	5	5

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL	BUD	LEGAL	ESH	TOTAL			
OE	EW3130040	545		560	719		719	733	792	809
TOTAL		545		560	719	0	719	733	792	809
DIRECT FTE		5		5	6	0	6	7	7	7

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

Support Pacific Northwest Laboratory (PNL) staff by reviewing and assisting in the preparation of National Environmental Policy Act (NEPA) documentation for proposed projects or programs. Input project/program information to a central database that is maintained for information and tracking purposes. Train and advise PNL staff in NEPA-related activities.

The scope of work is generally level-of-effort and includes the following activities: (1) review and assist in the preparation of NEPA documentation for proposed PNL projects and programs; (2) utilization and maintenance of a comprehensive NEPA compliance database; (3) provide NEPA training and guidance to various levels of PNL staff; (4) management of the PNL NEPA Compliance Program ADS; (5) maintain the PNL NEPA Program Plan (PNL-MA-9); (6) miscellaneous activities necessary to maintain the contemporaneity of the PNL NEPA Compliance Program; and (7) perform NEPA self-appraisals of PNL Centers and Directorates to ensure NEPA compliance. These activities are further defined in the following text.

1. Review and assist in the preparation of NEPA documentation: The number of reviews and document preparations per fiscal year is dependent upon the level of PNL business activity, but can be confidently projected from historic data. These reviews and document preparation assistance are necessary to ensure verifiable PNL compliance with all relevant NEPA requirements. Project reviews consist of evaluating proposed PNL projects and programs against existing DOE-approved NEPA documentation, particularly Appendix B Categorical Exclusions (CXs). Assistance in preparation of NEPA documentation consists of supporting PNL staff in preparing, submitting to DOE, and tracking project-specific CXs and Environmental Assessments (EAs). Document preparation also includes the preparation, submittal to DOE, and tracking of Hanford Site-wide generic and programmatic CXs, which are applicable to general categories of activities (generic CXs) and PNL programmatic activities (programmatic CXs).

2. NEPA compliance database: The PNL NEPA Compliance Program has developed and maintains a comprehensive database for the purposes of inputting/storing project information; tracking review activities at PNL, DOE-RL, and DOE-HQ; reporting status information to PNL project managers and DOE; recording the application of approved CXs to PNL projects; and trending various types of NEPA compliance information. The database is integral to PNL NEPA Compliance Program activities.

3. NEPA training and guidance: The PNL NEPA Compliance Staff (NCS) hosts bi-monthly meetings for PNL Center NEPA Representatives (CNRs), sponsors NEPA-related training activities for the PNL NCS and CNRs, interprets and disseminates changes in NEPA policy and guidance, and responds to a broad spectrum of NEPA-related questions from PNL CNRs and project managers. These activities are essential to ensure that PNL projects and programs obtain and maintain compliance with NEPA requirements.

4. Manage PNL NEPA Compliance Program ADS: The PNL NCS is responsible for requesting, defending, obtaining, and managing funds for the NEPA Compliance Program ADS. Inherent to the management of the Activity Data

Sheets are monthly reporting/statusing requirements to DOE-RL.

5. Maintain PNL NEPA Program Plan: The PNL NCS has developed and maintains the PNL NEPA Program Plan (PNL-MA-9). This Plan sets forth PNL procedures for submittal, review, and approval of NEPA documentation and assigns PNL personnel responsibilities for NEPA-related activities. Because NEPA policy and guidance and PNL internal procedures are dynamic in nature, maintenance of the Plan is necessary to reflect contemporary information and to ensure continued compliance with NEPA.

6. Activities necessary to keep PNL NEPA Compliance Program contemporary: The PNL NCS is involved in a multitude of activities that are necessary to obtain NEPA-related information and to maintain contemporaneity with NEPA-related requirements. These activities include, but are not limited to, meeting and communicating with DOE-RL, DOE-HQ, representatives from PNL cultural and biological resources groups, and NEPA representatives of other Hanford contractors and other DOE national laboratories. These activities are integral to day-to-day NEPA Compliance Program work.

7. NEPA self-appraisals: Appraisals would be conducted if the NEPA Compliance Program ADS is funded at the planning level. The PNL NCS has previously performed NEPA compliance self-appraisals of eleven PNL Centers and/or Directorates. The self-appraisals were performed as a verification of Center/Directorate compliance with NEPA requirements and included interviews with CNRs and project managers, random checks of NEPA auditable files, and, when relevant, visual inspections of ongoing projects. Any deficiencies (i.e., 'conditions') were noted during the appraisals and were subsequently requested to be corrected via appraisal reports. PNL NEPA self-appraisals are noted in quarterly environmental compliance reports from PNL to DOE-RL. Conditions with a Priority Planning Grid (PPG) score of eleven (11) or higher are automatically loaded into the Hanford Self Assessment database, to which DOE-RL has access. NEPA compliance self-appraisals are a necessary check on the adequacy of PNL Center/Directorate compliance with internal and external NEPA requirements.

RELATED ACTIVITIES NARRATIVE:

None.

KEY ASSUMPTIONS:

Scope Assumptions: (1) Site-wide generic and programmatic CXs submitted by PNL will continue to be well-received by the DOE-RL NEPA Compliance Officer and DOE-HQ, thus decreasing the number of project-specific CXs that would otherwise be submitted; (2) PNL projects proposals will increase in incremental fashion, resulting in incremental staffing increases; (3) Because of ever-changing NEPA requirements and guidance, it will be necessary to conduct continuing and additional NEPA-related training of appropriate PNL personnel; (4) Requirements for the NEPA compliance database will increase; (5) Project-specific Appendix B CXs will continue to be prepared and require DOE approval.

Cost Assumptions: (1) PNL projects proposals will increase in incremental

fashion, resulting in incremental staffing increases; (2) Because of ever-changing NEPA requirements and guidance, it will be necessary to conduct continuing and additional NEPA-related training of appropriate PNL personnel; (3) The cost of NEPA compliance will equal or exceed the cost of living increases.

Schedule Assumptions: (1) Increases in the number of PNL project proposals will result in a greater time commitment to NEPA-related reviews and document preparation assistance; (2) There will be a greater time commitment to log in and track NEPA activities through the NEPA compliance database; (3) Continuing and additional NEPA-related training of PNL personnel will increase time commitments; (4) There will be no great increases in the level of documentation per project.

ACTIVITY BY PRIORITY:

All activities are Priority 2.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

The PNL NEPA Compliance Program has established a viable and efficient framework for NEPA compliance activities. However, the volume of projects undertaken by PNL annually still outweighs the ability of the existing program to adequately review projects for NEPA compliance in a timely, cost-effective manner and to provide the necessary assistance to PNL staff in the preparation of required NEPA documentation.

The PNL NEPA Program Plan (PNL-MA-9) was completed and distributed in December 1992, and is currently being revised to conform to current NEPA requirements and PNL procedures. The NEPA Source Guide for the Hanford Site (WHC-SP-0903), co-authored by PNL, was completed and distributed in October 1992 and is currently being revised. The Site-wide generic Indoor Bench-Scale Research CX was prepared, submitted to DOE-RL, and approved on May 5, 1993, followed by Site-wide generic CXs for Safety and Environmental Improvements to Facilities (approved 7/9/93) and Installation and Modification of Retention Tanks (approved 9/24/93).

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0230	SUBMIT ANNUAL REPORT OF NEPA REVIEWS	9/30/94	9/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

It is anticipated that the PNL NEPA Compliance Program will review, provide document preparation support, and provide NEPA-related guidance to PNL staff on approximately 1,832 proposed projects in FY94. This activity is on schedule, along with other related level-of-effort work such as NEPA compliance database activities, training and guidance activities, management of the NEPA ADS, and activities necessary to keep the NEPA Compliance Program contemporary. In addition, the PNL NEPA Program Plan is currently in revision and should be completed by end of CY 1994. The PNL NCS is also currently preparing two programmatic CXs, which are expected to be submitted to DOE-RL in FY94. At the target level, there is currently no funding available to perform NEPA Compliance self-appraisals or to review PNL projects for compliance with the approved Indoor Bench-Scale CX.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

It is anticipated that the PNL NEPA Compliance Program will review, provide document preparation support, and provide NEPA-related guidance to PNL staff on approximately 1,984 proposed projects in FY95. Project reviews will include evaluating proposed actions against approved NEPA documentation, while document preparation support will include several project-specific CXs and EAs.

Maintaining the comprehensive database will include inputting/storing project information; tracking review activities at PNL, DOE-RL, and DOE-HQ; reporting status information to PNL project managers and DOE; recording the application of approved CXs to PNL projects; and trending various types of NEPA compliance information.

Training and guidance will include hosting bi-monthly meetings for PNL Center NEPA Representatives (CNRs), sponsoring NEPA-related training activities for the PNL NCS and CNRs, interpreting and disseminating changes in NEPA policy and guidance, and responding to a broad spectrum of NEPA-related questions from PNL CNRs and project managers.

Management of the NEPA ADS will include requesting, defending, obtaining, and managing funds for the NEPA Compliance Program ADS.

Revisions to the NEPA Program Plan will be performed as necessary to reflect contemporary information and to ensure continued compliance with NEPA.

Approximately five NEPA self-appraisals will be performed in the planning case as a verification of Center/Directorate compliance with NEPA requirements and will include interviews with CNRs and project managers, random checks of NEPA auditable files, and, when relevant, visual inspections of ongoing projects.

Other activities that necessary to obtain NEPA-related information and to maintain contemporaneity with NEPA-related requirements will include meeting and communicating with DOE-RL, DOE-HQ, representatives from PNL cultural and biological resources groups, and NEPA representatives of other Hanford contractors and other DOE national laboratories.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

It is anticipated that the PNL NEPA Compliance Program will review, provide document preparation support, and provide NEPA-related guidance to PNL staff on approximately 2,146 proposed projects in FY96. Project reviews will include evaluating proposed actions against approved NEPA documentation, while document preparation support will include several project-specific CXs and EAs.

Maintaining the comprehensive database will include inputting/storing project information; tracking review activities at PNL, DOE-RL, and DOE-HQ; reporting status information to PNL project managers and DOE; recording the application of approved CXs to PNL projects; and trending various types of NEPA compliance information.

Training and guidance will include hosting bi-monthly meetings for PNL Center NEPA Representatives (CNRs), sponsoring NEPA-related training activities for the PNL NCS and CNRs, interpreting and disseminating changes in NEPA policy and guidance, and responding to a broad spectrum of NEPA-related questions from PNL CNRs and project managers.

Management of the NEPA ADS will include requesting, defending, obtaining, and managing funds for the NEPA Compliance Program ADS.

Revisions to the NEPA Program Plan will be performed as necessary to reflect contemporary information and to ensure continued compliance with NEPA.

Approximately five NEPA self-appraisals will be performed in the planning case as a verification of Center/Directorate compliance with NEPA requirements and will include interviews with CNRs and project managers, random checks of NEPA auditable files, and, when relevant, visual inspections of ongoing projects.

Other activities that are necessary to obtain NEPA-related information and to maintain contemporaneity with NEPA-related requirements will include meeting and communicating with DOE-RL, DOE-HQ, representatives from PNL cultural and biological resources groups, and NEPA representatives of other

Hanford contractors and other DOE national laboratories.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Commensurate with PNL growth and increased project proposals, there will be progressive increases in the need for resources to review and assist in the preparation of NEPA documentation, maintain the comprehensive database, provide NEPA training and guidance, manage the NEPA Compliance Program ADS, maintain the NEPA Program Plan, conduct NEPA self-appraisals, and perform other activities that are necessary to obtain NEPA-related information and to maintain contemporaneity with NEPA-related requirements.

There are 2,314 anticipated project proposals requiring review, document preparation assistance, and/or NEPA-related guidance for FY97, 2,498 for FY98, 2,695 for FY99, and 2,908 for FY 2000. These estimates are based on historic data and are subject to change.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

Driver: National Environmental Policy Act (NEPA) of 1970 (Public Law 91-190, as amended). (Also recognized as the National Environmental Policy Act of 1969, 42 USC 4321-4347 et seq., as amended).

Affected Scope/Cost/Schedule: This regulation declares a broad national environmental policy and promotes consideration of the potential environmental consequences of federal agency actions.

Consequences: If this ADS activity is not funded, then PNL will be unable to demonstrate compliance with NEPA.

Driver: Council on Environmental Quality, 'Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act.' U. S. Code of Federal Regulations. 40 CFR 1500-1508. 1978.

Affected Scope/Cost/Schedule: This regulation establishes procedures for compliance with NEPA. In addition, this driver requires federal agencies to establish specific criteria for classes of actions requiring documentation under NEPA.

Consequences: If this ADS activity is not funded, then PNL will be unable to demonstrate compliance with NEPA.

Driver: U. S. Department of Energy, 'National Environmental Policy Act Implementing Procedures.' U. S. Code of Federal Regulations. 10 CFR 1021. 1992.

Affected Scope/Cost/Schedule: This regulation establishes general DOE procedures for implementing NEPA. Significantly, this regulation also establishes a list of classes of actions conducted by DOE and its contractors that require specific NEPA documentation. This list includes categorically excluded actions that do not normally require EAs or EISs.

Consequences: If this ADS activity is not funded, then PNL will be unable to demonstrate compliance with NEPA.

Driver: Secretary, Department of Energy Notice - SEN-15-90, 1990.

Affected Scope/Cost/Schedule: This regulation represents a DOE policy mandate by the Secretary of Energy for full compliance with NEPA. Significantly, this policy emphasizes incorporation of NEPA requirements early in the project planning process, 'with attention to detail in the initial preparation of the required documents.'

Consequences: If this ADS activity is not funded, PNL will be unable to demonstrate that it has achieved the objectives of SEN-15-90 and made every possible effort to incorporate an efficient NEPA process at the earliest possible stage of project or program development. Failure to accurately demonstrate compliance may result in contractual deficiencies by PNL and will impair PNL's ability to conduct research-related activities in a timely and cost-effective manner.

Driver: U. S. Department of Energy, 'National Environmental Policy Act Compliance Program.' DOE Order 5440.1E. 1992.

Affected Scope/Cost/Schedule: This Order establishes internal DOE responsibilities and procedures to implement NEPA.

Consequences: If this ADS activity is not funded, then PNL will be unable to demonstrate compliance with NEPA.

Driver: U. S. Department of Energy, Richland Operations Office (DOE-RL), 'Implementation of the National Environmental Policy Act at The Richland Operations Office.' DOE-RL Order 5440.1A. 1987.

Affected Scope/Cost/Schedule: This Order requires contractors to adopt internal procedures to initiate and participate in the NEPA process. RL contractors shall develop and implement a program which provides timely awareness and review of all proposed activities, provides for the timely completion and submittal of appropriate NEPA documentation to RL, and provides to RL ES&H Division and RL SMD a list of proposed actions, projects, and tasks identifying the level of NEPA documentation.

Consequences: If this ADS is not funded, then PNL will be unable to demonstrate compliance with DOE NEPA procedures.

REGULATORY KEY ISSUES:

If the NEPA Compliance ADS is not funded, proposed PNL projects will not obtain funding, ongoing PNL projects out of compliance will be stopped, and PNL will be unable to demonstrate compliance with 40 CFR 1500-1508, 10 CFR 1021, DOE 5440.1E, and DOE 5440.1A.

DOE NEPA compliance requirements have grown increasingly more comprehensive and inclusive over the past few years. As a result, the work scope of PNL NCS has increased accordingly. A primary example would be the current DOE-RL requirement to perform (and document) cultural and biological resource reviews for all DOE-RL projects with any potential to disturb such resources. These reviews are performed primarily to assess impacts to resources under the purview of the National Historic Preservation Act (NHPA) and the Endangered Species Act (ESA), but also have relevance to Appendix B CXs as defined by 10 CFR 1021. If this trend continues, the ability of the PNL NCS to keep pace with additional requirements will be eclipsed, especially at target level funding.

COMP/PROG BENEFITS AT PLANNING LEVEL:

The amount of planning case funding requested for FY95, FY96, and the outyears is required in order to ensure that PNL projects are compliant with NEPA regulatory drivers and other federal regulations under the purview of the NEPA. Additional labor is required to relieve the pressures of current understaffing and to allow PNL NEPA Compliance Staff to continue to offer an adequate level of NEPA support and guidance to PNL staff, to

review bench-scale research activities for NEPA compliance, to pursue streamlining of the NEPA process (e.g., preparing generic CX documents), and to conduct self-appraisals of PNL Centers for NEPA compliance verification.

If the PNL NEPA Compliance Program is not funded at the planning level for FY95, FY96, and the outyears, certain valuable historic Program activities will not be performed (i.e., review of bench-scale research activities for NEPA compliance, attempts to streamline the NEPA review process via generic CXs, and self-appraisals of PNL Centers). Without planning level funding, there is no assurance that all PNL projects will be in compliance with NEPA. In addition, lack of planning level funding may also affect TPA milestones and the Hanford mission of environmental cleanup and restoration.

CONCERNS AT PLANNING LEVEL:

None.

REQUIRED TECHNICAL DEVELOPMENT:

None.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8400 ADS SUF: 0 SUBACTIVITY: MA

SUBACTIVITY TITLE: EFFLUENT MONITORING

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: D VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECH RES-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE	EW3130040	3513
TOTAL		3513
DIRECT FTE		18

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3130040	3246	3413		3513	3513	3571	3662	3757	3856
TOTAL		3246	3413	0	3513	3513	3571	3662	3757	3856
DIRECT FTE		18	18	0	18	18	18	18	18	18

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3130040	3246	3413		3513	3513	3571	3662	3757	3856
TOTAL		3246	3413	0	3513	3513	3571	3662	3757	3856
DIRECT FTE		18	18	0	18	18	18	18	18	18

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

This activity characterizes and monitors air and liquid effluent (hazardous and radioactive) streams originating from PNL-operated facilities to verify compliance with environmental regulatory requirements. The activities include effluent pathways verification, stream characterization, facility drawing updates, sampling, sample analysis, quality assurance plans, operation of samplers, and instrumentation field testing.

This program is a continuity of operations activity and hence will continue as long as effluents are released from facilities which use radioactive and hazardous materials. By the end of FY 98, effluent lines will be verified in major facilities, baseline characterization of effluent will be completed, appropriate monitoring equipment will be installed and the program will have developed a means to maintain documentation that meets all applicable federal and state requirements.

The effluent monitoring program is conducted in conjunction with the Hanford Site environmental monitoring program through the comparison of effluents released from facilities and site and off-site monitoring. Results from radiation air monitoring are used for estimating off-site doses to the public. Radiological Air Sampling systems are being upgraded to comply with 40 CFR 61, WAC 246-247, and DOE/EH-0173T.

Liquid monitoring from PNL facilities is crucial to assure compliance of the new process sewer system from the National Pollutant Discharge Elimination System (NPDES) permit and to assure that the system is designed to treat all necessary constituents. A treatment system and NPDES permit is planned to comply with TPA milestone M-17-06. Additionally, PNL is responsible to determine if the existing administrative controls for sewer usage is adequate to ensure compliance to applicable environmental regulatory limits.

In order for WHC to ensure that the 300 Area sewer users are appropriately using the sewer system, in FY93, WHC issued Facility Liquid Effluent Waste Acceptance Criteria for all facilities utilizing the Process and Sanitary sewers in the 300 Area. Included in these criteria are requirements for all facilities to certify liquid effluent as meeting all applicable waste criteria relative to radioactive and/or hazardous constituents prior to discharge to sewer systems. Additionally, the WDOE, EPA, and City of Richland have been increasingly involved in the 300 Area sewers primarily due to the TPA commitments and associated public interest.

DOE Order 5400.1 requires the preparation of Facility Effluent Monitoring Plans (FEMPs) which state that all air and liquid effluent streams must be characterized. Monitoring activities will be based on characterization results, process (research) activities, radiological and hazardous material inventories, and line usage historical information.

RELATED ACTIVITIES NARRATIVE:

Existing activities involving installation and upgrades of liquid and air

samplers are funded through ADS 8430 and 7200-08. These ADS programs covered the installation of new systems and did not include funding for air or liquid monitors and samplers operations.

KEY ASSUMPTIONS:

The basic assumptions that are key to successful completion of milestones are: no major changes will be made in federal, state, or local regulations, budgets will be fully funded, and that external costs not controlled by DOE programs (laboratory analyses) remain relatively consistent with normal inflation. It is also assumed that the work scope at PNL facilities will remain relatively constant and that additional effluent streams will not be created.

ACTIVITY BY PRIORITY:

The activities of this project are principally Priority A. These are ongoing effluent monitoring operations required to maintain environmentally safe conditions. By proper monitoring of effluent releases, this activity ensures that environmental degradation does not occur.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

Related work done prior to FY93 and FY94, including non-ADS funded work, is as follows:

- . Established a QA Plan consistent with QAMs 005/80 and applied the QA Plan to the PNL Radiological Air Emission Sampling program.
- . Completed stack sampler system upgrades to bring monitoring activities into full compliance with regulatory requirements.
- . Developed an effluent monitoring database which meets all required WA objectives for EPA and state regulations.
- . Installed liquid effluent samples in 10 facilities.
- . Completed 325 facility liquid effluent line verification and drawings update. Initiated liquid effluent line verification in 324 building.
- . Established SOWS with the analytical laboratory for radiological analyses to be performed meeting EPA criteria.
- . Completed 327 facility effluent line verification and drawings update.
- . Completed all RPS line verification and drawings update in the 300 Area. This included RPS lines in 324, 325, 326, 327 and 329.

- . Completed all RLWS line verification in 300 Area buildings.
- . Completed stack monitoring and sampling upgrades in 324, 325, 327 and 3720. Upgrades were completed as required by the EPA/Hanford Federal Facility Compliance Agreement.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0250	CONDUCT LIQUID EFFLUENT SAMPLING PROGRAM	9/30/94	9/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

No work performed in FY 93 by PNL effluent monitoring is covered by ADS funding. Improvements in DOE-owned facilities required to bring certain facilities into compliance are covered under ADS 8430 and 7200.08.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0255	COMPLETE EVALUATION OF HAZARDOUS/TOXIC AIR EMISSIONS	9/30/95	9/30/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Quality Assurance: The quality assurance plan for liquid effluent monitoring will be implemented. Environmental monitoring activities must comply with the quality assurance protocols listed in QAMS-005-80 which results in assurance that representative samples are collected and data verified.

Records maintenance must conform to various procedures for short- and long-term storage requirements. A database will need to be maintained to perform required data reduction used for final reporting to the regulatory agencies.

A liquid sampling characterization methodology needs to be implemented which will take into account current research activities, past line usage information, Clean Water Act and State of Washington regulations and probable permitting requirements. Offsite dose calculations need to be prepared and submitted to DOE, EPA, and State of Washington. The primary reports used for offsite dose calculations are the Effluent Information System and Onsite Discharge Information System. EPA requires the calendar year emissions report for the Hanford Site.

According to DOE Order 5400.1: 'A written environmental monitoring plan shall be prepared for each... facility...that uses, generates, releases, or manages significant pollutants or hazardous materials.'

FEMPs require additional characterization evaluations of effluent streams. DOE Order 5400.1 states that annual determinations, based on the potential for radiological or hazardous materials stored within each facility to be released into the environment, be completed for DOE facilities.

40 CFR 61, Section D methods are completed to estimate the potential offsite dose. This criteria assumes no filtration capability is utilized. Hazardous material total inventories per facility are also compared to the 40 CFR 302.4 lists for reportable spills to the environment. If materials exceed the 40 CFR 302.4 limits, a further analyses is then completed which

involves evaluation of the form, use, location of storage, and the ultimate potential for the potential for a release to the environment. Due to the nature of the wide variety of research activities conducted by PNL, inventories of hazardous and radioactive materials is extensive.

General requirements for effluent monitoring for FEMPs are given in terms of satisfying the following objectives:

- . Verify compliance with applicable Federal, state, and local effluent regulations and DOE Orders.
- . Determine compliance with commitments made in Environmental Impact Statements, Environmental Assessments, or other official documents.
- . Evaluate the effectiveness of effluent treatment and control.
- . Identify the potential environmental problems and evaluate the need for remedial actions or mitigation measures.
- . Support permit revision and/or report unplanned releases.
- . Support permit revision and/or issuance.

The criteria for establishing a specific effluent monitoring scheme, procedures for laboratory analyses, a quality assurance plan for data collection and analysis, and program implementation procedures should be provided in appendices to the FEMP document.

A database that contains the entire inventories by facility needs to be designed. The database would allow for continual updating of facility inventories as they change during the year.

Program Development: Hazardous air and liquid sampling methodology needs to be continued for 300 Area buildings. Since there is not a routine process for PNL operated buildings, characterizations are expected to be complex and will require changes throughout the year. Air toxic releases will first need to be evaluated based on the types of chemicals and processes and the expected releases per facility. At that point, a determination will be made as to what types of monitors/samplers need to be installed to verify compliance to the Washington State Air Toxics Regulations as well as the Clean Air Act.

Operation: Operation and maintenance of effluent monitors is the responsibility of this program. This involves daily, weekly, and monthly routine operational checks, oversight of spare parts inventories, and calibration of applicable instruments. Additionally, as new regulations become final, new monitors and other associated equipment must be procured, installed, and tested. Also involved in the operations portion of this program is responding to monitor/sampler alarms, determining cause of alarms, preparation of occurrence reports, and ensure appropriate procedures are written and current.

Analytical costs for radiological and hazardous air and liquid samples are estimated to be approximately half of the total funding for this activity. The remaining funding is primarily for FTEs.

Line Verification: Building effluent line verifications are required. Due to the age and past usage of the 300 Area buildings all air and liquid release pathways need to be compared with existing drawings. Since numerous government contractors have operated these facilities, errors in drawings have been found to be numerous. In many cases, the lines must be verified through the use of dyes, sounding devices, and so on.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0260	REPORT ANNUAL EFFLUENT MONITORING RESULTS TO DOE, EPA AND WDOH	3/31/96	3/31/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

In FY95, the planned work is a continuation of FY94 tasks.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

By the end of FY99, all PNL facilities should have the effluent lines verified (air and liquid). Internal procedures will be in place to ensure that all drawings are updated as changes occur. PNL-operated buildings in the 300 Area will have the liquid effluent characterized through evaluation of data resulting from previous years sampling efforts. Waste certification plans will be completed and will be part of the facility operation procedures. Full compliance with liquid effluent discharges should be achieved.

The radioactive air monitors will be in full compliance with 40 CFR 61. Data will be input to the Hanford Environmental Information System Database for use in calculations of off-site doses.

The Quality Assurance Program for effluent monitoring activities will be in full compliance with EPA QAMS 005/80.

Liquid and air sampling and monitoring will continue to provide quantitative data supporting that PNL activities do not result in discharges to the environment which exceed regulatory limits.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

Primary drivers are listed below:

DOE 5400-5400.6

Impact: Requires effluent be characterized and monitored in facilities where radioactive and/or hazardous materials are used. Currently effluent is regulated by administrative controls and there are no means to verify that the administrative controls are effective. Offsite doses to the public could not be calculated without radiation air monitoring.

Consequences: If this activity is not funded, operations at these facilities would have to be discontinued. These DOE Orders also invoke responsibility to implement EPA requirements. Failure to abide by the EPA and state requirements could result in closure and significant fines. Willful non-compliance may lead to more severe penalties.

Clean Water Act, 40 CFR 122

Impact: This Act forbids disposal of regulated materials through air or liquid waste streams. Requires through the NPDES permit system that effluent be characterized prior to entering a surface water of the U.S. Funding is necessary to assure that regulated materials are not disposed of via an effluent stream.

Consequence: If this activity is not funded, liquid discharges at these facilities would have to cease. All liquid discharges would have to be stored until funds to analyze and dispose of the waste could be appropriated, basically the facilities would probably have to be shut down. Failure to abide by the EPA and state regulations could result in closure and significant fines. Willful non-compliance may lead to more severe penalties.

Clean Air Act, 40 CFR 61

Impact: This act requires sampling and monitoring of stacks with potential to release radioactive materials. Proposed changes to the CAA also include the potential need to monitor for hazardous/toxic materials. Requires that offsite doses to the public are monitored to assure that activities do not adversely affect the environmental safety of individuals.

Consequences: If this activity is not funded air discharges at some of the PNL facilities would have to cease. Funds would have to be provided for any facility that remained in operation to determine if that activity could even operate without further sampling. Failure to abide by the EPA and state requirements could result in closure and significant fines. Willful non-compliance may lead to more severe penalties.

Resource Conservation Recovery Act, 40 CFR 261-265

Impact: This Act defines hazardous waste and disposal criteria; effluent

monitoring is needed to assure that regulated materials are disposed through air or liquid waste streams. These materials defined as hazardous waste cannot be disposed of via an effluent stream.

Consequences: Any facility that has the potential to discharge these materials would have to cease operation. Failure to abide by the EPA and state requirements could result in closure and significant fines. Willful non-compliance may lead to more severe penalties.

WAC 173.303

Impact: This Act lists dangerous wastes and forbids their release through environmental pathways. Those materials defined as dangerous waste cannot be disposed of via any effluent stream.

Consequence: Any facility that has the potential to exceed or violate these discharge release criteria would have to cease operation. Failure to abide by state requirements could result in closure and significant fines. Willful non-compliance may lead to more severe penalties.

WAC 173.201 -

Impact: Washington State Code requires all liquid effluent to meet discharge release criteria.

Consequences: Any facility that has the potential to exceed or violate these discharge release criteria would have to cease operation. Failure to abide by state requirements could result in closure and significant fines. Willful non-compliance may lead to more severe penalties.

TRI- Party Agreement (TPA) Milestone M-17-06

Impact: Requires cessation of all discharges to the process sewer trenches. In order to cease discharges to the trenches, a new wastewater treatment system will be constructed and the outfall will tie into the Columbia River. Sampling and characterization of waste streams must proceed to ensure that all applicable regulatory criteria are met as well as to assure that the treatment system is designed to treat appropriate materials.

Consequences: If this work is not funded, then key waste streams will not be characterized which then leads to inadequate design criteria for the new process sewer system and possible failure of the system to protect the environment; certain waste streams will not be monitored to verify compliance with ES&H regulations and to support Hanford monitoring programs which could result in discharge of regulated materials to the Columbia River; and the above failures may violate the regulations cited herein. Hanford will not be able to verify that these conditions are safe.

REGULATORY KEY ISSUES:

New public interest in the process sewer system has been generated primarily through the TPA M-17-06. A notice of Intent to File a Lawsuit has been received by Richland Field Office relative to the process sewer

outfall from a local environmental group. If the lawsuit succeeds, then the scope and cost of effluent monitoring will probably increase.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Additional funding above the target level would provide for more expedient characterization of the liquid effluents. Requested funding allows for the absolute minimum number of samples collected to determine facility conditions as well as current discharges. Additional funding would also provide more expedient evaluations of toxic air releases. More frequent inspections could be performed of monitoring equipment and the facility effluent lines could be verified in a more expedient manner.

CONCERNS AT PLANNING LEVEL:

Verbatim compliance with CAA and CWA regulations cannot be met at the current planning level. The WDOE, City of Richland, and EPA frequent the 300 Area and facility drawings are likely to be requested on a routine basis. The regulators expect data verification that administrative control works and currently those data do not exist. The current planning level requests funding for 2 liquid samples to be pulled per facility per month. Due to the expected variability of the waste streams, these samples could not be adequate to statistically characterize the waste streams. Numerous effluent lines have been found to be mismarked in facilities already evaluated. Concerns exist that other lines are mismarked and, therefore, currently being discharged to inappropriate sewer systems. In regards to cleanout of air sampling systems, the current funding will not adequately support a complete probe washing program.

REQUIRED TECHNICAL DEVELOPMENT:

No additional technology is required.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8400 ADS SUF: 0 SUBACTIVITY: NA

SUBACTIVITY TITLE: ESSENTIAL ES&H DRAWINGS

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: D VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECH RES-NFP

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW3130040		TOTAL
TOTAL		854
DIRECT FTE		854
		9

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3130040		807	830		854	854	878	906	936	966
TOTAL		807	830	0	854	854	878	906	936	966
DIRECT FTE		9	9	0	9	9	9	9	9	9

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3130040		807	830		854	854	878	906	936	966
TOTAL		807	830	0	854	854	878	906	936	966
DIRECT FTE		9	9	0	9	9	9	9	9	9

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

This activity will accomplish the following activities:

Create operational drawings (one-line drawings) of essential building systems for the following buildings: 318, 324, 325, 327, 3730, 3760 and 747A.

Provide a uniform numbering system (Equipment Identification Number EQUID.) for equipment in these systems and retag equipment accordingly.

Provide a data base which will identify all essential equipment and reference each piece of essential equipment to drawings, preventative maintenance schedules, change documents, etc.

As-build required construction drawings of safety systems.

Create operational drawings (one-line drawings) of essential building systems for the following buildings: 318, 324, 325, 327, 3730, 3760 and 747A.

This activity consists of the creation of one-line diagrams to show locations, flows, and operations of essential building utilities and service systems. The existing systems' drawings were drawn for the purpose of constructing or installing the building and its systems. Over the years, many modifications have been performed on the building and its systems. These modifications required the creation of additional construction modification drawings. The number of drawings it now takes to understand the layout and operation of a system has expanded from the original construction drawings to include all the additional modification drawings. The original drawings are in poor condition and the information they provide is unreliable. By consolidating the information from several drawings that contain parts of a system into a set of one-line diagrams which show all of the system, we will be able to provide engineering and operations personnel easy access to critical information which is necessary to understand the system, and how it works.

Additionally the original construction drawings were a tool intended to aid in the construction and erection of the facility that they depict. They were not intended to be used as operational aids and they do not suit that function. The one-line drawings will identify the engineering content of the systems and provide a much better tool to the operations staff.

Provide a uniform numbering system (Equipment Identification Number EQUID.) for equipment in these systems and retag equipment accordingly.

The original equipment numbers assigned on the drawings are not adequate for data base use in identifying the equipment because they repeat on a regular basis and they are not unique. Additionally, as the facilities were modified and new additions were added, different numbering systems were used for the modifications and additions. This causes confusion and added expense in identifying a specific piece of equipment. Each piece of essential equipment will be assigned a unique new number in addition to its

currently assigned number. This distinct and unique number will eliminate the identification problem and make it possible to include the equipment identification number in a data base.

Provide a data base which will identify all essential equipment and reference each piece of essential equipment to drawings, preventative maintenance schedules, change documents, etc.

The current engineering document system is a manual system that in the past has not proven to be adequately referenced or indexed to allow engineers, drafters, operators or craftsmen to identify the current status of pending changes, completed changes, preventative maintenance schedules, etc. In the past identifying relationships between different types of engineering documents (i.e. change control) have been difficult at best to identify and at times impossible. Establishing a data base to control this type of information will make it much easier to identify the systems current configuration. The final data base will be available on the network for accessibility. The engineering documents will also be placed on the network.

As-built required construction drawings of safety systems.

Currently it is believed that the one-line drawings will be adequate to describe the as-built condition of approximately 90% of the building systems identified for this activity data sheet. During the drawing review process to create the one-line drawings, engineers will identify the existing construction drawings that have a legal requirement to be maintained. The as-built function will update the drawings to the condition the law requires. This as-built effort will require 2 to 3 times the effort that the one-line drawings require. This is the reason for the reduction of drawings produced per year in FY98 and other years were construction drawings are being as-built.

RELATED ACTIVITIES NARRATIVE:

N/A

KEY ASSUMPTIONS:

Costs include field inspection to verify actual as-built configuration of the identified essential systems.

Essential systems will include systems which are located within the building.

Costs include data base setup and entry for equipment information.

The number of one-line drawings required for each building will vary according to the systems contained within each building. The estimated combined total of drawings for all buildings is 640. By dividing the 640 required drawings by 5 years, it was determined that an average of 128 drawings will need to be created each year and that a staff of 9 will be required. These drawings are a requirement of the corrective action for

Tiger Team finding OA.7-6 which calls for the preparation of all essential drawings. The drawings will be used mainly by building operations and engineering personnel during maintenance, trouble shooting and system design modifications and will provide faster, more reliable responses to emergencies.

The number of construction drawings that will be required to be as-built will not exceed the number stated in section 9.

ACTIVITY BY PRIORITY:

All activities in this ADS are Priority 3.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

To date this program has been funded for 6 weeks. The pilot program, tools development and procedures development have been completed on schedule. The project is now being moved to the 324 building. Files have been started for the data base and work is being started on the numbering system.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0275	COMPLETE FY94 ONE-LINE DRAWINGS FOR 324 BUILDING	9/30/94	9/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

During this year (FY94) the first phase of the work in the 324 building will be executed and 80 one-line drawings will be created. Work will begin on the data base and on the renumbering of the equipment.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0280	COMPLETE FY95 ONE-LINE DRAWINGS FOR 324 BUILDING	9/30/95	9/30/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

During FY95 this project will create 128 one-line drawings for the 324 building. Work will continue on the data base and the renumbering of the equipment.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0285	COMPLETE FY96 ONE-LINE DRAWINGS FOR 324 BUILDING	9/30/96	9/30/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

During FY96 this project will create 128 one-line drawings for the 324 building. Work will continue on the data base and the renumbering of the equipment.

If all of the one-line drawings are completed for the 324 building prior to the end of the fiscal year, work will be started on the as-building of the construction drawings that have been identified during the one-line drawing process. This as-built effort will require 2 to 3 times the effort that the one-line drawings require. This is the reason for the reduction of drawings produced per year in FY98 and other years were construction drawings are being as-built.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0295	COMPLETE AS-BUILT FY97 DRAWINGS FOR 324 BUILDING	9/30/97	9/30/97
8400-00-0300	COMPLETE AS-BUILT FY98 DRAWINGS FOR 324 BUILDING	9/30/98	9/30/98
8400-00-0520	COMPLETE ONE-LINE FY 99 DRAWINGS	9/30/99	9/30/99

8400-00-0535	FOR 325 BUILDING COMPLETE FY00 DRAWINGS FOR 325 BUILDING	9/30/00	9/30/00
--------------	--	---------	---------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Continue working on 324 construction drawings, 60 drawings.

FY98 Complete work on 324 construction drawings, 60 drawings.

FY99 Start one-line drawings of 325 building, 124 drawings.

FY00 Complete one-line drawings of 325 building, 65 drawings.

Start work on 325 construction drawings, 40 drawings.

FY01 Complete work on 325 construction drawings, 40 drawings.

Start work on 327 one-line drawings, 36 drawings.

FY02 Complete work on 327 one-line drawings, 4 drawings.

Complete work on 327 construction drawings, 40 drawings.

FY03 Complete work on 318 one-line drawings, 54 drawings.

Complete work on 318 construction drawings, 10 drawings.

Complete work on 3730 one-line drawings, 14 drawings.

Complete work on 3730 construction drawings, 5 drawings.

Complete work on 3760 one-line drawings, 12 drawings.

Complete work on 3760 construction drawings, 5 drawings.

Complete work on 747A one-line drawings, 12 drawings.

Complete work on 747A construction drawings, 5 drawings.

It should be noted that during all of the above activities, data base and equipment numbering is an ongoing part of the work.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:****Driver:**

10CFR435 Para. 06.3.4.1.1
Para. 07.3.8.1-7.3.8.4
Para. 10.3.10.1

Affected Scope: Requires one line drawings & As-Builts.

Consequences: Could be found in violation of the law. The facility could be shutdown. Possible legal action.

Driver:

10CFR830.110 Para. (d)(4)and (j) (Pending Approval)
Affected Scope: Requires documentation of all essential building systems to include drawings.

Consequences: Could be found in violation of the law. The facility could be shutdown. Possible legal action.

Driver:

DOE 4330.4A Chp. I Para. 3.4.5.d
Chp. I Para. 3.6.4.f
Chp. II Para. 18.3.1

Affected Scope: Requires As-Built drawings of all plant systems that fall under the maintenance management program. (Essential Drawings.)

Consequences: Would be in violation of the order.

Driver:

DOE 5480.19 Chp. VIII Para. 10
Chp. XVI Para. 20
Chp. XVII Para. A
Chp. XVII Para. B

Affected Scope: Requires As-Built drawings.

Consequences: Would be in violation of the order.

Driver:

DOE 5480.5 Para. 8.a

Affected Scope: Requires As-Built drawings.

Consequences: Would be in violation of the order.

Driver:

DOE 6430.1A Para. 0170-1
Para. 0203-1.5

Affected Scope: Requires As-Built drawings.

Consequences: Would be in violation of the order.

Driver:

EPA GUIDE DOC. Page 45, Page 51, Page 57

Affected Scope: Requires As-Built drawings.

Consequences: Would be in violation of the Guide Doc.

Driver:

NFPA 72 Chp. 6 Para. 6-1 & A-6-1
Chp. 1 Para. 1.4

Affected Scope: Requires As-Built drawings.
Consequences: Would be in violation of a National Std.

Driver:

Tiger Team Finding OA. 7-6

Affected Scope: Requires As-Built drawings.

Consequences: Would be in violation of the Tiger Team finding.

In addition the 324 and 325 buildings will require state and federal permits to operate as the verification facility for the Hanford Waste Vitrification Program (HWVP) program. One of the conditions for obtaining these permits and of keeping them is As-Built drawings of the facilities.

REGULATORY KEY ISSUES:

Costs include field inspection to verify actual as-built configuration of the identified essential systems.

Essential systems will include systems which are located within the building.

Costs include data base setup and entry for equipment information.

The number of one-line drawings required for each building will vary according to the systems contained within each building. The estimated combined total of drawings for all buildings is 640. By dividing the 640 required drawings by 5 years, it was determined that an average of 128 drawings will need to be created each year and that a staff of 9 will be required. These drawings are a requirement of the corrective action for Tiger Team finding OA.7-6 which calls for the preparation of all essential drawings. The drawings will be used mainly by building operations and engineering personnel during maintenance, trouble shooting and system design modifications and will provide faster, more reliable responses to emergencies.

COMP/PROG BENEFITS AT PLANNING LEVEL:

This activity is planned for 10 years at the planned level of spending. Ten years is considered to be at the outside of a reasonable response time to correct this problem. If the funding levels are reduced, the length of time to complete this task will extend out into the future proportionately. As the time frame grows, the likelihood of completing the program successfully diminishes.

Since having as-built drawings and engineering information more readily accessible has been repeatedly demonstrated to enhance the safe operation of facilities, additional funding could shorten the 10 year planned completion of this activity and their for enhance the safe operation of the ADS facilities at an earlier date.

CONCERNS AT PLANNING LEVEL:

All activities are funded at the Planning Level.

REQUIRED TECHNICAL DEVELOPMENT:

No new technical development is required to complete this activity.

THIS PAGE INTENTIONALLY
LEFT BLANK

THIS PAGE INTENTIONALLY
LEFT BLANK

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8400 ADS SUF: 0 SUBACTIVITY: OA

SUBACTIVITY TITLE: FACILITIES SAFETY AND CONDUCT OF OPERATIONS

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: D VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECH RES-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE	EW3130040	0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL	BUD	LEGAL	ESH	TOTAL			
OE	EW3130040	0	2233	2215			2215	1051	934	1217
TOTAL		0	2233	2215	0		2215	1051	934	1217
DIRECT FTE		0	10	12	0		12	7	6	8

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL	BUD	LEGAL	ESH	TOTAL			
OE	EW3130040	0	2233	2215			2215	1051	934	1217
TOTAL		0	2233	2215	0		2215	1051	934	1217
DIRECT FTE		0	10	12	0		12	7	6	8

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

EYEWASH AND SAFETY SHOWER FLUSH LINES: Add supplemental piping to the main headers to effectively clear lines of particles to prevent hazard to users of eyewash and safety shower units per OSHA, WISHA (WAC's OSHA), DOE Orders, and Tiger Team Findings.

CONDUCT OF OPERATION: DOE's expectations, for the graded approach to complying with DOE 5480.19, Conduct of Operation, require that PNL enhance the rigor of the Conduct of Operations program implementation. Assessment activities indicate that PNL needs to be more aggressive in line management training, line management self-assessment and program oversight. This ADS funds an enhanced effort to support line management Conduct of Operations self-assessments and provide an additional technical resources for consistent guidance and policy interpretation to support line management's implementation efforts.

ASBESTOS SURVEY: Before any construction, renovation, remodeling, maintenance, repair, or demolition project, PNL must perform a good faith inspection for asbestos containing material. The inspection shall be documented by a written report maintained on file available to all personnel performing facilities type work. PNL will prepare a single comprehensive report for each of its structures. These reports will be stored on a database that will be updated as asbestos is removed or discovered within the facilities. Hard copies of the reports will be provided to all crafts and contractors as needed.

ASBESTOS MAINTENANCE REMEDIATION: In all encounters of asbestos by workers, further work must cease until remediation is complete. Most of the remediations are small and frequent: removal of asbestos insulation obstructing access to steam and hot water valves, steam/hot water leaks, piping leaks, steam traps, steam heating coils, and outside air heating and cooling ductwork; removal or core-drilling of asbestos-impregnated floor tile; demolition or repair of asbestos-containing plastic laminate (i.e., Formica countertops); removing or penetrating wall materials using binders (glues) containing asbestos. A minority of remediations are larger efforts to remove asbestos insulation to allow replacement of central building components such as central hot water tanks and reheat coils.

HANFORD SITE ASBESTOS ABATEMENT PLAN: PNL must remove, encapsulate, or enclose asbestos containing material from the EM's three highest priority buildings: 327, 3730, and 318. This is in accordance with Tiger Team Finding A/CF-2, 'Inadequate Asbestos Management' (DOE 1990).

HAZARD ASSESSMENTS AND EXPOSURE EVALUATIONS: The hazard assessment and remediation-planning activity examines potential chemical and physical hazards to Laboratory workers as required by OSHA, WISHA (WAC's OSHA), DOE Orders, and Tiger Team Findings. Comprehensive and well-documented surveys of both facilities and operations are required to identify potential over-exposures to chemical hazards and to verify or implement compliance with occupational safety standards such as OSHA. The hazards include chemicals, noise, dangerous physical or operational conditions, and non-ionizing radiation.

Surveyors inspect each facility space (i.e., work stations, labs, or support space) and evaluate each distinct operation such as a research and development experiment, lab program, or line organization. The regulations require detailed assessments of the potential hazards identified through the surveys. These assessments include sampling and analysis of the

selected potential over-exposures and include in-depth field evaluations of OSHA-type hazards.

The initial work of this hazard assessment and remediation planning activity is to select strategies and document procedures for surveys and assessments. Other important work is to determine the criteria for evaluating the relative importance or risks of the wide range of hazards by setting protocols for sampling and analysis; developing databases to capture and administer the large amount of data generated by surveys and assessments; scheduling which facilities and operations should be assessed first based on their importance to DOE missions and on preliminary judgement of greatest risks.

MSDS: This task expands the hazards communication program component of MSDS at the Hanford Site. RL has directed the Hanford Contractors to support a site wide electronic system managed by the Hanford Environmental Health Foundation. The task will be to develop in CY 1994 the requirements for the system. Develop the system hardware and software in CY 1994 and load the system with MSDSs in the following years. PNL is requesting the funding above the current core funding we presently provide for this task to cover the cost of the electronic system.

INDUSTRIAL HYGIENE: This task covers the IH program improvements required to develop and implement IH program components identified as not compliant with regulatory requirements. Those program components are fume hoods and ventilation program, hazardous waste site workers program, indoor air quality program, confined space program, asbestos abatement program, lead, formaldehyde, cadmium, and non-ionizing program, chemical spill emergency response program, water quality program, and ergonomics program. PNL will develop and implement programs to be compliant with regulatory requirements.

RELATED ACTIVITIES NARRATIVE:

None.

KEY ASSUMPTIONS:

EYEWASH AND SAFETY SHOWER FLUSH LINES: DOE grants a waiver to allow flushing on a monthly basis per the OS.2-2 Tiger Team finding, and to allow testing and flushing of individual units to continue on a quarterly basis. The gross quantity estimate is 3,000 LF of 2 in. pipe, 18,000 2 in. fittings, 100 2 in. valves, and 4,400 manhours of pipefitter time. FTEs: about 1.09 for FY 1994, 1.11 for 1995 with most of the cost in a construction subcontract to KEH, and 0.58 in 1996 with most of the cost being construction by KEH. All work ends in FY 1996.

CONDUCT OF OPERATIONS SELF-ASSESSMENTS: Two formal Conduct of Operations self-assessments per year is required on individual facilities or programs. The training, performing, documenting and follow-up to each of these self-assessments requires approximately 0.25 FTE, a total of 0.5 FTE annually.

CONDUCT OF OPERATIONS TECHNICAL SPECIALIST: A technical specialist is required to provide consistent guidance, coordination, oversight, policy interpretation, and training for PNL Conduct of Operations activities.

GOOD FAITH ASBESTOS SURVEY: A certified asbestos inspector will need to make the walk downs and help create the reports. The written documents will be in a drawing-type format.

ASBESTOS MAINTENANCE REMEDIATION: Near future maintenance related asbestos removal costs will remain fairly consistent with the past few years. The

same quantity of tasks as in FY 1993 with escalation to the budget years. KEH will continue as the remediation contractor. The Laboratory must provide appropriate supervision (0.5 FTE).
HANFORD SITE ASBESTOS ABATEMENT PLAN: WHC determined abatement cost. Cost assumptions are the responsibility of WHC.
HAZARD ASSESSMENTS AND EXPOSURE EVALUATIONS: Cost estimates are based on historical costs of similar and ongoing programs. Because many DOE Orders driving this activity are relatively new, the interpretations of requirements may change based on further guidance from DOE; interpretation changes will drive scope, schedule, and cost changes in this activity. The hazard assessments and remediation planning activity does not fund the correction of hazards identified.

ACTIVITY BY PRIORITY:

Priority 'D'

GOOD FAITH ASBESTOS SURVEY: Before any construction, renovation, remodeling, maintenance, repair, or demolition project, PNL must perform a good faith inspection for asbestos containing material in the facility in accordance with WAC 296-62-07707.

ASBESTOS MAINTENANCE REMEDIATION: If asbestos is encountered, maintenance work must cease until remediation is complete in accordance with DOE Order 4330.4A.

HANFORD SITE ASBESTOS ABATEMENT PLAN: PNL must remove, encapsulate, or enclose asbestos containing material from the EM's three highest priority buildings: 327, 3730, and 318. This is in accordance with Tiger Team Finding A/CF-2, 'Inadequate Asbestos Management' (DOE 1990). Priority 'E': All of the following activities.

EYEWASH AND SAFETY SHOWER FLUSH LINES: PNL must add supplemental piping to effectively activate emergency eyewashes and showers to clear lines of particles to prevent hazards to staff in accordance with OSHA, WISHA (WAC's OSHA), DOE Orders, and Tiger Team Findings.

HAZARD ASSESSMENTS AND EXPOSURE EVALUATIONS: Examines potential chemical and physical hazards to Laboratory workers as required by recent OSHA, WISHA (WAC's OSHA), DOE Orders, and Tiger Team Finding. The regulations require comprehensive and well-documented surveys of both facilities and operations to identify potential over-exposures to chemical hazards and to verify or implement compliance with occupational safety standards such as OSHA. The hazards include chemicals, noise, dangerous physical or operational conditions, and non-ionizing radiation.

MSDS: This task expands the hazards communication program component of MSDS at the Hanford Site. The task will be to develop on CY 1994 the requirements for the system. Develop the system hardware and software in CY 1994 and load the system with MSDSs in the following years. PNL is requesting the funding above the current core funding we presently provide for this task to cover the cost of the electronic system. This task is driven by DOE orders and OSHA requirements.

INDUSTRIAL HYGIENE: This task covers the IH program improvements required to develop and implement these IH program components identified as not compliant with regulatory requirements. Those program components are fume hoods and ventilation program, indoor air quality program, confined space program, asbestos abatement program, lead, formaldehyde, cadmium, and non-ionizing program, chemical spill emergency response program, water quality program, and ergonomics program. PNL will develop and implement these programs to be compliant with regulatory requirements such as DOE orders

and OSHA requirements.

CONDUCT OF OPERATION: PNL must enhance the Conduct of Operations program implementation through self-assessments, more aggressively train line management, and provide a technical resource for consistent guidance and policy interpretation in accordance with DOE Order 5480.19, 'Conduct of Operations.'

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

EYEWASH AND SAFETY SHOWER FLUSH LINES: Funding was approved for starting the eyewash flushing project as of 1/1/94. Work for 305-B, 324, and 325 buildings described as follows: assemble existing drawings for the eyewash and safety shower systems and inspect to verify drawing accuracy; update drawings; develop preliminary designs; prepare and route NEPA documentation for approval; complete conceptual design drawings; prepare and obtain approval for design drawings. Prepare construction estimates. CONDUCT OF OPERATION: FY 1992: Completed compliance matrix assessment and identification of PNL Manual changes needed to bring PNL's Policies and Procedures into compliance. Completed initial facility compliance assessments. All activities were completed on overhead funding. FY 1993: Initiated a continuing Conduct of Operations self-assessment level of effort. Begin the required PNL Manual upgrade identified in the Compliance Matrix. All activities were completed on overhead funding. FY 1994: Initiate a training program focused on key research personnel covering Conduct of Operations as provided within the context of PNL's Policies and Procedures. These efforts will be completed on ADS funding. Complete PNL manual upgrades to bring PNL policies and Procedures into compliance. Continue the Conduct of Operations line management's self-assessment effort. These efforts will be completed on overhead funding. GOOD FAITH ASBESTOS SURVEY: Inspections and written reports have been carried out for buildings 324, 325, 326, 327, 329, 331, 331A and 331B under non-ADS funding. The reports completed during 1989 and 1990 have not been updated since. Reinspection of the facilities will be needed to determine how current the reports are. No database exists to store these reports, so they remain in hard copy form only. Once a format and database is developed, these reports will need to be converted to it. Per the Hanford Site Asbestos Abatement Plan, removal, encapsulation and enclosing of asbestos containing material was performed on 324 and 325 buildings during FY 1993. The reports for these two buildings do not presently reflect this work. ASBESTOS MAINTENANCE REMEDIATION: Presently, asbestos encountered during maintenance activities is remediated by KEH construction forces, and the costs are paid by facility maintenance. HANFORD SITE ASBESTOS ABATEMENT PLAN: In FY 1993, the Plan abated buildings 324 and 325. No work is scheduled for FY 1994. INDUSTRIAL HYGIENE AND OCCUPATIONAL SAFETY: NA. New activity in 1995. CONDUCT OF OPERATIONS: FY 1992: Completed compliance matrix assessment and identification of PNL Manual changes needed to bring PNL's Policies and Procedures into compliance. Completed initial facility compliance assessments. All activities were completed on overheads. CONDUCT OF OPERATIONS: FY 1993: Initiated a continuing Conduct of

Operations self-assessment level of effort. Begin the required PNL Manual upgraded identified in the Compliance Matrix. All activities were completed on overheads.

GOOD FAITH ASBESTOS SURVEY: Inspections and written reports have been carried out for buildings 324, 325, 326, 327, 329, 331, 331A and 331B under non-ADS funding. The reports were completed during 1989 and 1990 and have not been updated since. Reinspection of the facilities will be needed to determine how current the reports are. No data base exists to store these reports, so they remain in hard copy form only. Once a format and data base is developed these reports will need to be converted to it. Per the Hanford Site Asbestos Abatement Plan removal, encapsulation and enclosing of asbestos containing material was performed on the 324 and 325 buildings during FY 1993. The reports for these two buildings do not presently reflect this work.

ASBESTOS MAINTENANCE REMEDIATION: Presently, asbestos encountered during maintenance activities is remediated by KEH construction forces, and the costs are paid by facility maintenance.

HANFORD SITE ASBESTOS ABATEMENT PLAN: In FY 1993, the Plan abated buildings 324 and 325. No work is scheduled for FY 1994 to allow for funding requests to be made for further abatement work.

INDUSTRIAL HYGIENE AND OCCUPATIONAL SAFETY: NA. New activity in 1995.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0305	DESIGN EMERGENCY SHOWER & EYEWASH IMPROVEMENTS	9/30/94	9/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

EYEWASH AND SAFETY SHOWER FLUSH LINES: Funding approved for starting the eyewash flushing project as of 1/1/94. For the 305-b, 324, 325 Buildings, the work is described as follows: assemble existing drawings for the eyewash and safety shower systems and inspect to verify drawing accuracy; update drawings; develop preliminary designs; prepare and route NEPA documentation for approval; complete conceptual design drawings; prepare and obtain approval for design drawings. Prepare construction estimates.

CONDUCT OF OPERATION: FY 1994: Initiate a training program focused on key research personnel. These efforts will be completed on overhead funding. Complete PNL manual upgrades to bring PNL Policies and Procedures into compliance. Continue the Conduct of Operations line management's self-assessment effort. These efforts will be completed on overhead funding.

ASBESTOS MAINTENANCE REMEDIATION: Presently, asbestos encountered during maintenance activities is remediated by KEH construction forces, and the costs are paid by facility maintenance.

HANFORD SITE ASBESTOS ABATEMENT PLAN: In FY 1993, the Plan abated buildings 324 and 325. No work is scheduled for FY 1994 to allow for funding requests to be made for further abatement work.

INDUSTRIAL HYGIENE AND OCCUPATIONAL SAFETY: NA, new activity in 1995.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0310	COMPLETE INSTALLATION OF EYEWASH FLUSHLINES	9/30/95	9/30/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

EYEWASH AND SAFETY SHOWER FLUSH LINES: Buildings 305-B, 324, and 325 will be scheduled for events as follows: authorize and inspect construction by KEH, and do As-Builts. 318 Building: assemble existing drawings for and verify accuracy, do preliminary design, estimate costs, obtain permits and NEPA approval. 327 Building: Inspect to verify where and how the existing eyewash and safety shower units are installed and generate As-Builts, do preliminary design, estimate costs, obtain permits and NEPA approval.

CONDUCT OF OPERATION: Continue self-assessment efforts and establish a Technical Specialist to coordinate and assist line management. GOOD FAITH

ASBESTOS SURVEY: Perform good faith asbestos inspections (2 FTEs, Certified Asbestos Inspector). Walk-down half of ER and EM facilities. Write reports for facilities inspected.

GOOD FAITH ASBESTOS SURVEY: Rework policies and procedures (1 FTE, Technical Specialist). Create written asbestos report document. Set-up update triggering system when asbestos is removed or discovered. Update existing policies and procedures to reflect new asbestos reporting system. Create and maintain asbestos report database. Establish database for asbestos reports. Input reports to asbestos database. Update database as asbestos is removed or discovered. Distribute hard copies of reports to

crafts and contractors.

ASBESTOS MAINTENANCE REMEDIATION: Remediate asbestos hazards as they are encountered in daily maintenance.

HANFORD SITE ASBESTOS ABATEMENT PLAN: Abate 327 and 3730 buildings.

Complete annual survey.

HAZARD ASSESSMENTS AND EXPOSURE EVALUATIONS: Complete highest priority surveys for regulatory compliance (1/3 of Laboratory Facilities) by 10/01/95. Complete highest priority hazard assessment surveys (1/3 of Laboratory Operations) by 10/01/95.

HAZARD ASSESSMENT AND EXPOSURE EVALUATION: In FY 95, the hazard assessment and exposure evaluation activity is to document the action plan and the detailed procedures for the exposure survey and the regulatory compliance (OSHA) survey. Start-up work for both surveys is to select the criteria for evaluating the relative importance or risks of the wide range of hazards; and to schedule the facilities and operations to survey first based on their importance to DOE missions and on greatest potential risk. The exposure survey work includes the following: identification of Laboratory activities into operational units related to the type of work place hazards; resolution of procedures to assure consistent and reproducible data collection despite the several-year time span and the diversity of organizations, facilities, and surveyors.

Exposure survey work is then to conduct the surveys for the highest priority concerns (approximately 1/3 of the Laboratory) and assess each survey unit to determine hazard inventories and their potential risk. Concurrent work is to develop and maintain a database of surveys and detailed assessments; software for this level of compliance is not commercially available (i.e., not off-the-shelf). Important application work is to use the knowledge-base to train staff, improve engineering and administrative controls on new projects, and plan remediation (prioritize corrective actions and allocate limited funds from various sponsors). When exposure assessments identify inadequate engineering or administrative controls for high-risk hazards, conduct a detailed assessment by sampling & analyzing the identified hazard(s). The sampling work includes collection, chemical analysis, documentation, and subsequent monitoring of hazard(s). Detailed assessments for other hazards will be conducted in the next fiscal year.

The regulatory compliance work includes: establish detailed procedures and schedules to conduct the baseline survey for occupational safety (OSHA-related); and to prioritize facilities based on preliminary assessment of occupational hazards and programmatic importance. Work proceeds to the actual surveys and assessments for the highest priority facilities (approximately 1/3rd of the Laboratory). The surveyors inspect individual spaces and work stations.

The regulatory compliance survey results in detailed lists of hazards, the extent of deficiencies, specialized training or corrective action required or in-progress. Work continues to conduct in-depth field evaluations for high priority risks. Concurrent work is to develop a database of surveys and in-depth field evaluations; as with the exposure assessment activity, software for OSHA-related compliance is not commercially available. Work includes use of the knowledge-base to train staff, improve engineering and administrative controls on new projects, and plan remediation (prioritize corrective actions and allocate limited funds from various sponsors).

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0315	COMPLETE INSTALLATION OF EYEWASH FLUSHLINES	9/30/96	9/30/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

EYEWASH AND SAFETY SHOWER FLUSH LINES: In FY 1996, planned work is: 318 and 327 Buildings: authorize and inspect KEH construction; do As-Builts. Write final reports and project close-out. No further work is scheduled for this task.

CONDUCT OF OPERATION: Continue self-assessment efforts. Maintain Conduct of Operations Technical Specialist position to coordinate and assist line management's efforts for Conduct of Operations.

GOOD FAITH ASBESTOS SURVEY: Perform good faith asbestos inspections (1 FTE, Certified Asbestos Inspector). Walk-down remaining half of ER and EM facilities. Write reports for facilities inspected. Reinspect facilities reported on before 1993 and facilities worked on under ADS 1 W-101. Create and maintain asbestos report database (1 FTE, Sr. Designer, 1/2 FTE Drafter, 1/4 FTE Clerk, 1/4 FTE Manager). Input asbestos reports to database.

Update database as asbestos is removed or discovered. Distribute hard copies of reports to crafts and contractors.

ASBESTOS MAINTENANCE REMEDIATION: Remediate asbestos hazards as they are encountered in daily maintenance.

HANFORD SITE ASBESTOS ABATEMENT PLAN: Abate 318 Building. Perform annual survey.

HAZARD ASSESSMENTS AND EXPOSURE EVALUATIONS: In FY 1996, complete detailed assessments of potential over-exposure (1/3 operations assessed in FY 1994) by 06/01/96.

Complete medium priority surveys for regulatory compliance (second 1/3 of Laboratory Facilities) by 10/01/96.

Complete medium priority Hazard Assessment Survey (second 1/3 of Laboratory Operations) by 10/01/96.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0320	UPGRADE IH PROGRAMS	9/30/97	9/30/97

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

EYEWASH AND SAFETY SHOWER FLUSH LINES: No work is planned as the project is scheduled for completion during FY 1996.

CONDUCT OF OPERATION: Continue self-assessment efforts. Maintain Conduct of Operations Technical Specialist position to coordinate and assist line management's efforts for Conduct of Operations.

GOOD FAITH ASBESTOS SURVEY: FY 1996-1999 maintain asbestos report database (1/8 FTE Designer, 1/8 FTE Clerk). Update database as asbestos is removed or discovered. Distribute reports to craft and contractors as needed.

Perform reinspections.

ASBESTOS MAINTENANCE REMEDIATION: Remediate asbestos hazards as they are encountered in day to day maintenance.

HANFORD SITE ASBESTOS ABATEMENT PLAN: No work scheduled. All facilities, regardless of date of construction are required to be inspected and have a written report generated. Buildings previously inspected, will need another inspection to determine present status.

HAZARD ASSESSMENTS AND EXPOSURE EVALUATIONS: In FY 1997, complete lowest

priority surveys for regulatory compliance (third 1/3 of Laboratory Facilities) by 10/01/97.

Complete lowest priority Hazard Assessment Surveys (third 1/3 of Laboratory Operations) by 10/01/97.

Complete detailed assessments of potential over-exposures (second 1/3 operations assessed in FY 1995 by 06/01/97.

Complete detailed assessments of potential over-exposures (third 1/3 of Laboratory operations) by 06/01/98.

FY 1998 Complete Regulatory Compliance Survey and Assessment update by 10/01/98.

Complete highest priority Hazard Assessment Survey update by 10/01/98. In FY 1999, complete annual update of Regulatory Compliance Survey and Assessment by 09/30/99.

Complete highest priority Hazard Assessment Survey Update by 10/01/99. In FY 2000, complete annual update of Regulatory Compliance Survey and Assessment by 9/03/2000.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:**EYEWASH AND SAFETY SHOWER FLUSH LINES:**

Driver: ANSI Z358.1-90, Sections 4.7, 5.5, 7.5, 8.5, and 9.5, and DOE 6430.1a, Section 1540-1.5, Safety Devices, para. 2.

Impact: Each eyewash and/or safety shower unit must be tested weekly. DOE requires compliance with ANSI.

Consequences: DOE Laboratory facilities will not be in compliance with ANSI Z358.1-90. In many situations, workers safety cannot be assured regarding emergency shower and eyewash safety.

TT Driver: Tiger Team Finding OS.2-2

Impact: Requires units be flushed on a monthly basis; validates noncompliance with ANSI Z358.1, OSHA, and DOE 6430.1.

Consequences: Units will be visually inspected quarterly instead of monthly and DOE Laboratory facilities will not comply with the Tiger Team finding.

CONDUCT OF OPERATION:

Driver: DOE Order 5480.19

Impact: Contractors shall submit an implementation plan to DOE head of Field Office for approval. All Contractors shall comply with DOE Orders using the graded approach.

Driver: RL Appraisal Plan

ASBESTOS SURVEY:

Driver: WAC 296-62-077

Impact: Before any work is performed on a facility, a good faith inspection must be made to determine the presence of asbestos. Results shall be recorded and filed for review by the Washington State Director on request.

Consequences: A \$250 fine per violation per day shall be levied against the owner, the project stopped until an inspection is made and a report filed.

ASBESTOS MAINTENANCE REMEDIATION:

Driver: OSHA 29 CFR 1926.58 and 1910.1001

Impact: Requires Hanford to provide a safe environment for workers.

Consequences: Basic worker safety compromised and non-compliance. HANFORD

SITE ASBESTOS ABATEMENT PLAN:

Driver: Tiger Team Assessment of the Hanford Site, DOE/EH 0139, 'Inadequate Asbestos Management,' Finding A.CF-2, U.S. Department of Energy. HAZARD

ASSESSMENTS AND EXPOSURE EVALUATIONS:

Driver: OSHA (29 CFR 1910.1000(3) Subpart Z & 1910.1450(d)). Impact: This regulatory requirement requires that employers assess their work places for chemical and physical hazards to ensure that employees are not being exposed to hazardous chemicals exceeding prescribed limits. Consequence: DOE cannot determine compliance with this requirement without assessing the work place and/or performing hazard monitoring. Driver: WISHA (WAC 296-62(1), Part H)

Impact: This regulatory requirement requires that employers assess their work places for chemical and physical hazards to ensure that employees are not being exposed to hazardous chemicals exceeding prescribed limits.

Consequence: DOE cannot determine compliance with this requirement without assessing the work place and/or performing hazard monitoring. Driver: DOE-

HQ 5480.4(5.b.1.a), DOE-RL 5480.10, & DOE-RL 5480.4B. Impact: 5480.4 requires compliance with OSHA 29 CFR 1910. DOE-RL, 5480.10 requires that the contractors establish an industrial hygiene program that is effective in protecting the health of its' employees.

Consequence: Not meeting this is non-compliance with DOE regulations.

Driver: RL Letter of Direction, JJ Keating, 1/11/91, Subject: Chemical and Physical Agent Work Environment Worker Stress Inventory.
Impact: An implementation mechanism requiring each Hanford contractor to develop a program to assess exposure potential for contractor employees.
Consequence: Not meeting document is non-compliance with DOE directives.
Driver: Department Of Labor 'Evaluation of the U.S. DOE Occupational Safety and Health Program for its Government-Owned Contractor-Operated Facilities', 12/90. GOCO-Level Rec No. 15
Impact: DOL OSHA issued findings that require PNL to conduct a comprehensive compliance survey of all Laboratory facilities. Consequence: Not meeting document is non-compliance with DOE regulations. Driver: Letter, TD Chikalla to JJ Sutey, 'Compliance With Occupational Safety and Health Administration Requirements' dated May 30, 1991. Impact: This letter is an implementation mechanism in which RL directs the Laboratory to achieve full compliance with OSHA by 1995. This letter describes the Laboratory's plans for achieving this goal.
Consequence: Not meeting this letter is non-compliance with DOE directives.
Driver: Letter, Victor Stello, Jr. to All Managers, DOE Field Offices, 'DOE Orders Compliance', date Nov. 4, 1991. Attachment: Federal Register of Thursday January 26, 1989, 'Safety and Health Program Management Guidelines: Issuance of Voluntary Guidelines: Notice', (c)(2)(i)(A).
Impact: An implementation mechanism from DOE that recommends contractors use this guidance to develop effective worker safety and health programs.
Consequence: Not meeting this letter is non-compliance with DOE recommendations.
Driver: DOE-HQ 5480.8A, 'Contractors Medical Monitoring Program,' 1992
Impact: This order sets specific requirements for contractors medical monitoring program for employees.
Consequence: The consequence of not meeting this Order is a medical monitoring program less than compliant with requirements.
Driver: 29 CFR 1910, Occupation Safety and Health Administration (OSHA)
Impact: This regulation requires medical screening for specific chemicals and physical agents and that employee records be maintained. Consequence: The consequence of not complying with the regulation is having a medical program that may not detect physical aberrations when present. TT Driver: 1991 Tiger Team Findings IH.1-6B, IH.3-3B, & IH.4-7D. Impact: These findings pertain to the assessment for occupational exposure to chemical hazards were noted. Activities the Laboratory is requesting funding for in this ADS will address these findings and close them out. Consequence: The consequence of not meeting these findings is failure to meet corrective actions from the DOE Tiger Team findings.

REGULATORY KEY ISSUES:

EYEWASH AND SAFETY SHOWER FLUSH LINES: Workers will be at risk of contamination. The Lab will not meet national standards, DOE Orders, or OSHA and Tiger Team findings.

CONDUCT OF OPERATION: Budget limitations will preclude our ability to establish a level of effort directed toward Conduct of Operations activities sufficient to meet DOE performance expectations. DOE audit findings will result in lower appraisal scores.

ASBESTOS SURVEY: Noncompliance with Washington Administrative Code 296-62-077. Possible asbestos exposure to construction workers and building occupants.

ASBESTOS MAINTENANCE REMEDIATION: Non Compliance with DOE Order 4330.4A

'Maintenance Management Program.'

HANFORD SITE ASBESTOS ABATEMENT PLAN: Non compliance with Tiger Team A/CF-2, 'Inadequate Asbestos Management' (DOE 1990). Per the Plan, the 327, 3720, and 318 buildings have potentially friable asbestos in normally occupied areas or in the HVAC system. The potential of asbestos exposure to the building occupants is great if not assured in the future. HAZARD ASSESSMENTS AND EXPOSURE EVALUATIONS: If this activity is not funded, the consequence will be that DOE Laboratory facilities and operations will not comply with OSHA, WISHA (WAC's OSHA), DOE Orders, and Tiger Team Findings. In many situations, worker safety will not be assured. Lack of a hazard assessment and remediation planning programs will result in the failure of DOE to assure the health and safety of staff.

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

There are no additional concerns at the planning level.

REQUIRED TECHNICAL DEVELOPMENT:

None.

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8400 ADS SUF: 0 SUBACTIVITY: PA

SUBACTIVITY TITLE: RCRA PERMITTING

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: D VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECH RES-NFP

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW3130040		TOTAL
		109
TOTAL		109
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3130040		400	400	109		109	90	75	75	75
TOTAL		400	400	109	0	109	90	75	75	75
DIRECT FTE		2	1	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3130040		400	400	109		109	90	75	75	75
TOTAL		400	400	109	0	109	90	75	75	75
DIRECT FTE		2	1	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

Manage the development of an RD&D permit strategy, coordinating with DOE and Westinghouse Hanford Company to ensure their requirements are met within the scope of the strategy. Take the lead on developing more flexible methods of regulating research activities, which are protective of human health and the environment, but allow research, development and demonstration activities to continue with the minimum delay possible.

Manage the preparation, submittal, and modification of two permit applications: a RCRA Part B Application for the Building 325 Hazardous Waste Treatment Unit and Shielded Analytical Laboratory, and a Research, Development, and Demonstration Permit Application for the 300 Area Field Test Site.

RELATED ACTIVITIES NARRATIVE:

The Tri-Party Agreement contains generic milestones for thermal (1993), physical/chemical (1994) and biological (1995) treatment test facility permits. These milestones were based on the planning assumption that hazardous and mixed waste treatment research, development and demonstration (RD&D) activities could all be permitted through categorical Part B applications based on these highly general treatment modalities.

It has become clear that generic Part B applications are an inefficient and expensive approach to permitting RD&D activities:

- Experimental and dynamic RD&D activities are not compatible with the current lengthy and detailed Part B application process.
- The generic permit categories represent an artificial aggregation of various treatment technologies under investigation.
- The generic permit milestones bear no logical relationship to the actual sequence of programmatic activities.

The development of a single properly focused Part B application at Hanford costs approximately \$200,000. The development of a generic Part B application which artificially aggregates diverse technologies in various stages of development would probably cost a good deal more than \$200,000 and, more significantly, would likely not obviate the necessity to develop duplicative Part B 'reapplications' and pursue other permitting alternatives.

- For the above reasons, EPA and the Washington State Department of Ecology granted a one year extension of the Thermal Part B deadline in order to provide for the development of an integrated RD&D permit strategy. This strategy has the following objectives:

- Identify appropriate permitting pathways for specific activities, including options to the Part B process such as RD&D permits.

-
- Develop appropriate aggregations of related RD&D activities which can be bundled into single permit applications in order to save time and money.
 - Integrate permitting for all Hanford activities to avoid duplications of effort and to minimize administrative demands on the regulators.

Preliminary research, conclusions and recommendations were delivered to the regulators in October. Development of the overall strategy and realization of actual benefits will require investment in the activities proposed in this scoping document. Benefits will include:

- Elimination of inappropriate and redundant generic permitting efforts whose cost could approach or exceed one million dollars.
- Allocation of time and manpower to specific and effective permitting efforts for RD&D activities at appropriate times and places.
- Acceleration of technology investigations as specific activities are moved forward independently of unrelated activities.
- Large indirect savings associated with the more rapid deployment of treatment technologies.

Planned activities include:

- a) Continue current negotiations with regulators, assigning a particular permit or exemption pathway to each project.

 Create an integrated Hanford permitting plan, including a schedule for permitting the various technologies which require permits.

 Develop improved protocols for site-wide long range permit planning and coordination.

 Negotiate new TPA milestones, withdraw or combine current milestones, assigning specific schedules for individual permits.

 Examine whether to withdraw the current Part A applications and delete the current TPA milestones, or leave the milestones in place with an indefinite schedule for permit submissions. Justify reduced level of effort on Part B development pursuant to generic Part A's, if TPA milestones are retained.

 Continue technology survey, updating current technologies as more detailed information becomes available, and adding new technology summaries as they are identified.

- b) Create a computerized management system for Treatability Studies, ensuring that treatment and storage quantity limits are not exceeded.

 System must allow management on a building or laboratory level, with automatic, real-time report-writing capabilities.

 Examine possibility of installing the system on a network, allowing researchers to schedule waste receipts and treatability study start dates.

c) Examine current site-wide reporting systems to determine the scope of the system and the potential to modify the reporting system to automatically provide the data required to make a permit alternative recommendation. Create a schedule for permit preparation and submission, if required.

Investigate the potential to allow electronic reporting of technologies, automatically updating the technology summaries and permit strategy as an integral part of the process.

d) Coordinate with other DOE complex sites and labs.

Share information and successes.

Identify regulatory impediments to expeditious cleanup of DOE complex sites; coordinate proposed regulatory modifications to relieve those barriers identified. (An example is the current Treatability Study proposed rulemaking - comments were prepared requesting expansion of the exemption to meet specific DOE needs, which are unique to DOE complex sites.)

In keeping with the theme of Hanford as a 'Reinventing Government' site, position Hanford as the 'innovative permitting site'. During the recent Hanford Summit, Mary Riveland, Director of the Washington State Department of Ecology, suggested a regulatory demonstration project, which would emphasize those regulations that speeded cleanup, and de-emphasize those regulations that slowed cleanup times (including those regulations concerned with setting precedents).

e) Prepare permit applications. (Each permit application is estimated to cost approximately \$150,000. Judging from the Westinghouse experience with the Waste Water Pilot Plant, RD&D permit applications may cost as much as a Part B application.)

Retract 325/3100 Part B Application and prepare Building 325 Hazardous Waste Treatment Unit and Shielded Analytical Laboratory Part B Application.

Prepare 300 Area Field Test Site RD&D Application.

KEY ASSUMPTIONS:

PNL has experience in the preparation of two other Part B Permits. The costs associated with preparing the previous permits were used as a guide for determining this activities funding level. Activities in FY93 and FY94 have shown that, because of the newness of permitting R&D activities, significant time is required interacting with the regulators, DOE, WHC, and PNL staff to define the scope and specific content of the R&D based permit. Therefore, the funding required to prepare these permit applications is assumed to be equivalent to the funding required for preparation of a Part B Application. Further, outyear costs identified in this ADS reflect more realistic expectations of resources required for maintenance of the permits once submitted.

The initial assignment of activities to permit options has been based on favorable regulator response to initial recommendations. An internal review of the scope of activities to be permitted and an evaluation of the Hanford-wide strategy for permitting technology development activities as they apply to the three TPA milestones and Hanford in general has been initiated. This evaluation involves close interaction, coordination, and negotiations with the Regulators. The type of permit that may ultimately be required by the regulators for R&D activities may differ from the standard Part-B permit [e.g. a Research, Development, and Demonstration (RD&D) permit]. The initial evaluation was completed on 09-29-93. Negotiations with the regulators on the initial recommendations are expected to continue throughout this fiscal year. Additional permits will likely be required if the regulators respond unfavorably.

The Target Program is structured around the assumption that PNL and RL will not have to submit three Part B Permit Applications for Thermal Treatment, Physical/Chemical Treatment, and Biological Treatment (to meet TPA milestones) on 12-31-94, 12-31-94, and 12-31-95, respectively. Recent discussions with State and Federal regulators and involving DOE, PNL, and WHC permitting staff have identified the need to reevaluate the scope and permitting strategy for technology development activities specific to the Thermal, Physical/Chemical, and Biological technical areas and for the Hanford Site generally. This review is being led by PNL and was completed by September 30, 1993, although updating will be accomplished throughout FY94. It is anticipated that this reevaluation will result in a coordinated approach to permitting for the Hanford Site, defining the specific technologies that need to be permitted by category and location, the type of permit that should be applied for, and schedule for completing each permit, including the identification of new or modified TPA milestones as appropriate. In addition, it is hoped that the reevaluation will identify approaches for expediting the permitting and operational implementation of permits specific to technology applications.

The implementation of the above reevaluation could significantly impact the funding requirements for FY95 and beyond and the schedule of deliverables for FY94 and in the outyears.

ACTIVITY BY PRIORITY:

All activities are Priority 2. These activities directly fulfill three TPA Milestones (M-20-42, M-20-43, M-20-44).

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

A Project Manager has been identified and a project team established. A project schedule has been developed. A survey of potentially regulated technologies has been completed, with the activities assigned to particular permit alternatives. The question of the advisability of proceeding with a

Part-B Permit for research, development, and demonstration activities is receiving detailed scrutiny. Reviews of other Hanford technology based permits, and discussions held with DOE-RL, WDOE, EPA, WHC and PNL staff suggest that the RD&D permit may be more appropriate than a Part-B for research, development, and demonstration activities. Recommendations to refocus the permitting effort are in preparation. A change request to delay the submission of the thermal treatment Part-B permit has been submitted and approved, with an agreement to evaluate the research, development, and demonstration permitting vehicle and to develop, if necessary, permitting approaches more consistent with the immediate and long-term needs of the Hanford Site and regulators.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0335	SUBMIT RCRA PERMIT CHANGE CONTROL PACKAGE TO RL	5/30/94	5/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

During FY94, the following will be conducted:

Continue the current negotiations between EPA, Ecology, DOE and the Hanford Site contractors, which is expected to lead to a flexible, comprehensive Hanford Site permitting strategy. During FY93, numerous issues were informally discussed with EPA and Ecology; resolution of these issues have since been formally proposed by DOE and the Hanford Site contractors, although final resolution has not yet been achieved.

Update the technology survey which was required as a part of the permitting strategy. This survey provides the data necessary to demonstrate the impacts of regulatory interpretations. However, since the end of the survey (completed in August 1993), technology applications have changed, and some new technologies have been proposed.

Create a computerized management system for Treatability Studies Exemptions. (At the present time, most RD&D activities fall within this exemption; as technology demonstration scale-up occurs, closer tracking will be required.)

Examine current reporting systems to allow updating the technology survey as new technologies are developed, or as new applications of existing technologies are proposed.

Negotiate and submit a comprehensive change control package with EPA and WDOE, which will provide a final resolution to the 3 generic Part-A applications and Part-B Milestones, allowing current and future operations at the 300 Area Field Test Site (ISV Site) to continue under an RD&D operational permit, and preparing a Building 325 Hazardous Waste Treatment Unit/Shielded Analytical Laboratory Part B Application; these applications are proposed to be submitted in place of the generic Part B Applications.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0350	SUBMIT 325 RCRA PART B APPLICATION TO RL	2/28/95	2/28/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Continue negotiations with regulators as required to ensure RD&D activities continue without unnecessary delays. Continue updating the technology survey, assigning permit options and milestones for submission of applications as appropriate.

Submit final certified Building 325 Hazardous Waste Treatment Unit and Shielded Analytical Laboratory Part B and RD&D permit applications to EPA and Ecology.

Building 325 Hazardous Waste Treatment Unit and Shielded Analytical Laboratory Part B permit, and RD&D permit applications activities include the following:

Revise the Building 325 Hazardous Waste Treatment Unit and Shielded Analytical Laboratory Part B permit, and the RD&D permit applications, incorporating DOE-RL comments, and resubmit.

Certify the permit applications prior to submission to Ecology and EPA.

Submit draft permit application to Washington Department of Ecology and the EPA for review.

Respond to WDOE/EPA/RL comments as required.

Prepare other permit applications as required, and submit to RL for review and comment.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0175	SUBMIT REVISED RCRA PERMIT APPLICATIONS AS REQUIRED	9/30/96	9/30/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Continue negotiating milestones and permit application requirements as needed.

Review and incorporate any comments received from WDOE or EPA on permit applications and resubmit the permit(s) for further review.

Revise any other required permit applications in accordance with RL comments, and submit a final application to EPA and Ecology for their review and approval.

In addition, annual reports on submitted permits will be developed and delivered to WDOE and EPA.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Continue negotiating milestones and permit application requirements as needed.

Incorporate further comments into the permit applications and work with DOE-RL and the regulators to obtain final approval of the permits.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

Tri-Party Agreement Milestones: M-20-00 (All Part B Applications must be submitted by May 1996); M-20-42,43,44 (generic Part B Application milestones)

Resource Conservation and Recovery Act (RCRA)

Tentative TPA Cost and Management Efficiency Initiative: Paragraph 6, Regulatory Reform; Paragraph 14, Document Review.

REGULATORY KEY ISSUES:

This program is structured around submitting two permits in place of the current TPA requirement to submit three Part-B Permit Applications for Thermal Treatment, Physical/Chemical Treatment, and Biological Treatment on 12/31/93, 12/31/94, and 12/30/95, respectively. Recent discussions with State and Federal regulators and involving DOE, PNL, and WHC permitting staff have identified the need to re-evaluate the scope and permitting strategy for technology development activities specific to the Thermal, Physical/Chemical, and Biological technical areas and for the Hanford Site generally. The initial review was led by PNL and was completed by September 30, 1993. It is anticipated that this re-evaluation will re-define the specific technologies that need to be permitted by category and location, the type of permit that should be applied for, and schedule for completing each permit, including the redrafting of the existing three TPA milestones to two applications. In addition, it is hoped that the re-evaluation will identify approaches for expediting the permitting and operational implementation of permits specific to technology applications.

The implementation of the above re-evaluation could significantly impact the funding requirements for FY 95 and beyond and the schedule of deliverables for FY 94 and the outyears.

COMP/PROG BENEFITS AT PLANNING LEVEL:

It is anticipated that there will be multiple (two or more) permits underway in FY 94 and FY 95. A change request was submitted to EPA and WDOE to delay the Thermal Treatment milestone one year (to 12/31/94). This has been approved.

CONCERNS AT PLANNING LEVEL:

Failure to fund this project would result in the delay of resolution of issues between EPA, Ecology, and DOE, directly impacting three TPA milestones (both the Thermal Treatment and Physical/Chemical Treatment Part B milestones are now scheduled for 12/31/1994; the Biological Treatment Part B milestone is scheduled for 12/31/95) and potentially resulting in failure to meet those milestones.

REQUIRED TECHNICAL DEVELOPMENT:
None

THIS PAGE INTENTIONALLY
LEFT BLANK

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8400 ADS SUF: 0 SUBACTIVITY: PC

SUBACTIVITY TITLE: PRODUCTIVITY COMMITMENT

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: D VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECH RES-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE	EW3130040	-3903
TOTAL		-3903
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3130040	-900	-4463		-4591	-4591	-7496	-12841	-5795	-5949
TOTAL		-900	-4463	0	-4591	-4591	-7496	-12841	-5795	-5949
DIRECT FTE		0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3130040	-900	-4463		-4591	-4591	-7496	-12841	-5795	-5949
TOTAL		-900	-4463	0	-4591	-4591	-7496	-12841	-5795	-5949
DIRECT FTE		0	0	0	0	0	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

The Productivity Commitment is an effort to enhance cost efficiencies. It achieves the same workscope at a lower unit rate, or with the application of more efficient processes or through cost avoidance.

RELATED ACTIVITIES NARRATIVE:

None.

KEY ASSUMPTIONS:

Productivity Commitments are assigned each fiscal year to secure additional funding for otherwise unfunded critical activities.

The strategy for accomplishing these specific cost savings are not yet detailed.

ACTIVITY BY PRIORITY:

This activity is Priority 4.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

None.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

A total of \$900K has been assigned as the Productivity Commitment for FY 1994.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

A total of \$4,463K has been assigned as the Productivity Commitment for FY 1995.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

For FY 1996, the Decrement Productivity Commitment assigned is \$3,903K. An increment of \$688K is assigned above the Decrement Level to total \$4,591K at the Target Level.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Outyear Target Level Productivity Commitments assigned are:

FY 1997	\$7,496K
FY 1998	\$12,841K
FY 1999	\$5,796K
FY 2000	\$5,949K

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

None.

REGULATORY KEY ISSUES:

None.

COMP/PROG BENEFITS AT PLANNING LEVEL:

None.

CONCERNS AT PLANNING LEVEL:

None.

REQUIRED TECHNICAL DEVELOPMENT:

None.

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

The objective of this project is to assure safe storage of CS-137 in the Hanford 300 Area prior to permanent storage or disposal and to prepare the CsCl for return to storage at WESF or for other beneficial use. This activity provides dispositioning of capsules, pellets, and powder that were generated by several DOE programs dealing with CsCl. Currently over 1,700,000 curies of Cs-137 in a form unacceptable to return to WESF pool is in the 327 building pool.

This inventory and the program generating the legacy is detailed as follows:

11 Swollen WESF capsules (RSI Irradiators)
1 WESF capsule, which is singly encapsulated (RSI Irradiators) 12 WESF Capsules (324 Bldg. D-Cell Commercial SF Program)
Approx. 5.5 kg of CsCl from two opened WESF capsules (Dest. Exam Program)
Approx. 1.6 kg CsCl powder in T-4 cans from ORNL (Encapsulation Program) 48 gm Reject Powder (Encapsulation Program)
10 singly encapsulated Nordion C-1000 capsules(Encapsulation Program) . 22 Nordion C-161 pellets
3 gm Nordion C-1000 pellets .

The technical scope will include evaluating and selecting an option for dispositioning of this material, conducted in conjunction with WHC and building upon the option study already conducted by WHC. The 12 WESF capsules in 324 Building D-Cell will be decontaminated and moved to the 327 pool, returned to WESF, or supplied to other vendors for beneficial use. All defected capsules, powder, and pellets will be repackaged in a for suitable for temporary storage in 327, permanent storage at WESF, or final disposal. The hot cells in 324 Building will be cleaned and wastes will be disposed.

In addition, removal and disposition of the process equipment within the cells will be completed.

RELATED ACTIVITIES NARRATIVE:

ADS 8410-00-DA provides incremental funding for this ADS activity in FY96.

The activities of this ADS are closely related to those of WHC ADS No. 3032 for the Hanford WESF program and ADS 4195 for the Cesium Return Program. Storage of intact capsules at WESF is covered under WHC ADS No. 3032. Receipt of packaged CsCl from the 300 Area, preparation for transfer to B-Plant, and ultimate storage in the WESF pool is covered in the WHC ADS 4195.

KEY ASSUMPTIONS:

No permanent storage of 137Cs will be permitted in the 300 area. 300 area facilities are inadequate for long term storage of 137CsCl. This material

must be repackaged as required and transferred to WESF, the engineered storage facility for this material, as soon as possible.

WESF storage requires a double encapsulated source in which the inner capsule can be heard moving when shaken.

ACTIVITY BY PRIORITY:

All of the activities of the proposed program are Priority 1. Cesium 137 is a highly radioactive material with high energy gamma emission and unencapsulated CsCl salt is readily dispersible. Although most of the cesium is doubly encapsulated they are not stored in the facility designed for them. Of even greater concern is the approximately 700,000 Ci of cesium chloride stored in containers in the hot cells or in bulged WESF capsules in the 327 Building pool. This material must be placed in appropriate containers for temporary storage in the pool and later returned to the WESF pool or otherwise disposed of to prevent the potential for contamination of the facility and the subsequent increased exposure to the staff working in and around the hot cells.

This work is required to assure conformance with Federal and State Statutes. Statutes applicable to this program are as follows:

40 CFR 61, Subparts H, National Emission Standards for Emissions of Radio nuclides Other Than Radon from Department of Energy Facilities. The following paragraphs apply:

- 61.91 Definitions
- 61.92 Standard
- 61.93 Emission monitoring and test procedures
- 61.94 Compliance and reporting
- 61.95 Record keeping requirements
- 61.96 Applications to construct or modify
- 61.97 Exceptions from the reporting & testing requirements

Outlines the standards and reporting and record keeping requirements for radiological emissions from DOE facilities. If loose CsCl powder is not contained, the likelihood of an accidental release of radio nuclides to the environment is increased.

WAC 246-247 - Radiation Protection-Air Emissions. The following paragraphs apply:

- WAC-246-247-001 Purpose
- WAC-246-247-010 Applicability
- WAC-246-247-020 Exemptions
- WAC-246-247-030 Definitions
- WAC-246-247-040 Standards
- WAC-246-247-050 Registration
- WAC-246-247-060 Airborne Emission Permits
- WAC-246-247-070 New and Modified Sources
- WAC-246-247-080 Monitoring and Reporting
- WAC-246-247-090 Special Reports
- WAC-247-100 Regulatory Actions

Washington State regulations governing air release of radio nuclides which could be exceeded without proper maintenance of the CsCl in the 324 Building.

Containment of loose CsCl powder and dispositioning of the radioactive pellets and capsules is necessary to ensure safety. Failure to do so could result in environmental release and exposure to individuals.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

None. This work was initiated in FY94.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0015	CONSOLIDATE AND OVERPACK ALL UNCONTAINED CsCl IN 324 SMF	9/30/94	9/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Prepare a project management plan.

Perform task planning, scheduling, and reporting.

Store all cesium chloride powder and pellets in release resistant containers in a shielded box in the SMF cells in 324 Building.

Complete procedures for decontaminating, gamma scanning, and transfer of 12 WESF capsules in D-Cell to 327 Building.

Complete an evaluation of final disposition options for the material. Specific emphasis will be given to determining the best method to deal with the eleven (11) swollen capsules stored at PNL.

Select packaging concept for swollen/single encapsulated capsules.

Complete decontamination and nondestructive examination of twelve (12) WESF capsules stored in the 324 Building D-Cell. Package and transport these capsules to the 327 building water basin. These capsules need to be moved so as to provide space in support of the B-Cell Restoration Program. Storage containers (canisters) will be fabricated for each capsule like the ones being used to store the capsule in the 327 Building water basin. An additional storage rack will be needed for the water basin to store capsules. Several shipments will be required to transport them from the 324 Building to 327 Building for storage. Some of these capsules are considered for use by other vendors for irradiation sources. An evaluation as to the suitability of using these capsules will be completed, appropriate.

Initiate evaluation of shipping cask options and availability for transport of CsCl to WESF.

Complete waste disposal plan for wastes from 137Cs decontamination of 324 hot cells. Begin preparation of procedures for waste disposal.

Provide support to the litigation on WESF capsule failure at the RSI Decatur, Georgia facility and the IOTech irradiator will be supplied as required.

Support level of effort tasks such as radiation safety, maintenance, and laundry which are necessary for performance of tasks within this Project.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

8400-00-0020

EXAMINE DAMAGED CsCl CAPSULES &
INITIATE REPACKAGING OF CAPSULES

9/30/95

9/30/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Review and revise project management plan as necessary.

Perform task planning, scheduling, and reporting.

Based on the engineering study performed in FY 1994, select suitable packaging for temporary storage of CsCl powder and pellets at PNL.

Perform engineering and supporting analyses to qualify repackaging/overpack/release resistant containers for over-road transport to WESF. The overpack for the release resistant container/reencapsulated CsCl will be designed, analyzed and fabricated to meet interface and transport requirements of the transport cask to be used for material return to WESF.

Develop plans, design and specifications, and procedures for processing powder, pellets, and swollen/singly encapsulated capsules for transfer to WESF or other beneficial use. If the swollen capsules can not be returned the same way as the non-swollen ones, they may have to be processed to remove the CsCl salt for repackaging or placed in suitable overpacks or additional outer containment for temporary or permanent storage.

Fabricate packaging and overpack components for CsCl powder and pellets and swollen/singly encapsulated capsules.

Initiate examination, processing, and packaging of CsCl powder and pellets.

Initiate examination and repackaging of swollen/single encapsulated capsules.

Begin transfer of packaged powder, pellets and cut sections to the 327 pool for interim storage as necessary.

Evaluate shipping cask options and availability for transport of CsCl to WESF. Contingent upon cask availability and WHC ability to receive, acceptable material will be transferred to WHC for permanent storage in the WESF facility. Suitably contained CsCl must be moved from the 327 Building to the 324 Building where it can be transloaded into casks for return to WESF.

Initiate remote decontamination of the compartments in the SMF starting with the least contaminated compartment.

Design and fabricate transfer containers to package contaminated equipment for movement from the SMF south cell to the Radiochemical Engineering Cells (REC) for disposal.

Support for litigation will continue to be supplied as needed.

Continue to support level of effort tasks such as radiation safety, maintenance, and laundry which are necessary for performance of tasks within this Project.

Capital equipment consisting of fixturing for positioning and rotation of capsules for closure welding must be procured in FY95. The estimated cost of this equipment is \$60,000.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0025	COMPLETE REPACKAGING OF DEFECTIVE CsCl CAPSULES/STORE IN 327 POOL	9/30/96	9/30/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Review and revise project management plan as necessary.

Perform task planning, scheduling, and reporting.

Complete processing and repackaging of swollen/singly encapsulated capsules for interim storage in the 327 pool or transfer to WESF. Complete transfer accordingly.

Complete processing and encapsulation of CsCl powder, pellets, and cut sections for interim storage in the 327 pool or transfer to WESF. Complete transfer accordingly.

Remove contaminated equipment used for the CsCl Encapsulation and Destructive Examination Program from the compartments and package in transfer containers within the SMF south cell. Transfer containers will then be moved to the REC B Cell for preparation for disposal.

Prepare equipment for disposal using the grouted container method developed for disposal of contaminated equipment from 324 Building B-Cell. Several grout containers may be acquired depending on the quantity of CsCl remaining on equipment.

Remotely decontaminate SMF South Cell compartments using the master-slave manipulators. Remote decontamination will be performed to a level such that manned entry can be accomplished for final decontamination.

Complete manned entry decontamination of SMF South Cell compartments. Several entries will be required to decontaminate compartments to the level they were prior to the CsCl Encapsulation and Destructive Examination Program being performed in them. The compartments and cell zone one HEPA filters will be changed and tested as required. The compartments and cell will then be restored to a point such that they can support other missions.

Transfer contaminated equipment and waste generated during cleanup to the Hanford Burial Grounds disposal site.

Support for litigation will continue to be supplied as needed.

Continue to support level of effort tasks such as radiation safety, maintenance, and laundry which are necessary for performance of tasks within this Project.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0645	TRANSFER CESIUM MATERIALS TO WESF	9/30/97	9/30/97

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Activities during this period will be a continuation of tasks begun in FY 94, FY 95 and FY 96. It is anticipated that all cesium chloride legacy will be stored in suitable containers in 327 Building in FY95 and FY96. If WHC can support receipt of capsules by this time, capsules will be shipped to WESF. Waste disposal plans and procedures for CsCl capsule storage canisters and racks from the 327 facility will be prepared. Racks and canisters will be disposed of after shipment of CsCl to WESF. It is expected that the litigation will be ongoing during this period and a limited amount of support will be required.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

40 CFR 61, Subparts H, National Emission Standards for Emissions of Radio nuclides Other Than Radon from Department of Energy Facilities. The following paragraphs apply:

- 61.91 Definitions
- 61.92 Standard
- 61.93 Emission monitoring and test procedures
- 61.94 Compliance and reporting
- 61.95 Record keeping requirements
- 61.96 Applications to construct or modify
- 61.97 Exceptions from the reporting & testing requirements

Outlines the standards and reporting and record keeping requirements for radiological emissions from DOE facilities. If loose CsCl powder is not contained, the likelihood of an accidental release of radio nuclides to the environment is increased.

WAC 246-247 - Radiation Protection-Air Emissions. The following paragraphs apply:

- WAC-246-247-001 Purpose
- WAC-246-247-010 Applicability
- WAC-246-247-020 Exemptions
- WAC-246-247-030 Definitions
- WAC-246-247-040 Standards
- WAC-246-247-050 Registration
- WAC-246-247-060 Airborne Emission Permits
- WAC-246-247-070 New and Modified Sources
- WAC-246-247-080 Monitoring and Reporting
- WAC-246-247-090 Special Reports
- WAC-247-100 Regulatory Actions

Washington State regulations governing air release of radio nuclides which could be exceeded without proper maintenance of the CsCl in the 324 Building.

Containment of loose CsCl powder and dispositioning of the radioactive pellets and capsules is necessary to ensure safety. Failure to do so could result in environmental release and exposure to individuals.

Valuable hot cell space and building resources that are required for clean up of Hanford waste are being expended unnecessarily. Due to the high radiation level emitted from CsCl, other work in these cells is not plausible.

REGULATORY KEY ISSUES:

None.

COMP/PROG BENEFITS AT PLANNING LEVEL:
Planning and Target Levels are the same.

CONCERNS AT PLANNING LEVEL:
None.

REQUIRED TECHNICAL DEVELOPMENT:
None.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8400 ADS SUF: 0 SUBACTIVITY: TA

SUBACTIVITY TITLE: 324 BUILDING HOT CELL FACILITY S&M

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: D VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECH RES-NFP

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EW3130040		TOTAL
TOTAL		2820
DIRECT FTE		13

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3130040		2485	2750		2820	2820	3000	3200	3335	3502
TOTAL		2485	2750	0	2820	2820	3000	3200	3335	3502
DIRECT FTE		0	13	0	13	13	13	14	14	14

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EW3130040		2485	2750		2820	2820	3000	3200	3335	3502
TOTAL		2485	2750	0	2820	2820	3000	3200	3335	3502
DIRECT FTE		0	13	0	13	13	13	14	14	14

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

The major objective of this project is to provide for regular surveillance and maintenance of 324 building hot cells and systems which are required for the safe storage of radioactive materials. The majority of these materials are legacy materials from previous programmatic activities for which no funding source exists to provide for their oversight, pending final disposition. Regular surveillance of these materials including witnessed audits and routine accountability must be performed on an on-going basis, over and above any other activities which are being conducted in the building.

Essential hot cell systems including HVAC filtration equipment, radiation detection instruments, compressed air and water supplies, manipulators, cranes, windows, and the containment boundaries of all hot cells must be routinely tested for proper operation and all needed maintenance or repairs promptly performed. Frequent, scheduled radiological surveys to detect the migration of legacy contamination out of the hot cells, air locks, truck dock, gallery, manipulator repair and low level waste compaction areas, cask handling area, and building ventilation systems must be conducted and any contamination which is detected must be removed in order to assure personnel and the site safety and mandated environmental compliance. In support of programmatic and cleanup activities, routine inspection of packages containing radioactive materials are performed to assure their integrity.

Administrative and technical plans and procedures are prepared to ensure that staff are adequately trained and operational procedures defined. Included here is support of technician and supervisory staff training related to general hot cell operations. Completing the development of and provision for maintenance of radioactive inventory systems consistent with the building OSRs is also an element of building surveillance and maintenance activities.

RELATED ACTIVITIES NARRATIVE:

This project provides the base surveillance and maintenance activities to assure that the 324 Building hot cell operation is maintained in a safe and operationally satisfactory condition. All programs within the 324 Building hot cell operation directly benefit from this project.

KEY ASSUMPTIONS:

Failure to provide funding for surveillance and maintenance activities will increase the likelihood of accidental radionuclide releases from the 324 building hot-cells to the worker environment, outside the building, and off the Hanford Site. Surveillance and maintenance funding is required to prevent violations of DOE orders, state and federal regulation, ALARA principles and to prevent unsafe facility conditions. Hanford projects and future use of the hot cells will be affected by lack of funding since the facilities will not be in a safe configuration for use.

Nuclear materials housed in the facility hot cells are assumed to be in a safe and controlled condition prior to surveillance (e.g., SMF cesium is stored in release resistant containers). The funding used for this activity is intended to keep the facility in compliance with state and federal regulations and to maintain the facilities for current and future Hanford projects. Funding levels are based on historical costs of surveys and maintenance activities and on current PNL labor rates within the facility operating groups. Funding requested may not be sufficient to fully mitigate the results of major, unforeseen system failures. Current budgeted funds in FY95 may not be adequate if it is determined during FY94 initial sampling efforts that an extensive sampling program is required to fully characterize the radioactive dispersible material inventory within the 324 Building and outside of B-Cell.

ACTIVITY BY PRIORITY:

All activities under this project have comparable priority. The activities are necessary to ensure safe and efficient operation of the 324 Building activities consistent with regulations and orders.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

- A schedule for radiological surveys of the 324 Building hot-cells, and preparation of necessary documentation to authorize these surveys will be developed and a plan prepared outlining actions to be taken if survey results indicate the presence of contamination beyond established limits. This is scheduled to begin in March 1994. Regular scheduled preventive maintenance on critical safety and environmental protection (R&EP) systems have been performed and needed repairs on failed containment systems, or other equipment, made as appropriate. Nuclear material surveillance, accountability, and audits have been made as required and routine reports on the results provided. An inventory of the radioactive dispersible contamination outside of B-Cell has been initiated. A draft training guide for 324 Building Hot Cell Operation Staff has been issued. Required radiological surveys and required preventative maintenance work has been conducted on schedule for FY 94.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0060	COMPLETE 324 BLDG ANNUAL MAINTENANCE & SURVEYS	9/30/94	9/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

A schedule for radiological surveys of the 324 building hot-cells, and preparation of necessary documentation to authorize these surveys will be developed and a plan prepared outlining actions to be taken if survey results indicate the presence of contamination beyond established limits. This is scheduled to begin in April 1994. Regular scheduled preventive maintenance on critical safety and environmental protection (R&EP) systems have been performed and needed repairs on failed containment systems, or other equipment, made as appropriate. Nuclear material surveillance, accountability, and audits have been made as required and routine reports on the results provided. An inventory of the radioactive dispersible contamination outside of B-Cell has been initiated. A draft training guide for 324 Building Hot Cell Operation Staff has been prepared. Required radiological surveys and required preventative maintenance work has been conducted on schedule for FY 94.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Perform regular radiological surveys throughout the 324 building hot cells, air locks, truck dock, gallery, manipulator repair and low level waste compaction areas, and cask handling area and remove any contamination which may be located during the surveys. Verify the integrity of all hot cell containment boundaries by checking for the presence of contamination in the immediate vicinity of these boundaries. Inspect selected radioactive samples to ascertain the integrity of their storage containers and repackage the materials as required to preclude spread of contamination from the materials to their storage areas. Determine that all critical radiological and environmental protection systems are operating properly by performing scheduled preventive maintenance and completing repairs on equipment that has failed or is found to be otherwise defective. Control any known or suspected migration of contamination to the environment or operating personnel and ensure that the facilities remain in a safe condition. Conduct routine inspection of radioactive material storage containers to ascertain the integrity of containers. Perform routine maintenance of hot cell equipment, i.e., manipulators, cranes, windows, etc., as required to handle/control the materials in the cells. Complete the 324 Building-Wide survey of dispersible material and implement administrative systems to manage the radioactive material within the building consistent with building OSRs. Fully implement 324 Building Hot Cell Operating Staff training program and update/prepare technical/safe operating procedures as required to support hot cell operations.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Conduct scheduled radiological surveys within the facility and carry out all required preventive maintenance work. Perform any decontamination which might be required to remove contamination found during the radiological surveys and perform all needed repairs on containment system or other equipment which is essential to maintaining the building hot cells in a safe condition. Perform routine inspection of radioactive material storage containers to ascertain the integrity of the containers and routine maintenance of hot cell equipment, i.e., manipulators, cranes, windows, etc., as required to handle/control the materials in the cells. Carefully examine the containment boundary of each hot cell in FY 96 to verify that no contamination has migrated from the cells. Perform comprehensive radiological surveys of each cell and associated ventilation and service systems, and remove any contamination which is found. Test all key safety and environmental control systems for proper operation and perform any maintenance which is required to repair failed or defective equipment. Assess the overall effectiveness of both the radiological survey and preventive maintenance schedules to determine whether the frequency and comprehensiveness of these activities should be increased. Activities during this period will be a continuation of tasks begun in FY 94 and FY 95.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Description at the Planning Level of the work planned for the outyears.

Activities during this period will be a continuation of tasks begun in FY 94, FY95 and FY96.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

The regulations which are most pertinent to this activity are listed below:

40 CFR 61, Subpart H: Outlines standards for radionuclide emissions (other than radon) from DOE facilities. If critical building hot-cell systems are not maintained, and if regular radiological surveys are not performed, the likelihood of an accidental release of radionuclides to the environment is increased.

WAC 246-247: Washington State regulations governing air emissions of radionuclides. The consequences are similar to those associated with 40 CFR 61, Subpart H above.

WAC 173-400: General Washington State regulations pertaining to air pollution sources. The consequences are related to those associated with WAC 246-247.

Regulation 80-7: Benton-Franklin-Walla Walla Counties Air Pollution control Authority general regulations. Similar consequences to WAC 246-247.

40CFR 261.3 and 40 CFR 261.20: Federal regulations which define and specify the general characteristics of hazardous waste. Any waste materials generated during routine surveys and/or preventive maintenance activities would be potentially impacted by these regulations.

WAC 173-303-140: Washington State code which outlines the designation of dangerous waste. This has similar impact on the surveillance and maintenance activities as 40 CFR 261.3 and 40 CFR 261.20 above.

29 CFR 1910: Defines safe storage, control and disposal of nuclear materials.

DOE Order 5480.2a: Establishes minimum requirements by which DOE manages its radioactive waste and contaminated facilities.

DOE Order 5480.19: Provide requirements in developing procedures relating to conduct of operations at DOE facilities.

DOE Order 5480.20: Provides requirements and guidelines for training of nuclear facility operating staff.

DOE Order 5633.3: Provides minimum requirements for control and accountability of nuclear materials.

DOE Order 5400.1: Identifies standards contained in legislation, regulations, and Executive orders mandatory for DOE Operations.

DOE Order 5400.5: Establishes standards and requirements for operations of DOE contractors with respect to protection against undue risk from radiation.

DOE Order 5480.4B: Provides guidance and standards to be used for DOE-RL

contractors.

REGULATORY KEY ISSUES:

Funding provided under this ADSWP will prevent DOE from potentially being in violation of several federal and state statutes which have relevance to the maintenance of nuclear facilities such as those in the 324 building. By performing regular radiological surveys, the presence of contamination will be promptly determined, thereby enabling its containment and removal before any can be released from the facility. By performing regular maintenance on critical radiological and environmental protection (R&EP) systems, the integrity of these systems will be assured, further contributing to the facility remaining in a safe condition.

Failure to provide funding for surveillance and maintenance activities will increase the likelihood of accidental radionuclide releases from the 324 building hot-cells to the worker environment, outside the building, and off the Hanford Site. Surveillance and maintenance funding is required to prevent violations of DOE orders, state and federal regulation, ALARA principles and to prevent unsafe facility conditions. Hanford projects and future use of the hot cells will be affected by lack of funding since the facilities will not be in a safe configuration for use.

ADS 1013 entitled 'Safety and Environmental Compliance-300 Area' will be potentially impacted if this ADSWP is not funded. Since any radionuclide releases from the facility would involve the 300 area, it will be difficult to accomplish the goals of ADS 1013 if this activity is not funded.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Timely completion of B-Cell Cleanout, D-Cell legacy waste removal, and eventual removal of the FRG canisters in A-Cell are all dependent upon the maintenance of a facility at an operational level that assures effective and safe day-to-day operation. Progressive degradation of a facility resulting from inadequate maintenance can potentially impact timely removal of the radioactive material legacy in the 324 Building. Ongoing and thorough surveillance of building safety systems and inventory of radioactive material is critical to assure nuclear material accountability, maintenance of building safe operating limits, and compliance with DOE Orders.

CONCERNS AT PLANNING LEVEL:

Funding at the planning level will provide a base of maintenance activity and surveillance critical to safe and effective operation of the 324 Building. The projected funding will provide for a modest program of facility upgrade to equipment and hotcell systems that degrade from use, normal aging, and/or damage resulting from the radiation environment. The planned funding is potentially insufficient to cope with major and unexpected equipment/system failures. Budgeted funds in FY95 may not be adequate if it is sufficient during FY94 initial sampling efforts that an

extensive sampling program is required to fully characterize the radioactive dispersible material inventory within the 324 Building and outside of B-Cell.

REQUIRED TECHNICAL DEVELOPMENT:
None.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8400 ADS SUF: 0 SUBACTIVITY: UA

SUBACTIVITY TITLE: SMS IMPLEMENTATION

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: D VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECH RES-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE	EW3130040	0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3130040	0	0			0	724	743	762	783
TOTAL		0	0	0	0	0	724	743	762	783
DIRECT FTE		0	0	0	0	0	5	5	5	5

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE	EW3130040	0	0			712	724	743	762	783
TOTAL		0	0	0	0	712	724	743	762	783
DIRECT FTE		0	0	0	0	5	5	5	5	5

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

The Hanford Site Management Plan defines the requirements for the Hanford Site Management System. In general, this system requires PNL to plan, manage, and report Hanford Site activities for which PNL has project management responsibility in a very specific and disciplined way. As currently implemented for WBS 1.7.1, the Site Management Plan requires PNL to prepare and submit a MYPP, FYWP, and monthly progress reports. Any changes to the established baseline need to occur following approval of Class 1 change requests.

As currently implemented for WBS 1.7.1, the Site Management Plan requires PNL to prepare and annually submit a Multi-Year Program Plan (MYPP) and a Fiscal Year Work Plan (FYWP). The format and content of the MYPP and FYWP are supplied in guidance documents by RL. The MYPP provides top-level goals, plans, schedules, and estimated costs in each mission area. The FYWP pulls from the MYPP and ADS, defines the scope, schedule and estimated costs to be accomplished within the technical areas during the next fiscal year. This plan incorporates the specific technical area requirements defined by RL. Upon approval by RL, the technical descriptions, schedules, and budgets become the fiscal year technical, schedule, and cost baselines. Work will commence upon receipt of a signed work authorization by the Assistant Manager Level-COR.

On a monthly basis, Status Reports, against the approved baseline, are prepared which describe the technical, cost, and schedule performance for the prior month. PNL will submit a report covering baseline data for which PNL is the responsible contractor. For non-PNL lead activities, PNL will forward baseline data to the responsible site contractor for roll-up in their reports.

Any changes to the technical, cost, or schedule baselines will be documented through class 1 changes. These changes are logged in and tracked by the Program Analyst and Control Specialist. Baselines and appropriate documentation will be revised upon approval of the changes by RL.

To facilitate integration with WHC and to improve project management and the accuracy and timeliness of future reporting, PNL developed a relational database to integrate data maintained by the program office. The database links to the PNL financial database, which eliminates redundant data entry tasks. Future links will automatically retrieve needed planning and progress information directly from project management databases with export capabilities to WHC systems. The integrated database will be capable of generating the SMS reports, FYWP, and MYPP. Beyond import/export capabilities, screens/forms for manipulating data will be developed. Each release of the system will include a user's guide and training for administrative staff. As format requirements change for the SMS report, FYWP, and MYPP, modifications will need to take place in the report forms generated from the database.

The ER/WM Directorate is working to improve the quality of project management being employed in the laboratory by: developing a requirements

document; conducting audits/surveillances of project management documentation; on-call assistance for planning/progress determinations; and ensuring proper integration/coordination with SMS database effort.

RELATED ACTIVITIES NARRATIVE:

Not applicable.

KEY ASSUMPTIONS:

The estimate was developed based on existing Site Management System requirements assuming minor adjustments to the Site Management System requirements over the period of the plan. Funding would not be available for significant enhancements to the requirements. To the extent these requirements are increased, a corresponding increased cost is anticipated. The cost estimates are based on the effort expended in FY 1993 and the 1st quarter of FY 1994.

ACTIVITY BY PRIORITY:

This activity is Priority 4. The SMS system implements improved management practices and provides project tracking for the program.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

To Date the following activities have been accomplished: create a central data repository to facilitate integrated reporting and data transfers to other systems (e.g. EPDS); development of a prototype of the database for testing; developed procedures for transferring the data which currently resides in Excel into the database; developed initial versions of the SMS reports using the data from the database. Submission of monthly status reports; Submission of FY 1994 FYWP Rev 0 and Rev 1. Submission of Phase I and Phase II to the MYPP.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

To Date the following activities have been accomplished: create a central data repository to facilitate integrated reporting and data transfers to other systems (e.g. EPDS); development of a prototype of the database for testing; developed procedures for transferring the data which currently resides in Excel into the database; developed initial versions of the SMS reports using the data from the database. Submission of monthly status reports; Submission of FY 1994 FYWP Rev 0 and Rev 1. Submission of Phase I and Phase II to the MYPP.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Since there are no funds at the target level for this activity, this description is for the planning level only.

During the year, the planning and reporting database will be utilized to record budget and schedule performance to RL on a monthly basis. Enhancements to the system will be made to consist of report/query customization and minor revisions to data structures; integration/compatibility with other Hanford contractors; generation of the following years' Fiscal Year Work Plan; and updates to the MYPP to reflect any changing goals/requirements; data imports/exports with appropriate project management systems. All changes to the established approved baseline will be tracked.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Since there are no funds at the target level for this activity, this description is for the planning level only.

During the year, the planning and reporting database will be utilized to record budget and schedule performance to RL on a monthly basis, the FYWP, and the MYPP. Enhancements to the system will be made to consist of report/query customization and minor revisions to data structures; data imports/exports with appropriate project management systems. All changes to the established approved baseline will be tracked.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0195	ANNUALLY COMPLETE FISCAL YEAR WORK PLAN	9/30/95	9/30/97

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Since there are no funds at the target level for this activity, this description is for the planning level only.

During the year, the planning and reporting database will be utilized to record budget and schedule performance to RL on a monthly basis, the FYWP, and the MYPP. Enhancements to the system will be made to consist of report/query customization and minor revisions to data structures; data imports/exports with appropriate project management systems. All changes to the established approved baseline will be tracked.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

Activities are driven by RLIP 5000.5 and the Site Management Plan, August 1992 (draft).

REGULATORY KEY ISSUES:

If funding is not received PNL overheads are necessarily inflated by the amount shown in order to provide this DOE-required system.

COMP/PROG BENEFITS AT PLANNING LEVEL:

At this level, costs for preparation of the SMS system are charged direct. At the target funding level, PNL overheads are necessarily inflated by the amount shown in order to provide this DOE-required system.

CONCERNS AT PLANNING LEVEL:

The estimate assumes that the Site Management System requirements will not increase over the period of the plan. Funding is not available to support enhanced requirements.

REQUIRED TECHNICAL DEVELOPMENT:

None.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8400 ADS SUF: 0 SUBACTIVITY: VA

SUBACTIVITY TITLE: INTERIM STORAGE OF HBEP IRRADIATED FUEL

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: D VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECH RES-NFP

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996 TOTAL
OE EW3130040		0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130040	0	0	0		0	572	0	0	0
TOTAL	0	0	0	0	0	572	0	0	0
DIRECT FTE	0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130040	0	0	76		76	496	0	0	0
TOTAL	0	0	76	0	76	496	0	0	0
DIRECT FTE	0	0	0	0	0	0	0	0	0

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

Irradiated fuel currently stored at General Electric Company's Vallecitos Nuclear Center (GE-VNC) is to be retrieved from storage, packed for shipping, and then shipped to Hanford for interim storage. The irradiated fuel shall be packaged and shipped in accordance with an approved Storage/Disposal Approval Record (SDAR) to be prepared by Westinghouse Hanford Company (WHC). The Department of Energy (DOE) is to accept title to the irradiated fuel upon arrival at Hanford. WHC will place the packaged, irradiated fuel into interim storage until final disposal is available. This is a one-time activity. Planned start and end dates are 10/1/95 and 9/30/97, respectively.

The following major activities have to be performed to complete this activity: a) DOE-RL obtain approval from DOE-HQ to receive the irradiated fuel at Hanford (see assumptions); b) WHC prepare/approve SDAR specifying how the irradiated fuel shall be packaged and shipped to Hanford; and c) GE-VNC package and ship the irradiated fuel in accordance with the SDAR. To accomplish this will require substantial coordination among PNL, DOE-RL, WHC, and GE-VNC. Work at PNL and WHC will be primarily management in nature, with the exception of receiving the packaged irradiated fuel. The majority of technical work will be performed by GE-VNC; i.e., retrieval, packaging, and arranging for shipping of the irradiated fuel.

The project will be organized as follows:

1.0 Project Management

All activities at Hanford necessary to prepare for, and then receive the irradiated fuel.

1.1 PNL Activities

This task will encompass management of the ADS project, including: interface activities between PNL, RL, WHC, GE-VNC; and performing support activities that can be performed by PNL.

1.2 WHC SDAR Preparation

This activity will be conducted, and controlled, by WHC to prepare/approve the SDAR specifying the packaging and shipping of the irradiated fuel from GE-VNC to Hanford; this activity will be in response to the Request for SDAR already filed by GE-VNC; all following activities are dependent upon this activity being completed by WHC.

1.3 WHC Charge for Storage

WHC will assess a charge for interim storage of the 5 55-gallon barrels containing the irradiated fuel; this charge is on a ft³ basis, with different rates for TRU and TRU-mixed.

2.0 GE-VNC Subcontract

Complete Shipment to Hanford (dependent on ADS funding and WHC preparing approved SDAR)

2.1 Interactions with PNL, WHC

Prepare additional information as necessary, arrange for materials necessary for packaging and shipping, etc.

2.2 Acquisition of Storage Barrels

Acquire lead-lined 55-gallon stainless steel barrels for storage of irradiated fuel, in accordance with requirements of the SDAR; the design of these storage barrels is planned to be that specified in WHC-SD-WM-SARP-001.

2.3 Retrieve and Package Irradiated Fuel in Accordance with SDAR The irradiated fuel pieces, grouted cans, and salt tubes are in a GE-VNC storage vault; they have to be retrieved for packaging and shipping.

Fuel rod pieces will be placed in a GE-modified gallon can; the can will be placed in a non-sealed poly sack; the can and sack will be placed in a GE aluminum liner; the liner will be placed in a second non-sealed poly sack; the sack will be placed in the central insert of the 55-gallon barrel. The poly sacks will provide clean surfaces and prevent contact between dissimilar materials. Carbon filters will be installed on the aluminum liner, barrel insert, and barrel lid.

Salt tubes and grouted cans will be packaged in the same manner as the fuel rod pieces.

2.4 Shipping Cask Rental and Preparation

The GE 2000 cask, designed and approved to ship 55-gallon barrels, is planned for shipping the barrels to Hanford.

2.5 Shipping Costs

Shipping of the cask and barrel from GE-VNC to Hanford will be arranged by GE-VNC using a commercial vendor.

RELATED ACTIVITIES NARRATIVE:

None.

KEY ASSUMPTIONS:

DOE/HQ approval for receipt/interim storage of the irradiated fuel at Hanford will be received. Request of HQ was made in FY91 and no response has yet been received.

No role of, or obstacles from, State of Washington in receipt/interim storage of the irradiated fuel at Hanford.

No significant changes in regulatory requirements from those applicable during FY93.

Planned schedule assumes that funding is provided in FY96 to support WHC's preparation/approval of the necessary SDAR; this is necessary before retrieval, packaging, and shipping activities by GE-VNC can commence.

Assumes that irradiated fuel can be shipped to Hanford in a total of five 55-gallon barrels, which will require five shipments utilizing a cask capable of shipping only one barrel at a time. Estimated costs: - acquisition of stainless steel barrels: \$15K/barrel

- shipping: \$30K/trip including cask rental and preparation - WHC costs for SDAR preparation and irradiated fuel storage are included in the fee to be paid WHC based on the volume of material to be stored. Estimated cost in FY97 is \$568/ft³ for TRU and \$1047/ft³ for mixed waste. Therefore, assuming 4 barrels of TRU and 1 barrel of mixed TRU, the estimated FY97 storage cost is \$25K.

ACTIVITY BY PRIORITY:

The entire activity identified in this ADS is at Priority 2.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

No activities have been performed using ADS funding.

Activities to date have been completed using High Burnup Effects Program (HBEP) funding and FY91 DOE-RL funding. During FY91, a technical proposal for packaging and shipping the irradiated fuel, agreeable to WHC, was prepared. During FY92, HBEP funds were used for GE-VNC to prepare and submit a Request For A Storage/Disposal Approval Record. HBEP funds were also used to perform ORIGEN calculations of radionuclide content in the irradiated fuel to support the Request For A Storage/Disposal Approval Record. During FY93, an ADS was submitted for FY95 funding, but no funding was provided.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:
No ADS funding for FY94.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:
No ADS funding has been provided.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

The principal activity planned for FY96 is supporting the preparation/approval of a Storage/Disposal Approval Record (SDAR) by WHC and DOE-RL. This activity is necessary to fully define the requirements for packaging and shipping the irradiated fuel, and must be completed before packaging and shipping can be performed. Interactions between WHC, PNL, and GE-VNC will be necessary to complete this activity.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0155	COMPLETE SHIPMENT OF IRRADIATED FUEL TO DOE SITE	9/30/97	9/30/97

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Planned FY97 activities are based on the assumption that an approved SDAR is issued during FY96 so that packaging and shipping of the irradiated fuel can proceed during FY97. Planned activities for FY97 are:

- Interactions between WHC, PNL, and GE-VNC to resolve technical issues associated with packaging and shipping the irradiated fuel.
- GE-VNC will retrieve the irradiated fuel from storage and package it according to the approved SDAR. This activity will include acquisition of five lead-lined stainless steel 55-gallon barrels necessary for packaging the irradiated fuel.
- GE-VNC will prepare and load the shipping cask for transport to Hanford. This activity will include costs for cask preparation and rental

for five shipments (GE-2000 cask will accommodate only one barrel).

- The irradiated fuel will be shipped to Hanford's 200 Area for interim storage. This activity will include costs for five shipments and WHC costs for storage of five 55-gallon barrels. WHC costs for SDAR preparation and irradiated fuel storage are included in the fee to be paid WHC based on the volume of material to be stored.

If the work proceeds according to assumptions, it will be completed in FY97.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

DOE Grant Award DE-FG06-80ET34046 Am.001 - Specifies that DOE will accept the irradiated fuel at Hanford.

DOE Order 5820.2A - Refers to all DOE radioactive material to be sent to DOE sites.

REGULATORY KEY ISSUES:

Successful completion of this activity within the requested budget and schedule is dependent on several factors. Key factors include: a) DOE-HQ approval for RL and WHC to accept this spent fuel at Hanford, b) successful preparation and approval of SDAR by WHC, (progress on the SDAR may not be made until a funding source is secured), and c) escalation of costs for packaging, shipping, and storing the spent fuel between now and when the work is approved and performed. Costs are highly dependent upon any future changes in regulations.

COMP/PROG BENEFITS AT PLANNING LEVEL:

The target level funding is sufficient to complete this activity in FY97. Without planning level funding, the spent fuel will remain at GE-VNC and the commitment of DOE to remove the fuel will remain unmet. GE-VNC has raised the possible need to start charging storage costs if the spent fuel is not removed. If the spent fuel is not removed soon, the agreed methodology may no longer be applicable because of additional changes in regulations. Costs will continue to escalate with inflation and changes in regulations.

CONCERNS AT PLANNING LEVEL:

Without funding, the irradiated fuel will remain at GE-VNC and the DOE-RL acknowledged commitment to remove the fuel and accept it at Hanford will remain unmet. GE-VNC has raised the possible need to start charging storage costs if the irradiated fuel is not removed. If the irradiated fuel is not removed soon, the agreed technical methodology may no longer be applicable because of future changes in applicable regulations. Costs will continue to escalate with inflation and changes in applicable regulations.

REQUIRED TECHNICAL DEVELOPMENT:

None under 1993 regulatory environment.

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8400 ADS SUF: 0 SUBACTIVITY: XA

SUBACTIVITY TITLE: THERMAL TREATMENT TESTING FACILITY

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: D VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECH RES-NFP

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996 TOTAL
OE EW3130040		0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130040	0	0	0		0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0
DIRECT FTE	0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130040	0	0	0		0	1131	1633	2404	2557
TOTAL	0	0	0	0	0	1131	1633	2404	2557
DIRECT FTE	0	0	0	0	0	6	9	12	13

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

The Thermal Treatment Testing Facility (TTTF) is being established to test thermal processes for mixed waste treatment. This will allow the selection of the best technology to go into the nations mixed waste processing plants that will be established during the next 5 to 15 years. Multiple technologies are anticipated to be needed and the technologies will need to be integrated into treatment systems within the TTTF. Each of the DOE sites has reviewed their needs for treatment technologies and thermal treatment is a prominent part of most of the sites plans. DOE may need to establish the thermal technologies at a rapid pace in conformance to FFCA agreements with states as a result of the current FFCA process. The TTTF could provide much of the needed experience to aid in this establishment.

RELATED ACTIVITIES NARRATIVE:

The DOE has responsibility for significant volumes of mixed low-level wastes at about 50 different sites across the country. Most of these wastes are going into interim storage until they can be treated to allow their disposal. The Thermal Treatment Testing Facility (TTTF) is being established to test thermal processes for mixed waste treatment. This will allow the selection of the best technology to go into the nations mixed waste processing plants that will be established during the next 5 to 15 years. Multiple technologies are anticipated to be needed and the technologies will need to be integrated into treatment systems within the TTTF. Each of the DOE sites has reviewed their needs for treatment technologies and thermal treatment is a prominent part of most of the sites plans. DOE may need to establish the thermal technologies at a rapid pace in conformance to FFCA agreements with states as a result of the current FFCA process. The TTTF could provide much of the needed experience to aid in this establishment.

The TTTF is a key component of the National Mixed Waste Program. It will support all of DOE in the evaluation of alternative thermal technologies and provide base data to be used in design and operation of prototype process units. The TTTF will provide for integration of treatment technologies at a pilot scale and help answer many questions about the flexibility, capability, and operability of selected thermal technologies. The technologies for the TTTF will be recommended by working groups from the Mixed Waste Program.

The TTTF will operate on simulated wastes containing hazardous materials. It will not become an actual mixed waste processing facility. The technology activities will focus on obtaining pilot scale operational data on the thermal processes. This information will include operability, flexibility, and waste specific processability information. Data will be obtained during pilot operations to determine preferred operating conditions including feed times, feed rates, off-gas characteristics for the respective waste types, and the ability of the final products to pass the EPA TCLP and the DOE disposal requirements.

The TTF is one of two pilot facilities being established by DOE for the testing of technologies for mixed waste treatment. The second pilot facility is to emphasize treatment of aqueous streams and non-thermal technologies and is being established at Lawrence Livermore National Laboratory (LLNL). Both facilities are to test technologies at pilot scale that are being developed by the Mixed Waste Integrated Program (MWIP) under EM-50, other DOE waste treatment technologies, or are based on commercially available technologies that can be modified for use by DOE. The technologies determined to have the best potential from the TTF activities will then be established in actual processing facilities, first at one site and then at additional sites needing treatment technology.

KEY ASSUMPTIONS:

The modules for the TTF will be established in the 324 Building in the 300-Area of the Hanford Project.

The TTF will be capable of processing hazardous materials, but such waste processing will not be a normal part of operations. Testing will be with simulated materials containing known amounts of hazardous components and non-radioactive isotopes.

The procurement/construction costs of thermal processes are estimated to cost \$2M each including design, installation, and startup costs. It is further assumed that there will be one additional technology in FY-95, three technologies in FY-96, and one in each subsequent year.

ACTIVITY BY PRIORITY:

All activities for this project are Priority 2.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K
-----**TASKS COMPLETED TO DATE:**

New activity.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:
No activity.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Phase I operations of the TTF will begin with one thermal treatment technology. Supporting equipment for off-gas treatment, and initial feed preparation will also be established. Test data on the operability, flexibility, and waste processability will be developed and published during the year.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Design of a second thermal treatment module will be completed, procured, and installed in the remodeled TTF along with the first module, if it is deemed appropriate to move the unit at that time. Selection of the subsequent technologies for the TTF will be based on recommendations of the Mixed Waste Program steering group.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Additional technologies will be brought into the TTF and tested as recommended by the Mixed Waste steering committee.

Technical reports on the behavior of processes including their limits of operation, the processing rates, maintenance requirements, the quality of the final waste form, and potential environmental impacts will be described. These reports will provide the recommendations for technologies to be established as treatment units for DOE's mixed wastes.

Site specific problems will be addressed with specific testing runs of existing or modified equipment.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

The major driver for the TTTF is the FFCA which requires that treatment capacity be established with state concurrence agreements that will contain fixed schedules for construction and operation of the treatment facilities.

REGULATORY KEY ISSUES:

The need for TTTF is national as it will provide support to multiple facilities that are needed throughout the country at multiple sites. If the TTTF is not established each of the sites will establish a mini-TTTF or will proceed to facility design and operation will poorer quality information that will eventually result in poorer operation of the facilities and inefficient operational coordination between sites. It will also help to provide uniform technology at the DOE sites and increase DOE overall effectiveness. Delays in the TTTF will result in more costly facilities and the continued storage of mixed wastes with the associated costs for storage operations and potential state and EPA fines for non-conformance to the RCRA treatment requirements. It will also invite Congressional reviews of DOE activities under the FFCA.

COMP/PROG BENEFITS AT PLANNING LEVEL:

See Regulatory Key Issues.

CONCERNS AT PLANNING LEVEL:

See Regulatory Key Issues.

REQUIRED TECHNICAL DEVELOPMENT:

Not applicable.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8400 ADS SUF: 0 SUBACTIVITY: YA

SUBACTIVITY TITLE: 324 BUILDING B-CELL SAFETY CLEANUP

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: D VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECH RES-NFP

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE	EW3130040	238
TOTAL		238
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL	BUD	LEGAL	ESH	TOTAL			
OE	EW3130040	1101	672			0	0	0	0	0
TOTAL		1101	672	0		0	0	0	0	0
DIRECT FTE		0	0	0		0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL	BUD	LEGAL	ESH	TOTAL			
OE	EW3130040	1101	672			0	0	0	0	0
TOTAL		1101	672	0		0	0	0	0	0
DIRECT FTE		0	0	0		0	0	0	0	0

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

This funding for this subactivity supplements the funding in ADS 8410-00-AA. The subactivity funding from YA and AA will be combined to complete the project. The write-up for subactivity YA covers the whole 324 Building B-Cell cleanout project. The same writeup appears in subactivity AA.

This program will remove the accumulated, highly dispersible radioactive contamination from the 324 Building B-Cell to resolve a major safety concern; namely, 1,500,000 Ci of highly dispersible contamination. This radioactive source term results from immobilization of 70 million Ci, over a 20-year period, for DOE sponsored programs. The major Pacific Northwest Laboratory programs have included the Waste Solidification Engineering Prototypes Program, the Nuclear Waste Vitrification Program, the Zeolite Vitrification Demonstration Program, and the Nuclear Waste Treatment Program's Pilot-Scale Radioactive Liquid-Fed Ceramic Melter Testing task. Additional to the source term, these programs and other programs have left the hot-cells filled with highly contaminated equipment, cell waste, hazardous waste and radioactive materials.

This ADS sub-activity is funded in FY94 by waste management nondefense (EM-30) under ADS 8410-00-AA [\$7,199K] and by Waste Management Defense (EM-30) [\$1,102K.]

This ADS sub-activity includes cleanout operations system repair and maintenance; and packaging, storing and removing the Radioactive Mixed Waste (RMW) and Special Case Waste (SCW) from the cells. The approach for disposition of Remote Handled-RMW (RH-RMW) that may be encountered during cell cleanout is presently being defined. The budget shown in this ADS includes time and funds for packaging RH-RMW so it can be stored temporarily in B-Cell, assuming concurrence is obtained from DOE and the State of Washington Department of Ecology (WDOE).

Starting in FY94, surveillance and maintenance (S&M) for 324 Building B-Cell is included in ADS Work Plan 8410-TA. This work plan identifies a specific scope of work and dollar level of S&M to support continuation of B-Cell Cleanout. (\$1.1M in FY94 not including laundry.)

The scope of work for the 324 Building B-Cell Cleanout Project includes:

- Packaging and removal of the 1,500,000 Ci of highly dispersible radioactive contamination in 324 Building B-Cell. NOTE: As this material is collected, sampled, analyzed and designated, it is expected that some of it will be designated RH-RMW which has no storage/disposal pathway. Options for disposition of this material are being evaluated.
- Removal and disposal of all pilot-scale equipment systems which were used for: spent fuel shearing and dissolution, liquid waste treatment, process condensate treatment, waste vitrification, borosilicate glass-filled canister decontamination and storage, and spent fuel storage.

-
- Packaging and transfer to WHC engineered storage of radioactive materials generated during research programs, including spent fuel and borosilicate glass (WHC Project W-272, WHC ADS 2200-0 TDD AR).
 - Decontamination of the 324 Building B-Cell ventilation duct to protect the B-Cell A-Frame filters.
 - Define final target cell restoration conditions by January 1996.

RELATED ACTIVITIES NARRATIVE:

The 324 Building B-Cell Cleanout is funded in FY94 by ADS 8410-00-AA. B-Cell in 324 Building is designated as the backup location for the HWVP Bench-Scale Melter (supports TPA Milestones M-02-00, M-03-00, M-03-02).

KEY ASSUMPTIONS:

Program scope will not increase over that outlined in this ADS and in the April 1993 Technical Program Plan [B-Cell component] (HCC-005 draft).

ADS Work Plan 8410-TA (Surveillance & Maintenance) and ADS Work Plan 8400-AA will be funded.

The Westinghouse Hanford Corporation (WHC) Waste Acceptance Criteria (WHC-0063-3) as of February 1994 will not become more restrictive.

The WHC Special Case Waste Storage Facility (WHC Project W-272, WHC ADS 2200-0 TDD AR) will be established on time to meet the B-Cell schedule.

There will be no major untimely or catastrophic failures of key equipment items such as cell cranes, cell and airlock doors; and no major contamination incidents. The program budget includes three weeks per year of time and funding for scheduled repairs of cranes and doors.

Program funding continuity will be provided per this plan eliminating the need (as happened in FY91) to disassemble, then reassemble, the program cell operations team.

There will be a constant size (as FY93) operations crew (technicians, technician supervisors, radiation protection technologists and crafts).

Technicians that conduct work on the program will not become part of a bargaining unit.

ACTIVITY BY PRIORITY:

1A Safety Problem - All activities addressing the significant safety problem caused by 1,500,000 Ci of highly dispersible contamination and exhaust duct cleanout are included.

2. Radioactive Mixed Waste - This includes Contact Handled-RMW (CH-RMW) which has a disposition pathway via the permitted CH-RMW storage facility in 200W, operated by WHC. It also includes RH-RMW which presently has no disposition pathway. It is expected that a portion of the highly dispersible contamination from the cell floor will be RH-RMW.

2. Special Case Waste - This includes spent fuel, canisters of borosilicate glass containing high-level waste, and a portion of the highly dispersible contamination from the cell floor. It is expected that this material will be packaged and placed in the WHC Special Case Waste Storage Facility that is being established.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

At the start of the program in mid-FY88, a detailed technical program plan was prepared, reviewed and approved. A detailed work breakdown structure was used to estimate cost and time for each cost account and to prepare overall program schedule and program plan. A modified earned-value program management approach was implemented to identify cost and schedule variances, using change controls to keep scope, schedule and budget current. Progress is reviewed every six months - DOE-HQ and DOE-RL. Logic diagrams for the major tasks were constructed to show the sequence and interrelation of events and aid in determining the fraction completed for earned value. Support staff were assigned (Project Management, Financial, QA, Safety, Facilities and Operations). The program plan has been reviewed externally: Overall plan - August 1990 (Stone and Webster); Plan and Budget - September and October 1990 (WHC); RCRA Situation - September, October 1990 (Stone and Webster); PF Gubanc - (H&R Technical Associates); OMB Review - November 1991; Pete Keenan, Terrance A. Graham, P.E., R.P.S., Rick Myrick, P.E. - Summer 1991 (Engineering Sciences, Inc.); Jan 94 Replanning and Overall Approach - March 94, Westinghouse West Valley Nuclear Services Inc.; Milestone Assessment - April 94, MACTEC and RL-AMT.

Program activities in FY94 were planned by updating the February 1993 critical path activity network that included specific equipment removal activities as well as supporting activities. The updating includes lessons learned on FY93 activities; removal and size reduction of the 3A, 3B, and 4A Racks. The approach was also used as a basis for replanning the project, and finalizing the overall Project Management Plan and the Technical Project Plan. The results of replanning activities in late FY93 and the first half of FY94 were used in preparation of this ADS.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

During FY94, this program is funded by Waste Management - nondefense under ADS Work Plan 8410-00-AA. The 324 Building B-Cell cleanout addressing the safety concern caused by 1,500,000 Ci of highly dispersible contamination will continue to be the major focus. At the end of FY94, B-Cell floor will be 63% cleared with the completion of the following activities which are specified in detail (per earned value management system) in the project management plan.

- 4A Rack removal (TK-120 storage rack)
- RLFCM removal
- Turntable removal (50% complete)
- Pipe trench flush and pipe removal (43% complete)

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

The 324 Building B-Cell floor area will be 71% cleared through completion of the following activities:

- Define RH-RMW disposition approach by January 1995.
- Complete turntable removal
- Pipe trench flush and pipe removal
- 1A Rack removal
- Initiate procurement of containers and casks for special case waste

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:

The 324 Building B-Cell floor area will be 77% cleared through completion of the following activities:

- Define final cell restoration conditions by January 1996, based on projection of future hot-cell needs.
- 1B Rack removal

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

- 7B fuel storage rack removal
- 2A rack removal
- Gallery services removal
- Final removal of debris and equipment from B-Cell
- Final removal of highly dispersible activity from B-Cell
- Final special case wastes packaged and transferred to WHC
- B-Cell Safety Issue resolved

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

Cleanout of B-Cell is necessary to address safety concerns (packaging and removal of highly dispersible radioactive waste). Specific regulatory drivers are summarized below.

Draft 324 Building SAR identifies B-Cell Safety Problem (10 CFR 100, DOE Orders 5480.5, 5481.1B). Operational Safety Requirements in the Draft SAR require that the B-Cell safety problem is addressed on the schedule shown in this ADS.

DOE-RL has designated 324 Building B-Cell as Unreviewed Safety Question (DOE Order 5480.USQ).

Tri-Party Agreement milestones require cell restoration and utilization as follows: 324 B-Cell and airlock M-20-00 (pretreatment), M-03-00 (HWVP), M-03-02 (HWVP)

Good Management Practices - Secretary Watkins

- 'Point 1: Resetting ES&H over Production'
- 'Point 3: Tiger Teams - Environmental Compliance Assessments' - Point 10: Accelerating Cleanup of DOE Facilities'

Additional applicable DOE Orders 5820.2A, 5400.1, 5400.3, 5400.5, 5480.48, 5480.19 and 5633.3.

RCRA - EPA (40 CFR 261.2, 261.3, 261.10, 261.11, 161.20, 261.22, 261.24, 262.34, 1501.3); and WAC (173.303-016, 017, 070, 071, 080, 081, 082, 083, 084, 090, 100, 101, 102, 104, 200).

NEPA (5440.1), OSHA (29 CFR 1910).

REGULATORY KEY ISSUES:

Safety: The 1,500,000 Ci of dispersible contamination in 324 Building B-Cell must be collected, packaged and removed from the cell to address the existing safety problem.

RCRA Compliance: As waste is collected, it must be appropriately sampled, analyzed, designated, packaged, and (if it is RH-RMW) stored temporarily until a RH-RMW disposition approach is established.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Target Level Impact: Receipt of only that funding identified in the target level would delay cleanout completion schedule significantly since cleanout efficiency would be reduced to about 50% because staffing needed to support two shifts per day would not be funded. RCRA compliance issues would be triggered and 324 Building operational safety requirements would not be met. Since this is a safety issue, PNL does not agree with funding at below the planning level.

CONCERNS AT PLANNING LEVEL:

The following factors could drive additional cost increases:

- More stringent burial ground requirements - (if need to add high-integrity containers to Category III LLW packages ~ \$80K per package x 78 packages = \$6.2M)
- This work plan assumes concurrent activities in airlock and cell. Without this, costs would increase about \$1M per year or \$7M, and time would increase about 9 months.
- Because of the uniqueness of SCW packaging, costs for this task could increase.
- The approach for disposition of RH-RMW is being established. This ADS presently contains funds only to package the RH-RMW for temporary storage until the disposition approach is established.

REQUIRED TECHNICAL DEVELOPMENT:

Advances in metal cutting techniques and metal surface decontamination will be immediately applicable, but are not required to complete this activity.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8400 ADS SUF: 0 SUBACTIVITY: ZA

SUBACTIVITY TITLE: 300 AREA RH-MW TREATMENT SYSTEM

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: D VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECH RES-NFP

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996 TOTAL
OE EW3130040		0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130040	0	0	0		0	2107	4451	3638	3981
CE 35EW31304	0	0	0		0	0	250	400	100
TOTAL	0	0	0	0	0	2107	4701	4038	4081
DIRECT FTE	0	0	0	0	0	9	15	9	12

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3130040	0	0	1461		1461	2107	2452	3638	3981
CE 35EW31304	0	0	50		50	0	200	400	100
TOTAL	0	0	1511	0	1511	2107	2652	4038	4081
DIRECT FTE	0	0	7	0	7	9	6	9	12

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

Several high-activity radioactive mixed waste (RMW) streams are currently generated or stored in Pacific Northwest Laboratory facilities primarily in the 300 Area. These waste streams are primarily located/generated in the 324 and 325 Buildings, although other buildings do occasionally generate such waste streams. Approximately 4000 kg of high-activity solids have accumulated and an additional 5000 kg are generated annually. There are no facilities at the Hanford Site which can easily manage these streams. To store the waste in available storage facilities the waste must be packaged in shielded containers to reduce the surface dose to contact handle limits. Packaging substantially increases the volume of the waste, the amount of handling required, and the number of waste shipments. For a large fraction of this waste it is not practical to manage the waste by packaging in shielded containers. Managing the waste by packaging is thus not in concert with the ALARA principle, it increases the risk, increases the amount of waste that must be managed in the future, and thus substantially increases the cost for waste management.

The Westinghouse Hanford Company has an active effort to develop a modular facility for the storage of high-activity waste in the 200 Area. A large fraction of the accumulated waste in the 300 Area would not meet waste acceptance criteria in this new facility without treatment because of its' highly dispersible form.

The project provides facility modifications, including adding waste treatment capabilities, to allow volume reduction of waste streams, waste treatment that will permit disposal of wastes for which no current disposal method is available, including the solidification of liquid radioactive mixed wastes.

PNL research and development activities in the 325 Building in support of waste tank characterization generate 1000 to 1500 gallons of liquid radioactive mixed waste each year. In addition, 75 kilograms of solid radioactive mixed waste (RMW) have currently accumulated for which there is no disposal path available. An additional 4.5 Kg are produced each year. In addition, solid RMW in the form of contaminated beakers, pipettes, bottles and rags require treatment for disposal.

Currently, B-Cell in the 324 facility is being renovated in preparation for continued use. This work will generate approximately 150 cubic feet of radioactive particulate which will require disposal. Solidification of the particulate can greatly reduce the volume of waste requiring disposal as well as producing a waste form that will also produce an estimated 3,000 gallons of contaminated fluids which may be liquid RMW. These liquids can be treated in the proposed facility to greatly reduce volume and solidify the radioactive constituents.

Some liquid wastes are generated which do not meet the acceptance criteria of the 340 facility. These must be treated to meet those criteria or, when possible, must be packaged for shipment to the Hanford Central Waste Complex. This latter method substantially increases operating costs and currently included only storage, no disposal. In some cases, acceptance

criteria at the Central Waste Complex cannot be met by packaging.

This project will include the design of a thermal treatment system, capable of volume reduction of liquids followed by vitrification, as well as the direct vitrification of solids. The melter design will have the capability of melting a combination of vitrifiable solids and metals. The metals will separate and be removed by bottom drain prior to removal of the molten glass. The resulting materials can then be disposed of separately. Wastes for which no current disposal path is available will be treated to meet acceptance criteria to permit disposal in existing facilities, thus reducing storage space requirements in CWC.

Cost estimates are very preliminary and have been made in advance of conceptual design. The estimates are subject to revision upon completion of a conceptual design report. Operating costs prior to start-up are to cover design activities. Adjustment of estimated operating and capital costs may be required after completion of the conceptual design report.

RELATED ACTIVITIES NARRATIVE:

The objectives of this proposed activity are related to several other activities based on the fact that remote-handled, high-activity mixed hazardous wastes are generated by several facilities, projects, and activities in the 300 Area. Much of this waste does not have an existing management pathway, this activity addresses this lack of a management pathway. These problem waste streams are generated activities which include the restoration of hot cell facilities in the 324 and 325 Buildings (PNL ADS #8410-00-AA and WHC ADS 7100) and the characterization of 200 Area tank waste in the 325 Building.

Additionally, the proposed activities are related to the vitrification technology evaluation and development for low-level and high-level tank wastes. These activities are ongoing and will produce information and data that will be used as part of these proposed activities.

KEY ASSUMPTIONS:

- Funding for an engineering evaluation/feasibility study will be available of FY95
- A finding of no significant impacts will result from the environmental impacts evaluation
- Supplements to existing safety analysis documentation will satisfy all requirement for safety documentation

ACTIVITY BY PRIORITY:

All activities in this project are Priority 2.

Remote handled RMW is generated by several 300 Area activities, currently this material does not have long-term management pathway. Some RH-RMW is being stored in facilities beyond 90-days without the required permitting. This type of storage will continue until a permitted storage or treatment option becomes available. In the case of the tank characterization activities, no material is being stored beyond regulatory limits, but as the number of samples increases the current storage pathway (i.e., shielding and storage in the contact-handled storage facility [CWC]) may no longer be practical. Accepting tank samples for characterization without a proper management pathway for the waste generated during analysis may not be possible. Thus identification of a long-term management option is critical to the continuance of tank waste characterization.

In the case of the Hot Cell Remediation Project (HCRP), RH-RMW is being stored in the cells beyond the 90-day limit without a hazardous waste storage permit. This situation is being addressed as part of the restoration program, but addressing this problem requires that final disposition of the waste is known. The activities proposed in this ADS addresses the final disposition of the waste. The last decontamination stage of the cell restoration will be made difficult, more costly, and potentially impractical by leaving the generated RMW in the cells.

Completing an engineering/feasibility study to evaluate other treatment options (e.g., the Hanford LLW or HLW vitrification facilities) and to determine the practicality and economics of treating RH-RMW in the 324 Building hot cells is critical to the related activities. Thus the initial phase of this overall activity is high-priority.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

300 AREA RH-MW TREATMENT SYSTEM

TASKS COMPLETED TO DATE:
Not applicable.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

CURRENT YEAR (FY 1994) TASK NARRATIVE:
Not applicable.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:

The activities that will completed in the budget year include a detailed engineering evaluation of the long-term management options that are or might be available to manage the RH-RMW currently stored and generated as part of 300 Area activities. The evaluation will also address the feasibility of the each option. The options that will be evaluated include:

- assessing the use of the low-level waste or high-level waste vitrification facilities planned for the Hanford Site
- transportation of the untreated material or partially treated material to the proposed storage facility for RH-RMW
- placement of a vitrification treatment system into the 324 Building hot cells for treatment of RH-RMW
- other currently unidentified options

Initial glass formulation and waste form acceptance testing will be performed using simulated wastes which represent the targeted waste streams. This testing will encompass waste form durability, ability to meet current waste acceptance criteria for final disposal options (i.e., geologic repository, low-level waste burial, etc.).

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:

The proposed activities for the planning year is as follows:

- Laboratory/Engineering-Scale Testing This activity is a continuation of the laboratory testing performed during the budget year. It will encompass the development of a glass formulation for the final waste form produced in the glass melter, evaluation of the waste form

produced using simulated and actual waste, and engineering-scale testing using waste simulants in existing engineering-scale melters.

- **Functional Design Criteria/Conceptual Design Plan** This activity will prepare the functional design criteria for the 300 Area RMW waste treatment system and the design plan for the conceptual design of the treatment system. These documents will guide the design of the treatment system.
- **NEPA Documentation** This activity will initiate the preparation of the required NEPA documentation to design, build, install, and operate the proposed waste treatment system. This will include preparation of the ADM, and initiation of the environmental impacts evaluation.
- **Definitive Design** This activity will encompass the initiation of the definitive design of the proposed treatment system. Initial activities will entail engineering design calculations in support of final design.
- **Safety Documentation** The initial phases of the safety analysis and production of required safety documentation for the treatment system will started in the budget year. This effort will prepare the hazard classification to determine what level of safety analysis is required for the treatment system.
- **Operational Readiness Review** This activity initiated the review process for operational readiness. Activity during the budget year will entail selection of the initial readiness review board, preparation of the ORR plan, and education of the board as to the scope of the proposed system.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8400-00-0545	RH-MW TREATMENT SYSTEM ENGINEERING/FEASIBILITY STUDY	10/31/95	9/30/97
8400-00-0580	RH-MW TREATMENT SYSTEM CONCEPTUAL DESIGN	4/30/96	9/30/97
8400-00-0600	RH-MW TREATMENT SYSTEM DEFINITIVE DESIGN	1/31/97	9/30/98
8400-00-0590	RCRA PERMITTING FOR RH-MW TREATMENT FACILITY	7/31/98	9/30/98
8400-00-0605	RH-MW TREATMENT SYSTEM FABRICATION	4/30/99	4/30/99
8400-00-0630	IN-CELL COLD TESTING OF RH-MW TREATMENT SYSTEM	2/28/00	2/28/00

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

The activities that will be performed in the outyears include:

- Completion of final design for the proposed treatment system - Preparing the appropriate permit applications and obtaining the appropriate permits for system construction and operation including:
 - Hazardous Waste Treatment Permit (RCRA Permit)
 - Air Permits

- Completion of required NEPA documentation
- Completion of required safety documentation, i.e., SAR/TSAR supplements to 324 Building SAR/TSAR
- Completion of melter system fabrication
- Completion of startup, acceptance testing, and cold testing of the melter system before final hot operations. This testing will encompass both out of cell and in cell testing.
- Complete training of melter system operators. As part of cold testing the system operators will be trained
- Complete preparation and approval of treatment system operation procedures and documentation.
- Complete installation of the treatment system into the 324 Building hot cell facilities.
- Initiate operation of the system treating 300 Area RH-RMW

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

Project is required to reduce the volume of problem wastes created by Tank Characterization activities in the 325 facility, and by the B-Cell cleanout activities in 324. Problem wastes that have no current disposal path will be treated to meet Waste Acceptance Criteria of Hanford permitted facilities so that disposal is feasible. The impact of not proceeding with the project will be increased costs of waste handling, continued accumulation of wastes that have no disposal pathway available, and interference with scheduled completion of TPA milestones.

The accumulation of problem wastes in the 325 facility can reach the point that hot cell analytical operations including the SST/DST core sample analysis work supporting TPA milestone M-10 will be jeopardized. If the facility modifications and installation of treatment capabilities are not completed, the cost and difficulty of handling and disposing of wastes created by B-Cell cleanout will be increased. Waste disposal costs will continue to increase and final disposal of the generated wastes will be delayed indefinitely.

This is the initial submission of an ADS for this activity. However, cost estimates precede conceptual design and will be subject to revision as those activities are completed.

REGULATORY KEY ISSUES:

Waste acceptance criteria for the final waste disposal sites has a large effect on the final waste form and its' performance criteria. The waste form will be developed using the most recent acceptance criteria, account for any proposed changes, and where possible leave as large a margin for future changes as practical (i.e., the best waste form practical will be developed/produced).

COMP/PROG BENEFITS AT PLANNING LEVEL:

Funding at the requested level will allow proper detailed evaluation of the long-term management options for the RH-RMW currently being stored and generated in the 300 Area.

Funding at the planning level will allow the fielding of a system that can treat waste which currently has no long term management pathway. This treatment will allow the waste to either be managed as radioactive only waste or transported to a proposed storage facility for the storage of RH-RMW.

CONCERNS AT PLANNING LEVEL:

None.

REQUIRED TECHNICAL DEVELOPMENT:

It is assumed that existing technology will be fielded for use in this treatment system. This activity will use information produced as part of the ongoing technology evaluation for the vitrification of low-level and high-level tank wastes.

The waste glass formulation effort will draw on the substantial knowledge/data base which has been produced over the last 25+ years of waste glass formulations work at PNL. This activity is not expected to present a problem based on process knowledge of the waste and data from waste characterization efforts.

THIS PAGE INTENTIONALLY
LEFT BLANK

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8410 ADS SUF: 0 SUBACTIVITY: AA

SUBACTIVITY TITLE: 324 BUILDING B-CELL SAFETY CLEANOUT

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: N VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECHNOLOGY RES

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996
OE EX3120020		TOTAL
TOTAL		10509
DIRECT FTE		43

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EX3120020		7199	10370		10747	10747	10412	10111	10429	6740
TOTAL		7199	10370	0	10747	10747	10412	10111	10429	6740
DIRECT FTE		0	44	0	43	43	45	40	38	22

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	B&R		RL BUD	LEGAL	ESH	TOTAL				
OE EX3120020		7199	10370		10747	10747	10412	10111	10429	6740
TOTAL		7199	10370	0	10747	10747	10412	10111	10429	6740
DIRECT FTE		0	44	0	43	43	45	40	38	22

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

This program will remove the accumulated, highly dispersible radioactive contamination from the 324 Building B-Cell to resolve a major safety concern; namely, 1,500,000 Ci of highly dispersible contamination. This radioactive source term results from immobilization of 70 million Ci, over a 20-year period, for DOE sponsored programs. The major Pacific Northwest Laboratory programs have included the Waste Solidification Engineering Prototypes Program, the Nuclear Waste Vitrification Program, the Zeolite Vitrification Demonstration Program, and the Nuclear Waste Treatment Program's Pilot-Scale Radioactive Liquid-Fed Ceramic Melter Testing task. Additional to the source term, these programs and other programs have left the hot-cells filled with highly contaminated equipment, cell waste, hazardous waste and radioactive materials.

This ADS sub-activity is funded in FY 1994 by waste management nondefense (EM-30) under ADS 8410-00-AA [\$7,199K] and by Waste Management Defense (EM-30) [\$1,102K.]

This ADS sub-activity includes cleanout operations system repair and maintenance; and packaging, storing and removing the Radioactive Mixed Waste (RMW) and Special Case Waste (SCW) from the cells. The approach for disposition of Remote Handled-RMW (RH-RMW) that may be encountered during cell cleanout is presently being defined. The budget shown in this ADS includes time and funds for packaging RH-RMW so it can be stored temporarily in B-Cell, assuming concurrence is obtained from DOE and the State of Washington Department of Ecology (WDOE).

Starting in FY 1994, surveillance and maintenance (S&M) for 324 Building B-Cell is included in ADS Work Plan 8410-TA. This work plan identifies a specific scope of work and dollar level of S&M to support continuation of B-Cell Cleanout. (\$1.1M in FY 1994 not including laundry.)

The scope of work for the 324 Building B-Cell Cleanout Project includes:

- Packaging and removal of the 1,500,000 Ci of highly dispersible radioactive contamination in 324 Building B-Cell. NOTE: As this material is collected, sampled, analyzed and designated, it is expected that some of it will be designated RH-RMW which has no storage/disposal pathway. Options for disposition of this material are being evaluated.
- Removal and disposal of all pilot-scale equipment systems which were used for: spent fuel shearing and dissolution, liquid waste treatment, process condensate treatment, waste vitrification, borosilicate glass-filled canister decontamination and storage, and spent fuel storage.
- Packaging and transfer to WHC engineered storage of radioactive materials generated during research programs, including spent fuel and borosilicate glass (WHC Project W-272, WHC ADS 2200-0 TDD AR).
- Decontamination of the 324 Building B-Cell ventilation duct to protect the B-Cell A-Frame filters.

- Define final target cell restoration conditions by January 1996.

RELATED ACTIVITIES NARRATIVE:

The 324 Building B-Cell Cleanout is funded in FY 1994 by ADS 8410-00-AA. B-Cell in 324 Building is designated as the backup location for the HWVP Bench-Scale Melter (supports TPA Milestones M-02-00, M-03-00, M-03-02).

KEY ASSUMPTIONS:

Program scope will not increase over that outlined in this ADS and in the April 1993 Technical Program Plan [B-Cell component] (HCC-005 draft).

ADS Work Plan 8410-TA (Surveillance & Maintenance) and ADS Work Plan 8400-YA will be funded.

The Westinghouse Hanford Corporation (WHC) Waste Acceptance Criteria (WHC-0063-3) as of February 1994 will not become more restrictive.

The WHC Special Case Waste Storage Facility (WHC Project W-272, WHC ADS 2200-0 TDD AR) will be established on time to meet the B-Cell schedule.

There will be no major untimely or catastrophic failures of key equipment items such as cell cranes, cell and airlock doors; and no major contamination incidents. The program budget includes three weeks per year of time and funding for scheduled repairs of cranes and doors.

Program funding continuity will be provided per this plan eliminating the need (as happened in FY 1991) to disassemble, then reassemble, the program cell operations team.

There will be a constant size (as FY 1993) operations crew (technicians, technician supervisors, radiation protection technologists and crafts).

Technicians that conduct work on the program will not become part of a bargaining unit.

ACTIVITY BY PRIORITY:

1A Safety Problem - All activities addressing the significant safety problem caused by 1,500,000 Ci of highly dispersible contamination and exhaust duct cleanout are included.

2. Radioactive Mixed Waste - This includes Contact Handled-RMW (CH-RMW) which has a disposition pathway via the permitted CH-RMW storage facility in 200W, operated by WHC. It also includes RH-RMW which presently has no disposition pathway. It is expected that a portion of the highly dispersible contamination from the cell floor will be RH-RMW.

2. Special Case Waste - This includes spent fuel, canisters of borosilicate glass containing high-level waste, and a portion of the highly dispersible contamination from the cell floor. It is expected that this material will be packaged and placed in the WHC Special Case Waste Storage Facility that is being established.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

At the start of the program in mid-FY 1988, a detailed technical program plan was prepared, reviewed and approved. A detailed work breakdown structure was used to estimate cost and time for each cost account and to prepare overall program schedule and program plan. A modified earned-value program management approach was implemented to identify cost and schedule variances, using change controls to keep scope, schedule and budget current. Progress is reviewed every six months - DOE-HQ and DOE-RL. Logic diagrams for the major tasks were constructed to show the sequence and interrelation of events and aid in determining the fraction completed for earned value. Support staff were assigned (Project Management, Financial, QA, Safety, Facilities and Operations). The program plan has been reviewed externally: Overall plan - August 1990 (Stone and Webster); Plan and Budget - September and October 1990 (WHC); RCRA Situation - September, October 1990 (Stone and Webster); PF Gubanc - (H&R Technical Associates); OMB Review - November 1991; Pete Keenan, Terrance A. Graham, P.E., R.P.S., Rick Myrick, P.E. - Summer 1991 (Engineering Sciences, Inc.); Jan 94 Replanning and Overall Approach - March 94, Westinghouse West Valley Nuclear Services Inc.; Milestone Assessment - April 94, MACTEC and RL-AMT.

Program activities in FY 1994 were planned by updating the February 1993 critical path activity network that included specific equipment removal activities as well as supporting activities. The updating includes lessons learned on FY 1993 activities; removal and size reduction of the 3A, 3B, and 4A Racks. The approach was also used as a basis for replanning the project, and finalizing the overall Project Management Plan and the Technical Project Plan. The results of replanning activities in late FY 1993 and the first half of FY 1994 were used in preparation of this ADS.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8410-00-0075	324 BUILDING B-CELL 63% FLOOR AREA CLEARED OF DISPERSIBLES	9/30/94	9/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

During FY 1994, this program is funded by Waste Management - nondefense under ADS Work Plan 8410-00-AA. The 324 Building B-Cell cleanout addressing the safety concern caused by 1,500,000 Ci of highly dispersible contamination will continue to be the major focus. At the end of FY 1994, B-Cell floor will be 63% cleared with the completion of the following activities which are specified in detail (per earned value management system) in the project management plan.

- 4A Rack removal (TK-120 storage rack)
- RLFCM removal
- Turntable removal (50% complete)
- Pipe trench flush and pipe removal (43% complete)

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8410-00-0080	324 BUILDING B-CELL 71% FLOOR AREA CLEARED OF DISPERSIBLES	9/30/95	9/30/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

The 324 Building B-Cell floor area will be 71% cleared through completion of the following activities:

- Define RH-RMW disposition approach by January 1995.
- Complete turntable removal
- Pipe trench flush and pipe removal
- 1A Rack removal
- Initiate procurement of containers and casks for special case waste

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8410-00-0065	324 BUILDING B-CELL 77% FLOOR AREA CLEARED OF DISPERSIBLES	9/30/96	9/30/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

The 324 Building B-Cell floor area will be 77% cleared through completion of the following activities:

- Define final cell restoration conditions by January 1996, based on projection of future hot-cell needs.
- 1B Rack removal

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8410-00-0070	324 BUILDING B-CELL 88% FLOOR AREA CLEARED OF DISPERSIBLES	9/30/97	9/30/97
8410-00-0085	324 BUILDING B-CELL 99% FLOOR AREA CLEARED OF DISPERSIBLES	9/30/98	9/30/98
8410-00-0090	324 BUILDING B-CELL DUCT CLEANOUT INITIATED	9/30/99	9/30/99
8410-00-0100	324 BUILDING B-CELL SAFETY ISSUE RESOLVED	9/30/00	9/30/00

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

- 7B fuel storage rack removal
- 2A rack removal
- Gallery services removal
- Final removal of debris and equipment from B-Cell
- Final removal of highly dispersible activity from B-Cell
- Final special case wastes packaged and transferred to WHC
- B-Cell Safety Issue resolved

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

Cleanout of B-Cell is necessary to address safety concerns (packaging and removal of highly dispersible radioactive waste). Specific regulatory drivers are summarized below.

Draft 324 Building SAR identifies B-Cell Safety Problem (10 CFR 100, DOE Orders 5480.5, 5481.1B). Operational Safety Requirements in the Draft SAR require that the B-Cell safety problem is addressed on the schedule shown in this ADS.

DOE-RL has designated 324 Building B-Cell as Unreviewed Safety Question (DOE Order 5480.USQ).

Tri-Party Agreement milestones require cell restoration and utilization as follows: 324 B-Cell and airlock M-20-00 (pretreatment), M-03-00 (HWVP), M-03-02 (HWVP)

Good Management Practices - Secretary Watkins

- 'Point 1: Resetting ES&H over Production'
- 'Point 3: Tiger Teams - Environmental Compliance Assessments' - Point 10: Accelerating Cleanup of DOE Facilities'

Additional applicable DOE Orders 5820.2A, 5400.1, 5400.3, 5400.5, 5480.48, 5480.19 and 5633.3.

RCRA - EPA (40 CFR 261.2, 261.3, 261.10, 261.11, 161.20, 261.22, 261.24, 262.34, 1501.3); and WAC (173.303-016, 017, 070, 071, 080, 081, 082, 083, 084, 090, 100, 101, 102, 104, 200).

NEPA (5440.1), OSHA (29 CFR 1910).

REGULATORY KEY ISSUES:

Safety: The 1,500,000 Ci of dispersible contamination in 324 Building B-Cell must be collected, packaged and removed from the cell to address the existing safety problem.

RCRA Compliance: As waste is collected, it must be appropriately sampled, analyzed, designated, packaged, and (if it is RH-RMW) stored temporarily until a RH-RMW disposition approach is established.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Target Level Impact: Receipt of only that funding identified in the target level would delay cleanout completion schedule significantly since cleanout efficiency would be reduced to about 50% because staffing needed to support two shifts per day would not be funded. RCRA compliance issues would be triggered and 324 Building operational safety requirements would not be met. Since this is a safety issue, PNL does not agree with funding at below the planning level.

CONCERNS AT PLANNING LEVEL:

The following factors could drive additional cost increases:

- More stringent burial ground requirements - (if need to add high-integrity containers to Category III LLW packages ~ \$80K per package x 78 packages = \$6.2M)
- This work plan assumes concurrent activities in airlock and cell. Without this, costs would increase about \$1M per year or \$7M, and time would increase about 9 months.
- Because of the uniqueness of SCW packaging, costs for this task could increase.
- The approach for disposition of RH-RMW is being established. This ADS presently contains funds only to package the RH-RMW for temporary storage until the disposition approach is established.
- This work plan assumes B-Cell exhaust duct cleanout can be accomplished for \$6 million.

REQUIRED TECHNICAL DEVELOPMENT:

Advances in metal cutting techniques and metal surface decontamination will be immediately applicable, but are not required to complete this activity.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8410 ADS SUF: 0 SUBACTIVITY: BA

SUBACTIVITY TITLE: 327 BUILDING SURVEILLANCE AND MAINTENANCE

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: N VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECHNOLOGY RES

DECREMENT CASE (\$ IN THOUSANDS)

		FY1996
	B&R	TOTAL
OE	EX3120020	0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000	
	B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EX3120020	1700	1763			1396	1396	1415	1429	1445	1460
TOTAL		1700	1763	0		1396	1396	1415	1429	1445	1460
DIRECT FTE		0	7	0		6	6	6	6	6	6

PLANNING CASE (\$ IN THOUSANDS)

		FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000	
	B&R		RL	BUD	LEGAL	ESH	TOTAL				
OE	EX3120020	1700	1763			1396	1396	1415	1429	1445	1460
TOTAL		1700	1763	0		1396	1396	1415	1429	1445	1460
DIRECT FTE		0	7	0		6	6	6	6	6	6

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

This project provides scheduled surveillance and maintenance of key 327 Building hot cells and systems which are required for the continued safe storage of radioactive fuels and materials samples. Radiological surveys and assays of all potentially contaminated ventilation ducts, drain lines, and related equipment will be performed to locate and characterize holdup fissionable material which may be present. Efforts to remove contaminants from these systems will be initiated.

RELATED ACTIVITIES NARRATIVE:

The major objective of this project is to provide regular surveillance and maintenance of key 327 Building hot cells and systems which are required for the continued safe storage of radioactive fuels and materials samples. The majority of these samples are legacy materials from previous programmatic activities and for which no funding source exists to provide for their oversight, pending disposition. There are approximately 1400 legacy samples containing a total of 27 kilograms of accountable nuclear material, as well as an additional 1500 samples of irradiated structural materials stored in the facility. Regular surveillance of these materials including witnessed audits and routine accountability must be performed over and above any other activities which are being conducted in the building. All essential building systems including HVAC equipment, radiation detection instruments, compressed air and water supplies and the containment boundaries of all hot cells and storage basins must be routinely checked for proper operation and all needed repairs must be promptly performed. Scheduled radiological surveys must be conducted to detect contamination which has migrated out of the hot cells and building ventilation systems, and any contamination which is discovered must be contained or removed to assure personnel and site safety and mandated environmental compliance.

Radiologically contaminated waste materials produced during conduct of this work must be sorted such that hazardous or dangerous constituents may be identified and separated. A program will be developed and implemented to sort these materials, categorize them, and make a determination as to the appropriate designation of the waste type (i.e., hazardous waste, mixed waste, TRU, etc.).

Work begun during FY 94 to identify and procure assay equipment required to locate and characterize potential holdup fissionable material present in building systems (and to actually initiate the assays) will be continued. Assuming holdup material is located, the work scope will be expanded to include implementing methods for its safe removal.

KEY ASSUMPTIONS:

Scope, cost, and schedule baselines have been projected based upon existing 327 Building staff performing much of the work at their current labor rates. Scheduled and required maintenance is assumed to be performed by

craft services personnel either directly assigned to the facility or temporarily assigned from other site locations. Additional funding is needed for FY95 and FY96 activities related to waste disposal costs which are in excess of originally projected levels.

ACTIVITY BY PRIORITY:

With the exception of holdup fissionable material characterization, all of the activities to be carried out under this task are considered to be Priority 1. The surveillance and maintenance work which will be performed is required to ensure that no radioactive or otherwise hazardous materials are allowed to migrate to the environment where they would pose a hazard either to staff or to members of the public.

Holdup fissionable material characterization is considered to be Priority 3. Location and characterization of holdup fissionable material directly relates to the resolution of a potential criticality safety problem, in direct compliance with a recent DOE order mandating that all nuclear facilities implement a plan for locating and characterizing such materials.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

Milestones Completed: Schedules for preventive/required maintenance activities and comprehensive radiological surveys were prepared, approved, and implemented during FY 93.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8410-00-0035	IMPLEMENT PROGRAM TO LOCATE FISSIONABLE MATERIALS IN 327 BLDG	9/30/94	9/30/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Current Year: Assay instrumentation for holdup measurements has been identified and procurement initiated. A task plan outlining the methodology of the holdup measurements has been drafted and is undergoing review. Preparations are underway to perform more detailed radiological dose rate determinations on the facility ventilation ducts and other equipment to obtain information which will assist in calibrating the assay system. After evaluating the survey data and completing procurement of the assay equipment, the assay work will begin. Preventive/required maintenance will continue to be conducted in accordance with the existing schedule, as will radiological survey activities. Legacy waste materials will be sorted, categorized, and re-packaged for eventual disposal. Other activities such as removal and control of legacy contamination, unscheduled repairs necessitated by equipment failure due to age or condition, and general decontamination will be carried out throughout the year on an as-needed basis.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8410-00-0060	IMPLEMENT PLAN FOR CONTROL OR REMOVAL/327 FISSIONABLE MATERIALS	9/30/95	9/30/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Scheduled preventive maintenance will be performed as well as maintenance which is required to restore essential systems to full operational status. Radiological surveys of building systems and equipment will be carried out in accordance with the approved schedule. Radiological contamination discovered during survey activities will be either contained or removed as appropriate. The containment boundary of each hot cell will be inspected. Storage basins and storage arrays will be periodically examined and their contents verified during accountability audits. Radiological assays of building systems will continue with the objective of locating and identifying any holdup fissionable materials. If such material is discovered, planning will be initiated for its safe removal.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8410-00-0015	VERIFY INTEGRITY OF ALL 327 BLDG. HOT CELL CONTAINMENT BOUNDARIES	9/30/96	9/30/96

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Scheduled maintenance and radiological survey activities will continue. Required maintenance will be performed to restore essential building

systems to operational status. Migrating legacy contamination will be removed or fixed in place as appropriate. Fissionable material holdup assay work will continue until all building systems have been examined. Planning for the safe removal of holdup material which is discovered will be completed, and removal work will begin when authorized. Accountability of all stored radioactive materials will be maintained.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8410-00-0020	PERFORM OP TESTS ON ALL KEY 327 BLDG SYSTEMS & COMPLETE REPAIRS	9/30/97	9/30/97
8410-00-0025	EVALUATE EFFECTIVENESS OF 327 BLDG RAD SURVEY AND MAINT SCHEDULES	9/30/98	9/30/98
8410-00-0030	CONDUCT PREVENTIVE MAINTENANCE OF CRITICAL 327 BUILDING SYSTEMS	9/30/99	9/30/99
8410-00-0010	VERIFY NO NEW FISSIONABLE MATERIAL BUILDUP IN 327 BUILDING	9/30/00	9/30/00

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Scheduled maintenance and radiological survey activities will continue. Required maintenance will be performed to restore essential building systems to operational status. Migrating legacy contamination will be removed or fixed in place as appropriate. Removal of holdup fissionable materials will be completed during this period. Accountability of all stored radioactive materials will be maintained.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

DOE Order 5480.24 - This DOE Order directs all nuclear facilities to prepare and implement a program for locating and identifying holdup fissionable material in each facility. The original scope of work for this project has been increased in FY 94 to provide the required funding and to obtain the necessary portable assay equipment. Failure to implement this program will increase the risk of an accidental criticality resulting from an unexpected fissionable material accumulation.

40 CFR 61, Subpart H - This federal statute specifies standards for radionuclide emissions (other than radon) from DOE facilities. The entire scope of this project is affected. Failure to continue this work will greatly increase the likelihood of a radionuclide release to the environment with potentially significant risk to site personnel and to the public.

WAC 246-247 - Washington State regulation governing air emissions of radionuclides. The same scope of work and consequences pertain to this regulation as to 40 CFR 61, Subpart H.

WAC 173-400 - General Washington State regulation pertaining to air pollution sources. Scope of work and consequences same as 40 CFR 61, Subpart H.

40 CFR 261.3 and 40 CFR 261.20 - Federal statutes which define and specify the general characteristics of hazardous waste. Waste materials produced during routine surveys and/or preventive maintenance activities will be regulated by these statutes. Compliance with these statutes is essential to assure that all waste materials are properly specified and meet current regulations for either land disposal or other approved handling.

WAC 173-303-140 - Washington state code outlining the designation of dangerous waste. The affected scope of work and consequences are similar to those associated with 40 CFR 261.3 and 40 CFR 261.20 above.

REGULATORY KEY ISSUES:

Disposal of legacy transuranic waste materials is the principal issue with the potential for impacting the surveillance and maintenance work activities. Both nuclear fuel specimens and other TRU waste materials which are no longer needed or related to current programs are stored in the facility and must be safely disposed of during the course of this work. There is currently no approved disposal site for TRU waste and one must be identified before these materials can be removed from their current locations.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Planning level funding is essential to ensure that legacy contamination is found and either removed or stabilized promptly and that all 327 Building

systems required for the continued safe operation of the facility are maintained fully functional. Maintenance of these systems and control of contamination are required to comply with both Washington state and federal environmental safety and health statutes. Funding at the target level will necessitate a reduction in the amount and frequency of work performed and thereby increase the risks to site workers, members of the public, and to the environment.

CONCERNS AT PLANNING LEVEL:

None.

REQUIRED TECHNICAL DEVELOPMENT:

None.

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8410 ADS SUF: 0 SUBACTIVITY: CA

SUBACTIVITY TITLE: 327 BUILDING LEGACY WASTE

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: N VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECHNOLOGY RES

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996 TOTAL
OE EX3120020		0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL BUD	LEGAL	ESH	TOTAL				
OE EX3120020	0	0			0	734	1323	1246	5183
CE 35EX31201	0	0		0	0	50	0	0	0
TOTAL	0	0	0	0	0	784	1323	1246	5183
DIRECT FTE	0	0	0	0	0	2	4	4	15

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL BUD	LEGAL	ESH	TOTAL				
OE EX3120020	0	0			0	3400	3496	3586	3639
CE 35EX31201	0	0		0	0	50	0	0	0
TOTAL	0	0	0	0	0	3450	3496	3586	3639
DIRECT FTE	0	0	0	0	0	11	11	11	11

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

The major objective of this project is to clean out the 327 building; locate, identify, and remove legacy contamination from the interior of the 327 building, its hot cells and associated mechanical and ventilation equipment, and to prepare the facility for ultimate D&D. The scope of work to be performed includes a comprehensive radiological assessment of the entire facility interior, followed by initiation of a major decontamination effort intended to remove the contamination which is found so that the facility may be safely decommissioned in full compliance with all environmental regulations.

Significant quantities of radioactive waste materials which are currently stored within the facility hot cells will be removed and disposed of to support D&D of the facility. In addition legacy fuels remaining in the 325 Building from the LMR program will be disposed of as part of this ADS. Decontamination and waste management plans will be prepared early in the effort to guide facility decontamination and waste disposal.

RELATED ACTIVITIES NARRATIVE:

Surveillance and maintenance of the 327 building is provided in ADS 8400-00-BA. Implementation of this ADSWP is directly related to other Hanford Site ADSs including ADS 2310 'Hanford Environmental Compliance,' and ADS 7225 'Laboratory Support,'.

KEY ASSUMPTIONS:

The most recent activities conducted within the 327 Building were in support of various NE sponsored programs including the Liquid Metal Reactor (LMR) program, the FFTF reactor, and a variety of commercial reactor spent fuel studies. The wastes produced during these programs include Transuranic (TRU) and non Tru materials, as well as low level waste (LLW) and radioactive mixed waste. Ultimate disposal will involve a variety of specialized packaging and transportation schemes requiring substantial funding to accomplish.

Due to the large effort which will be required to accomplish complete decontamination of the facility interior, hot cells, and storage areas, it is assumed that much of the work will be assigned to KEH construction forces personnel. Cost estimates are based on existing labor rates for KEH and PNL.

ACTIVITY BY PRIORITY:

Activities to be carried out during this project are all considered to be Priority 4 since comprehensive radiological cleanup of the 327 building is necessary prior to facility turnover for D&D. Only by complete removal of radioactive materials and contamination can site worker and public safety be assured, as well as the prevention of radionuclide releases to the

environment.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

None. This activity is not projected to start until a later date.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:
 There are no activities scheduled for FY 94.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:
 There are no activities scheduled for FY 95.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

PLANNING YEAR (FY 1996) TASK NARRATIVE:
 No funding is identified at the target level. At the planning level, preparations for facility cleanout will begin with an analysis of the radiological and physical status of building systems and hot cells. Survey and high-range radiation detection instrumentation will be identified and procurement initiated to support ALARA considerations and to more accurately characterize the radiological condition of materials handled or generated during the decontamination work. A plan will be prepared and implemented which controls decontamination and waste handling activities. Decontamination of the facility will begin.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8410-00-0005	INITIATE CLEANOUT OF 327 BUILDING DECONTAMINATION CELL	9/30/97	9/30/97

OUTYEAR (FY 1997-2000) TASK NARRATIVE:
 Funding at the target level will enable preparation for facility cleanout to begin with an analysis of the radiological and physical status of building systems and hot cells (deferred from FY95). At the planning level, facility cleanout will proceed with decontamination of selected hot cells, the Dry Storage Array, and the water-filled basins. The canyon and basement areas will be cleaned including wall and ceiling interiors. Ventilation ducts will be decontaminated, and waste materials categorized and packaged according to their final classification (LLW, TRU, Mixed, etc.). Stored samples of irradiated materials and nuclear fuel will either be properly disposed of or transferred to another suitable facility for storage.

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

DOE Order 6480.24:

This DOE order directs all nuclear facilities to prepare and implement a program for locating and identifying holdup fissionable material in each facility. Failure to implement this program will increase the risk of an accidental criticality resulting from an unexpected, undetected fissionable material accumulation.

40 CFR 61, Subpart H:

This federal statute specifies standards for radionuclide emissions (other than radon) from DOE facilities. The entire scope of this project is affected. Failure to perform this work will greatly increase the likelihood of a radionuclide release to the environment with potentially significant risk to site personnel and to the public.

WAC 246-247:

Washington State regulation governing air emissions of radionuclides. The same scope of work and consequences pertain to this regulation as to 40 CFR 61, Subpart H.

450 CFR 261.3 and 40 CFR 261.20:

Federal statutes which define and specify the general characteristics of hazardous waste. Waste materials produced during radiological surveys and decontamination activities will be regulated by these statutes. Compliance with these statutes is essential to assure that all waste materials are properly specified and meet current regulations for either land disposal or other approved handling.

WAC 173-303-140:

Washington State code outlining the designation of dangerous waste. The affected scope of work and consequences are similar to those associated with 40 CFR 261.3 and 40 CFR 261.20 above.

REGULATORY KEY ISSUES:

The most significant issue for this project is the protection of the environment, members of the public, and site employees from inadvertent exposure to radiological contamination during the facility cleanout activities. Considerable care will be required to ensure that radioactive waste materials which are produced are properly handled and packaged to prevent personnel exposure or environmental contamination from occurring.

Identification and development of approved disposal sites and methods for dealing with portions of the waste stream produced from the cleanup work also are key elements of the successful completion of the project. It is anticipated that a variety of waste forms will be generated, including radioactive mixed waste and transuranic waste which both currently present significant disposal problems.

A third key issue concerns the impact of the scheduled removal of Hanford patrol personnel from the 300 Area after March 3, 1993. There is at the

present time no approved method for accomplishing shipments of radioactive materials (nor are DOT-approved shipping containers available) in the area when largely unrestricted public access is possible after this date.

COMP/PROG BENEFITS AT PLANNING LEVEL:

Although radiological conditions within the 327 building are currently being monitored with funds provided for surveillance and maintenance, actual removal of stored nuclear fuels and materials and comprehensive cleanup of the facility will be required to ensure that no contamination is released to the public or the environment. Delays in initiating this important work and reductions from planning level to target level funding greatly increase the risk of an environmental release. If one were to occur, statutory prohibitions against such an event will be violated, thereby putting the DOE at risk of penalties assessed both by the US Environmental Protection Agency and the State of Washington Department of Ecology. Depending upon the nature of such an event, potentially serious risks to site workers and/or members of the public are also a very real possibility and will tend to increase with time. The physical size and complexity of the 327 building and the large-scale cleanup which will be required necessitate that substantial staff resources, equipment, and supplies be devoted to accomplishing the task.

CONCERNS AT PLANNING LEVEL:

Disposal of waste materials and nuclear fuels throughout this decontamination work can only be accomplished if suitable disposal sites are available and approved packaging and transportation options are in place. Delays in the start of this program due to lack of funding availability will increase the risk of radionuclide release to the environment and possible adverse affects on site personnel and to members of the public.

REQUIRED TECHNICAL DEVELOPMENT:

None.

present time no approved method for accomplishing shipments of radioactive materials (nor are DOT-approved shipping containers available) in the area when largely unrestricted public access is possible after this date.

COMPLEX BENEFITS AT PLANNING LEVEL:

Although radiological conditions within the 337 building are currently being monitored with funds provided for surveillance and maintenance, actual removal of stored nuclear fuels and materials and comprehensive cleanup of the facility will be required to ensure that no contamination is released to the public or the environment. Delays in initiating this important work and reductions from planning level to target level funding greatly increase the risk of an environmental release. If one were to occur, statutory prohibitions against such an event will be violated, thereby putting the DOE at risk of penalties assessed both by the US Environmental Protection Agency and the State of Washington. Department of Ecology. Risks to the public from such an event are also a very real possibility and will increase with time. The physical size and complexity of the cleanup and the cleanup which will be required necessitate staff resources, equipment, and supplies be devoted to accomplishing the task.

THIS PAGE INTENTIONALLY LEFT BLANK

CONCERNS AT PLANNING LEVEL:

Disposal of waste materials and nuclear fuels throughout this decontamination work can only be accomplished if suitable disposal sites are available and approved packaging and transportation options are in place. Delays in the start of this program due to lack of funding availability will increase the risk of radioactive release to the environment and possible adverse effects on site personnel and to members of the public.

REQUIRED TECHNICAL DEVELOPMENT
None

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8410 ADS SUF: 0 SUBACTIVITY: DA

SUBACTIVITY TITLE: CsCI LEGACY SAFETY PROGRAM

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: N VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: NONE TPC: 0 TEC: 0

DESCRIPTION: RICHLAND SCIENCE AND TECHNOLOGY RES

DECREMENT CASE (\$ IN THOUSANDS)

	B&R	FY1996 TOTAL
OE EX3120020		0
TOTAL		0
DIRECT FTE		0

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	RL	BUD	LEGAL	ESH	TOTAL				
OE EX3120020	0	0		221	221	0	0	0	0
TOTAL	0	0	0	221	221	0	0	0	0
DIRECT FTE	0	0	0	1	1	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	RL	BUD	LEGAL	ESH	TOTAL				
OE EX3120020	0	0		221	221	0	0	0	0
TOTAL	0	0	0	221	221	0	0	0	0
DIRECT FTE	0	0	0	1	1	0	0	0	0

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

The objective of this project is to provide supplemental funding for activities funded through ADS 8400-00-SA. The activity is to assure safe storage of Cs-137 in the Hanford 300 Area prior to permanent storage or disposal and to prepare the CsCl for return to storage at WESF or for other beneficial use. This activity provides dispositioning of capsules, pellets, and powder that were generated by several DOE programs dealing with CsCl. Currently over 1,700,000, curies of Cs-137 in a form unacceptable to return to WESF pool is in the 327 building pool.

This inventory and the program generating the legacy is detailed as follows:

11 Swollen WESF capsules (RSI Irradiators)
1 WESF capsule, which is singly encapsulated (RSI Irradiators) 12 WESF Capsules (324 Bldg. D-Cell Commercial SF Program)
Approx. 5.5 kg of CsCl from two opened WESF capsules (Dest. Exam Program)
Approx. 1.6 kg CsCl powder in T-4 cans from ORNL (Encapsulation Program) 48 gm Reject Powder (Encapsulation Program)
10 singly encapsulated Nordion C-1000 capsules(Encapsulation Program) . 22 Nordion C-161 pellets
3 gm Nordion C-1000 pellets .

The technical scope will include evaluating and selecting an option for dispositioning of this material, conducted in conjunction with WHC and building upon the option study already conducted by WHC. The 12 WESF capsules in 324 Building D-Cell will be decontaminated and moved to the 327 pool, returned to WESF, or supplied to other vendors for beneficial use. All defected capsules, powder, and pellets will be repackaged in a for suitable for temporary storage in 327, permanent storage at WESF, or final disposal. The hot cells in 324 Building will be cleaned and wastes will be disposed.

In addition, removal and disposition of the process equipment within the cells will be completed.

RELATED ACTIVITIES NARRATIVE:

The funding provided by this ADS supplements that provided by ADS 8400-00-SA in FY96. The activities of this ADS are closely related to those of WHC ADS No. 3032 for the Hanford WESF program and ADS 4195 for the Cesium Return Program. Storage of intact capsules at WESF is covered under WHC ADS No. 3032. Receipt of packaged CsCl from the 300 Area, preparation for transfer to B-Plant, and ultimate storage in the WESF pool is covered in the WHC ADS 4195.

KEY ASSUMPTIONS:

No permanent storage of 137Cs will be permitted in the 300 area. 300 area facilities are inadequate for long term storage of 137CsCl. This material

must be repackaged as required and transferred to WESF, the engineered storage facility for this material, as soon as possible.

WESF storage requires a double encapsulated source in which the inner capsule can be heard moving when shaken.

ACTIVITY BY PRIORITY:

All of the activities of the proposed program are Priority 1. Cesium 137 is a highly radioactive material with high energy gamma emission and unencapsulated CsCl salt is readily dispersible. Although most of the cesium is doubly encapsulated they are not stored in the facility designed for them. Of even greater concern is the approximately 700,000 Ci of cesium chloride stored in containers in the hot cells or in bulged WESF capsules in the 327 Building pool. This material must be placed in appropriate containers for temporary storage in the pool and later returned to the WESF pool or otherwise disposed of to prevent the potential for contamination of the facility and the subsequent increased exposure to the staff working in and around the hot cells.

This work is required to assure conformance with Federal and State Statutes. Statutes applicable to this program are as follows:

40 CFR 61, Subparts H, National Emission Standards for Emissions of Radio nuclides Other Than Radon from Department of Energy Facilities. The following paragraphs apply:

- 61.91 Definitions
- 61.92 Standard
- 61.93 Emission monitoring and test procedures
- 61.94 Compliance and reporting
- 61.95 Record keeping requirements
- 61.96 Applications to construct or modify
- 61.97 Exceptions from the reporting & testing requirements

Outlines the standards and reporting and record keeping requirements for radiological emissions from DOE facilities. If loose CsCl powder is not contained, the likelihood of an accidental release of radio nuclides to the environment is increased.

WAC 246-247 - Radiation Protection-Air Emissions. The following paragraphs apply:

- WAC-246-247-001 Purpose
- WAC-246-247-010 Applicability
- WAC-246-247-020 Exemptions
- WAC-246-247-030 Definitions
- WAC-246-247-040 Standards
- WAC-246-247-050 Registration
- WAC-246-247-060 Airborne Emission Permits
- WAC-246-247-070 New and Modified Sources
- WAC-246-247-080 Monitoring and Reporting
- WAC-246-247-090 Special Reports
- WAC-247-100 Regulatory Actions

Washington State regulations governing air release of radio nuclides which could be exceeded without proper maintenance of the CsCl in the 324 Building.

Containment of loose CsCl powder and dispositioning of the radioactive pellets and capsules is necessary to ensure safety. Failure to do so could result in environmental release and exposure to individuals.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

None. This work was initiated in FY94.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

CURRENT YEAR (FY 1994) TASK NARRATIVE:

Prepare a project management plan.

Perform task planning, scheduling, and reporting.

Store all cesium chloride powder and pellets in release resistant containers in a shielded box in the SMF cells in 324 Building.

Complete procedures for decontaminating, gamma scanning, and transfer of 12 WESF capsules in D-Cell to 327 Building.

Complete an evaluation of final disposition options for the material. Specific emphasis will be given to determining the best method to deal with the eleven (11) swollen capsules stored at PNL.

Select packaging concept for swollen/single encapsulated capsules.

Complete decontamination and nondestructive examination of twelve (12) WESF capsules stored in the 324 Building D-Cell. Package and transport these capsules to the 327 building water basin. These capsules need to be moved so as to provide space in support of the B-Cell Restoration Program.

Storage containers (canisters) will be fabricated for each capsule like the ones being used to store the capsule in the 327 Building water basin. An additional storage rack will be needed for the water basin to store capsules. Several shipments will be required to transport them from the 324 Building to 327 Building for storage. Some of these capsules are considered for use by other vendors for irradiation sources. An evaluation as to the suitability of using these capsules will be completed, appropriate.

Initiate evaluation of shipping cask options and availability for transport of CsCl to WESF.

Complete waste disposal plan for wastes from 137Cs decontamination of 324 hot cells. Begin preparation of procedures for waste disposal.

Provide support to the litigation on WESF capsule failure at the RSI Decatur, Georgia facility and the IOTECH irradiator will be supplied as required.

Support level of effort tasks such as radiation safety, maintenance, and laundry which are necessary for performance of tasks within this Project.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Review and revise project management plan as necessary.

Perform task planning, scheduling, and reporting.

Based on the engineering study performed in FY94, select suitable packaging for temporary storage of CsCl powder and pellets at PNL.

Perform engineering and supporting analyses to qualify repackaging/overpack/release resistant containers for over-road transport to WESF. The overpack for the release resistant container/reencapsulated CsCl will be designed, analyzed and fabricated to meet interface and transport requirements of the transport cask to be used for material return to WESF.

Develop plans, design and specifications, and procedures for processing powder, pellets, and swollen/singly encapsulated capsules for transfer to WESF or other beneficial use. If the swollen capsules can not be returned the same way as the non-swollen ones, they may have to be processed to remove the CsCl salt for repackaging or placed in suitable overpacks or additional outer containment for temporary or permanent storage.

Fabricate packaging and overpack components for CsCl powder and pellets and swollen/singly encapsulated capsules.

Initiate examination, processing, and packaging of CsCl powder and pellets.

Initiate examination and repackaging of swollen/single encapsulated capsules.

Begin transfer of packaged powder, pellets and cut sections to the 327 pool for interim storage as necessary.

Evaluate shipping cask options and availability for transport of CsCl to WESF. Contingent upon cask availability and WHC ability to receive, acceptable material will be transferred to WHC for permanent storage in the WESF facility. Suitably contained CsCl must be moved from the 327 Building to the 324 Building where it can be transloaded into casks for return to WESF.

Initiate remote decontamination of the compartments in the SMF starting with the least contaminated compartment.

Design and fabricate transfer containers to package contaminated equipment for movement from the SMF south cell to the Radiochemical Engineering Cells (REC) for disposal.

Support for litigation will continue to be supplied as needed.

Continue to support level of effort tasks such as radiation safety, maintenance, and laundry which are necessary for performance of tasks within this Project.

Capital equipment consisting of fixturing for positioning and rotation of capsules for closure welding must be procured in FY95. The estimated cost of this equipment is \$60,000.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Review and revise project management plan as necessary.

Perform task planning, scheduling, and reporting.

Complete processing and repackaging of swollen/singly encapsulated capsules for interim storage in the 327 pool or transfer to WESF. Complete transfer accordingly.

Complete processing and encapsulation of CsCl powder, pellets, and cut sections for interim storage in the 327 pool or transfer to WESF. Complete transfer accordingly.

Remove contaminated equipment used for the CsCl Encapsulation and Destructive Examination Program from the compartments and package in transfer containers within the SMF south cell. Transfer containers will then be moved to the REC B Cell for preparation for disposal.

Prepare equipment for disposal using the grouted container method developed for disposal of contaminated equipment from 324 Building B-Cell. Several grout containers may be acquired depending on the quantity of CsCl remaining on equipment.

Remotely decontaminate SMF South Cell compartments using the master-slave manipulators. Remote decontamination will be performed to a level such that manned entry can be accomplished for final decontamination.

Complete manned entry decontamination of SMF South Cell compartments. Several entries will be required to decontaminate compartments to the level they were prior to the CsCl Encapsulation and Destructive Examination Program being performed in them. The compartments and cell zone one HEPA filters will be changed and tested as required. The compartments and cell will then be restored to a point such that they can support other missions.

Transfer contaminated equipment and waste generated during cleanup to the Hanford Burial Grounds disposal site.

Support for litigation will continue to be supplied as needed.

Continue to support level of effort tasks such as radiation safety, maintenance, and laundry which are necessary for performance of tasks within this Project.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
--------------	-------	----------	--------

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

Activities during this period will be a continuation of tasks begun in FY 94, FY 95 and FY 96. It is anticipated that all cesium chloride legacy will be stored in suitable containers in 327 Building in FY95 and FY96. If WHC can support receipt of capsules by this time, capsules will be shipped to WESF. Waste disposal plans and procedures for CsCl capsule storage canisters and racks from the 327 facility will be prepared. Racks and canisters will be disposed of after shipment of CsCl to WESF. It is expected that the litigation will be ongoing during this period and a limited amount of support will be required.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

40 CFR 61, Subparts H, National Emission Standards for Emissions of Radio nuclides Other Than Radon from Department of Energy Facilities. The following paragraphs apply:

- 61.91 Definitions
- 61.92 Standard
- 61.93 Emission monitoring and test procedures
- 61.94 Compliance and reporting
- 61.95 Record keeping requirements
- 61.96 Applications to construct or modify
- 61.97 Exceptions from the reporting & testing requirements

Outlines the standards and reporting and record keeping requirements for radiological emissions from DOE facilities. If loose CsCl powder is not contained, the likelihood of an accidental release of radio nuclides to the environment is increased.

WAC 246-247 - Radiation Protection-Air Emissions. The following paragraphs apply:

- WAC-246-247-001 Purpose
- WAC-246-247-010 Applicability
- WAC-246-247-020 Exemptions
- WAC-246-247-030 Definitions
- WAC-246-247-040 Standards
- WAC-246-247-050 Registration
- WAC-246-247-060 Airborne Emission Permits
- WAC-246-247-070 New and Modified Sources
- WAC-246-247-080 Monitoring and Reporting
- WAC-246-247-090 Special Reports
- WAC-247-100 Regulatory Actions

Washington State regulations governing air release of radio nuclides which could be exceeded without proper maintenance of the CsCl in the 324 Building.

Containment of loose CsCl powder and dispositioning of the radioactive pellets and capsules is necessary to ensure safety. Failure to do so could result in environmental release and exposure to individuals.

Valuable hot cell space and building resources that are required for clean up of Hanford wasted are being expended unnecessarily. Due to the high radiation level emitted from CsCl, other work in these cells is not plausible.

REGULATORY KEY ISSUES:

None.

COMP/PROG BENEFITS AT PLANNING LEVEL:
Planning and Target Levels are the same.

CONCERNS AT PLANNING LEVEL:
None.

REQUIRED TECHNICAL DEVELOPMENT:
None.

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 8410 ADS SUF: 2 SUBACTIVITY: WB

SUBACTIVITY TITLE: 329 BUILDING COMPLIANCE (PNL)

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: N VERSION DATE: 5/12/93

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: 91-E-32200 TPC: 9400 TEC: 9100

DESCRIPTION: RICHLAND SCIENCE & TECH RESEARCH-NF

DECREMENT CASE (\$ IN THOUSANDS)

	FY1996 TOTAL
B&R	
LI 39EX31301	0
TOTAL	0
DIRECT FTE	0

TARGET CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL			
B&R									
LI 39EX31301	1800		0		0	0	0	0	0
TOTAL	1800		0	0	0	0	0	0	0
DIRECT FTE	0		0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
		RL	BUD	LEGAL	ESH	TOTAL			
B&R									
LI 39EX31301	1800		0		0	0	0	0	0
TOTAL	1800		0	0	0	0	0	0	0
DIRECT FTE	0		0	0	0	0	0	0	0

SCOPE INFORMATION
-----**TECHNICAL SCOPE NARRATIVE:**

The purpose of this project is to ensure continuity of operations in a vital laboratory facility that supports DOE missions in environmental restoration. This project is authorized in the FY91 budget to renovate major building systems in an aged but strategically important laboratory to improve ventilation, air filtration, and water piping to control radionuclides and ensure safe liquid effluents. These renovations are necessary to comply with the Clean Air Act, Clean Water Act, RCRA, and other requirements.

The project includes the following modifications to the 329 Building: upgrade of the fire protection systems to meet NFPA 13, replacement of a portion of the building electrical system to meet NFPA 70, National Electrical Code; upgrade HVAC system to meet requirements of 40 CFR 61, National Standard for Hazardous Air Pollutants and to comply with the Best Available Radionuclide Control Technology (BARCT) requirement; the State of Washington Administrative Code (WAC) Chapter 402-80, Monitoring and Enforcement of Air Quality and Emission Standards for Radionuclides; establish a laboratory and corridor fire separation to comply with NFPA 101, with its mandatory requirements of DOE 6430.1; provide access for the physically handicapped to comply with 41 CFR 101.19.6, Uniform Federal Accessibility Standard; modify laboratories to relieve crowding and reduce safety risks, replacement of corroded service piping; replacement of deteriorated waste piping systems to comply with DOE 5400.1, General Environmental Protection Program requirement, 40 CFR 116, Federal Water Pollution Control Act, and 40 CFR 261-265, Resource Conservation Recovery Act (RCRA) which requires that hazardous materials cannot be released in a liquid effluent. Extensive pipe corrosion hold the potential for containing radioactive material constituents.

RELATED ACTIVITIES NARRATIVE:

Significant analytical chemistry associated with the Tri-Party Agreement milestone M-10 and the environmental restoration program related to RCRA and CERCLA analysis is performed in the facility. The existing laboratory space is in desperate need of upgrading to meet current laboratory standards and to provide adequate laboratory space for these vital programs. The laboratories in the 329 Building are those which house part of the Chemical Measurement section, the only Hanford laboratory staff qualified to meet EPA Contract Laboratory Program (CLP) environmental measurements, which is an important part of the Tri-Party Agreement. As well, the 329 Building houses critical chemical laboratories and staff associated with method development research for DOE's waste management effort.

KEY ASSUMPTIONS:

The schedule, scope and cost of this activity are based upon the following assumptions: Phased construction activities can proceed as planned; the quantity of hazardous and mixed waste materials generated during demolition

is less than or equal to that which is estimated; regulations do not significantly change; and the methods and procedures that are planned for disposal of the hazardous and low level waste construction debris do not change and the cost of disposal is less than or equal to that estimated. At the time, this project was validated in FY89 for funding, the cost was estimated to be \$7.3 million. In the execution of the work several factors have contributed to the cost increases (and decreases) which have caused a net increase to the present \$9.1 million (current TEC, but DOE-HQ only funding \$9,046,980). They are summarized in order of cost impact as follows:

- Additional fume hoods needed beyond that shown in the CDR to meet today's safety requirements for laboratory work.
- Increased engineering costs attributed to new safety, environmental, and QA requirements, higher liquidation rates for the onsite AE, and additional engineering needed for the change room modifications, installation of additional fume hoods, and for planning/designing the modifications to minimize the impact and disruptions to ongoing activities in that building.
- Increased demolition costs to comply with DOE 6430.1A requirements regarding abatement of asbestos and hazardous low level wastes.
- The cost to dispose of low-level waste has increased significantly since the CDR was completed, and far exceeded the total contingency allowance for the project in the CDR estimate. The estimated cost would have been much greater, except a detailed survey allowed the estimated volume of potentially contaminated building demolition waste material to be reduced from 15,000 cf to 3,655 cf. In addition, to reduce waste volumes a compactor has been used by CF.
- The Conceptual Design did not provide for modifications of the change room, but new DOE 6430.1A requirements implemented since the CFR requires an extensive modification to change room area.
- The cost of escorts was eliminated due to the change in security requirements in the 300 Area.

The additional funds to complete the project is that amount received in FY94.

ACTIVITY BY PRIORITY:

These activities are Priority 1. This project provides fume hood workspace to minimize worker exposure to hazardous and dangerous materials, and prevents the spread of contamination through ventilation control.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

Definitive design was completed in May 1993, six months later than anticipated. This has impacted the completion date for the overall project.

Phase I demolition commenced on schedule in October 1992, and was substantially completed in the last quarter of FY93. The work was slowed so that the restrooms/changerooms could remain in operation as long as possible for the building occupants. A fixed price construction contractor initiated the Phase I construction in August 1993. The duration of the two construction phases remains unchanged.

SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8410-02-0015	COMPLETE 329 BUILDING PHASE II DEMOLITION & START CONSTRUCTION	8/31/94	8/31/94

CURRENT YEAR (FY 1994) TASK NARRATIVE:

After the laboratory space in the first phase (B section) is completed (6/94), staff and equipment will be relocated from A section to B section (8/94) and work will commence on demolition and construction in the second phase of the project. The Phase I and II construction work will be about 85% complete by the end of the FY.

Construction activity includes the following work.

- Provide supervision and technical direction to the onsite and offsite construction contractors. Develop detailed construction schedules consistent with project requirements. Assure industrial and nuclear safety at the construction site. Update project documents, control media, reports, schedules, and cost summaries as new information becomes available. Assure submittal review is appropriate.
- Provide engineering review and inspection management and coordination to ensure quality end product. Review submittals as required by construction and procurement specifications. Prepare weekly reports documenting the inspections and issues. Prepare, review, and disposition Engineering Change Notices (ECNs) documenting contractor deviation from the design, if required. Provide Cost Estimating support for ECNs, if any.
- Develop and management procurement plans and schedule consistent with project schedule requirements. Initiate documentation to procure long lead and engineering equipment. Provide liaison between A-E, program/project coordinations, and vendors during procurement. Coordinate participation of quality assurance, program/project coordinators, and other cognizant personnel during procurement and in-factory acceptance testing activities.
- Issue excavation and/or drilling and/or tie-in permits and welding and/or cutting permits to the onsite construction contractor. Approve radiation work procedures, if required, initiated by the onsite construction contractor. Review vendor submittals (shop drawings, catalogue cuts, calculations, certifications, warranties, etc.).
- Prepare and maintain a log of outstanding requirements as the construction progresses. Prepare a project 95% punchlist as each phase of construction nears completion. Perform a Quality Assurance audit of files at the completion of the project.
- Conduct a final inspection, testing, and acceptance of completed facilities for operation. Conduct a support project startup readiness review as required. Supervise accurate completion of as-built drawings. Prepare the project close-out documents, and obtain the require approvals. Arrange for disposition and/or storage of project materials.

The first phase of demolition and construction is in the Section B of the building. People and equipment from this area have been moved out of B section and limited to the labs in A and C sections in the interim. Construction of the first phase commenced in August 1993 and is scheduled to be complete in the third quarter of FY94.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
8410-02-0020	COMPLETE 329 BUILDING RENOVATION PROJECT	6/30/95	6/30/95

BUDGET YEAR (FY 1995) TASK NARRATIVE:

Activities in FY95 are conducted with funds carried from FY94. Early in the third quarter of FY95, the Phase II construction will be completed and fully operational. Staff and equipment will complete the final move into the Phase II laboratories. The project closeout will be completed late in the third quarter.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE:

No activity; the building is operational.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

No activity; the building is operational.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

DOE Order 6430.1A, pages 1-8, 1-9, 15-6, 16-1; WAC 402-80 2.1; CAA (40 CFR 61.92; Federal Water Pollution Act (40 CFR 116); RCRA (40 CFR 262.10(e)); 5480.11 3(a); NFPA 101 5-1.3 and NFPA 101 31-1.8; NFPA 45 6-2; NFPA 13 1-2; RLIP 5480.10 Part D, Attachment D-1; DOE 6430.1A pages 1-8, 9, 55, 15-6, and 16-1.

REGULATORY KEY ISSUES:

NONE

COMP/PROG BENEFITS AT PLANNING LEVEL:

No activities are planned above the target level.

CONCERNS AT PLANNING LEVEL:

NONE -- all activities are funded at the planning level.

REQUIRED TECHNICAL DEVELOPMENT:

None.

**THIS PAGE INTENTIONALLY
LEFT BLANK**

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 9996 ADS SUF: 0 SUBACTIVITY: AA

SUBACTIVITY TITLE: COST AND MANAGEMENT EFFICIENCY INITIATIVES PROGRAM

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: D VERSION DATE:

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: N/A TPC: TEC:

DESCRIPTION: PROGRAM MANAGEMENT

DECREMENT CASE (\$ IN THOUSANDS)

B&R	FY1996 TOTAL
TOTAL	0
DIRECT FTE	0

TARGET CASE (\$ IN THOUSANDS)

B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
OE EW3110000	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3110000	0	0			0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0
DIRECT FTE	0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
OE EW3110000	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3110000	0	0			1500	1565	1632	1702	1775
TOTAL	0	0	0	0	1500	1565	1632	1702	1775
DIRECT FTE	0	0	0	0	10	10	10	10	10

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

RELATED ACTIVITIES NARRATIVE:

KEY ASSUMPTIONS:

ACTIVITY BY PRIORITY:

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

SCHEDULE INFORMATION

FY 1994 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

CURRENT YEAR (FY 1994) TASK NARRATIVE:

FY 1995 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

BUDGET YEAR (FY 1995) TASK NARRATIVE:

FY 1996 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

PLANNING YEAR (FY 1996) TASK NARRATIVE:

FY 1997-FY 2000 MILESTONES:
MILESTONE ID TITLE

PLANNING

TARGET

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

DRIVERS AND IMPACTS INFORMATION

REGULATORY DRIVERS:

REGULATORY KEY ISSUES:

COMP/PROG BENEFITS AT PLANNING LEVEL:

CONCERNS AT PLANNING LEVEL:

REQUIRED TECHNICAL DEVELOPMENT:

INTRODUCTION AND CROSS-REFERENCE INFORMATION

OPERATIONS OFFICE: RL ADS ID: 9998 ADS SUF: 0 SUBACTIVITY: AA

SUBACTIVITY TITLE: TRANSPORTATION AND PACKAGING

INSTALLATION: HANFORD

CATEGORY: WM DEFENSE/NON-DEFENSE: VERSION DATE:

PROGRAM: EM PRINT DATE: 8/18/94

COST INFORMATION:

LINE ITEM NO: TPC: TEC:

DESCRIPTION: TRANSPORTATION OF THINGS

DECREMENT CASE (\$ IN THOUSANDS)

B&R	FY1996 TOTAL
TOTAL	0
DIRECT FTE	0

TARGET CASE (\$ IN THOUSANDS)

B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	RL	BUD	LEGAL	ESH	TOTAL				
TOTAL	0	0	0	0	0	0	0	0	0
DIRECT FTE	0	0	0	0	0	0	0	0	0

PLANNING CASE (\$ IN THOUSANDS)

B&R	FY1994	FY1995	FY1996	FY1996	FY1996	FY1997	FY1998	FY1999	FY2000
	RL	BUD	LEGAL	ESH	TOTAL				
OE EW3160201	0	0	1019	1384	2403	2475	2550	2626	2705
TOTAL	0	0	1019	1384	2403	2475	2550	2626	2705
DIRECT FTE	0	0	9	12	21	21	21	21	21

SCOPE INFORMATION

TECHNICAL SCOPE NARRATIVE:

This activity insures that offsite packaging and shipping operations comply with 49 CFR 171-180 and 10 CFR 11, that onsite packaging and shipping operations comply with DOE Orders 5480.3, 1540.1, 1540.2, and 5700.6C, and that advance planning is adequate to provide the containers (packagings) necessary to meet Tri-Party Agreement milestones and other mission essential commitments. It consists of three elements: transportation program management, packaging safety, and packaging development. This activity data sheet (ADS) covers only that portion of the Hanford Site transportation and packaging support that cuts across all programs. Funding for approximately 80% of this work comes in the form of 50 different cost account task packages spread across 24 different ADSs in the following proportions: 73% EM-30, 9% EM-40, 18% EM-60. Because of this fragmentation, the remaining 20% of this work is currently not performed at all. The latter work consists of needed program planning or cross-cutting activities that don't relate to a specific ADS purpose.

A. TRANSPORTATION PROGRAM MANAGEMENT: The objectives of this work package are to properly implement federal transportation regulations and DOE Orders and to insure the safety and compliance of onsite and offsite shipments. This work package is comprised of six task areas: publishing and maintaining the site Transportation Safety Manual; responding to regulatory changes and special initiatives; inspecting inbound hazardous materials shipments; publishing and maintaining a Quality Assurance Program Plan; providing on-call shipment planning support; and performing program self-assessment and responding to external audits.

1. The Transportation Safety Manual provides site-wide implementation of DOE Orders 5480.3 and 1540.1, 49 CFR Department of Transportation Regulations, 40 CFR Environmental Regulations, and Washington State Administrative Code 173-303 Dangerous Waste Regulations. It provides a single point of reference for site shipping activities.

2. Regulatory changes and proposed rulemakings require response, planning for site implementation, and sometimes procedure development. Special initiatives, such as security transition or shipping campaigns, require transportation research, impact assessment, and planning.

3. Inspection of all inbound Hazardous Materials shipments assures all shipments received at the Hanford facility are in compliance with applicable DOT, EPA, IATA, and WDOE regulations before release of the carrier or movement to the site. This inspection includes proper packaging, marking, labeling, placarding and shipping documentation. Approximately 500 such shipments are received each year.

4. The Quality Assurance Program Plan (QAPP) provides an audit trail to demonstrate safety consistent with NQA-1 and the hazards associated with hazardous materials transportation and packaging activities. It too requires frequent revision as regulations change and the program manual is revised.

5. On-call traffic management direction and assistance are provided

frequently to assist many site customers in planning shipments of materials to or from the site in support of the site environmental mission.

6. Program self-assessment and external audits assure regulatory compliance and generate corrective and improvement actions.

B. **PACKAGING SAFETY:** The objectives of this work package are to properly implement federal packaging regulations and DOE Orders and to develop and maintain a dependable onsite packaging safety program. This work package is comprised of five task areas: maintaining packaging safety evaluations and certifications as required by the Department of Energy, Department of Transportation and Nuclear Regulatory Commission; defining criteria and maintaining an onsite transportation packaging safety program and engineering capability as required by the Department of Energy; performing the onsite Safety Analysis Report for Packaging (SARP) upgrade program and engineering activities necessary to bring existing packaging systems into compliance with current safety requirements; maintaining a site Hazardous Materials Packaging Directory to identify compliant transportation packagings to Hanford Site users; and providing site regulatory interpretation and packaging selection guidance.

1. Maintenance of Safety Analysis Report for Packaging files, Certificates of Compliance, Certificates of Competent Authority and Quality Assurance records is required for each certified Type B, A-fissile and LSA-fissile radioactive material packaging used. In addition, the use of Type A radioactive material packagings necessitates the maintenance of testing evaluation documentation.

2. DOE safety directives for onsite transportation of hazardous materials require that an onsite transportation packaging safety program be defined and maintained. This includes the development of policy, procedures and safety evaluation methodology consistent with DOT criteria.

3. The Safety Analysis Report for Packaging upgrade program is required to bring existing onsite packaging systems into compliance with the onsite packaging safety program. This ongoing activity also involves ensuring that safety standards are clearly met as documented in these reports. Some packaging redesign or restrictions may result in order to demonstrate compliance. This program should ramp down after five years.

4. Maintenance of a comprehensive directory of approved hazardous materials packagings efficiently provides to potential site users information on packaging capacity, availability, allowable contents, and other use restrictions.

5. On-call packaging engineering direction and assistance are provided an average of sixty times per month. Assistance includes packaging selection searches, regulatory interpretations, use restriction information, and revisions to packaging safety documentation if permitted by analysis.

C. **PACKAGING DEVELOPMENT:** The objective of this work package is to work with the various site program managers in determining future packaging needs. This is essential to avoid schedule delays for packaging development or certification, and the advance planning will save money by

slowing the integration of customers' needs. Presently, there are no funds provided for this more cost-effective long-term planning and integration of site packaging needs.

This work package is comprised of four task areas: long-range packaging needs planning; integrating site packaging needs; developing generic packagings; and performing studies as needed to determine packaging solutions.

1. There is a crucial need to develop a comprehensive long range (5-10 years) plan that will identify current and future packaging needs for all Hanford programs. The plan would include a master schedule, identifying need dates for specific packagings, functions and requirements for each need, and potential opportunities to save time and money by integrating those needs.
2. Opportunities already exist for integrating the packaging needs of several different applications in order to save development time and cost; for examples, sample shipment and high level liquid transfer. A long range packaging needs plan is expected to identify other opportunities to integrate payload requirements and specific design interface features.
3. The long range plan is expected to confirm the need for a family(ies) of generic hazardous material packagings, designed to meet the needs of a broad spectrum of Hanford facilities and programs. This task will have to address the packaging of both solid waste and liquid waste.
4. Engineering studies, structured to identify alternative hazardous materials packaging systems that will be needed to satisfy specific program needs or replace existing systems in the long-term, will be performed.

RELATED ACTIVITIES NARRATIVE:

Portions of this activity that are already being performed are funded piecemeal through 24 different ADSs via 50 task packages to various cost accounts.

KEY ASSUMPTIONS:

Hazardous materials shipping activity will continue at the present rate of approximately 8,000 shipments onsite and 1,200 shipments to and from the site per year.

Responses to regulatory changes and special initiatives will continue at the present rate of approximately 50 per year.

Safety Analysis Report for Packaging upgrades will be performed at a rate of five per year.

On-call packaging support will continue at the present rate of 60 calls per month.

Application of DOT regulations to onsite shipments will not be expanded

beyond the present unrestricted public access roadways south of the Wye Barricade.

Regulations for hazardous materials packaging and transportation will continue to evolve to reflect national and international standards and public stakeholder concerns.

ACTIVITY BY PRIORITY:

Transportation Program Management and Program Development are priority 'B1' because they involve actions to insure compliance with federal regulations (49 CFR 171-180) written to protect the public and the environment during hazardous materials transportation activities. These two work packages also involve tasks which support on-time completion of Tri-Party Agreement milestones.

Packaging Safety is priority 'A2' because it involves developing and revising Safety Analysis Reports for hazardous materials packaging, proper selection of hazardous materials packages, proper applications of packaging safety restrictions, and definition of operational safety envelopes that protect site workers, the environment, and the public.

CAPITAL EQUIPMENT TITLES WITH DOLLARS OVER 25K

TASKS COMPLETED TO DATE:

In April 1993 the current Hazardous Materials Packaging and Shipping Manual, WHC-CM-2-14, was revised to include current site shipping practices and organizational changes.

Approximately 500 inbound shipments of hazardous materials arrived at the Hanford Site during FY 93. A similar volume was received in FY 92. Approximately 2,400 onsite regulatory compliance shipment inspections (30% of the total shipments) were performed during FY 93.

A library of packaging certification documentation was initiated.

A Safety Analysis Report for Packaging upgrade plan was issued in FY 93 and revised in FY 94.

A tracking system for on-call packaging support was established, along with a dedicated response team of packaging engineers.

A revision to the packaging directory was issued.

A symposium was conducted in FY 93 to identify all potential users of aboveground transportation of high level liquids in bulk quantity. A workshop was held in FY 94 to integrate these needs and determine specific schedules and packaging design requirements.

 SCHEDULE INFORMATION

FY 1994 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

CURRENT YEAR (FY 1994) TASK NARRATIVE:

No direct funding in FY 1994.

FY 1995 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

BUDGET YEAR (FY 1995) TASK NARRATIVE:

No direct funding identified for FY 1995.

FY 1996 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

PLANNING YEAR (FY 1996) TASK NARRATIVE:

Since this is a new ADS, the planning and target cases are assumed to be the same. The planning case funding provides for planning and initiation of a comprehensive site Transportation Safety Manual, maintenance of the existing manual to reflect regulatory and other changes, continued inbound shipment inspection and on-call support, a revised Quality Assurance Program Plan, five Safety Analysis Reports for Packaging upgrades, a long range site packaging needs plan, and continuation of the other cross-cutting transportation and packaging services described earlier.

FY 1997-FY 2000 MILESTONES:

MILESTONE ID	TITLE	PLANNING	TARGET
-----	-----	-----	-----

OUTYEAR (FY 1997-2000) TASK NARRATIVE:

In the planning case, the Transportation Safety Manual will be completed and issued, including comprehensive packaging safety criteria, transportation related training requirements, and traffic management direction. Packaging systems integrated to address multiple site needs will be designed and procured. Generic packagings will be developed to meet a wide range of site applications. All existing onsite Safety Analysis Reports for Packaging will be upgraded and this task will be trimmed back to a maintenance level of reviewing each Safety Analysis Report for Packaging every five years. Traffic management activities will

be fully automated and site shipping forms will be computerized to improve accuracy and efficiency. The Quality Assurance Program Plan will be updated and reissued. Other tasks and support to site customers will continue as described earlier.

DRIVERS AND IMPACTS INFORMATION
-----**REGULATORY DRIVERS:**

49 CFR 107-180 prescribe criteria for the transportation and receipt of hazardous materials. Specific requirements are contained in 49 CFR 171.2(a),(b),(c) and 49 CFR 173.415(a) pertaining to hazardous materials packaging, marking, labeling, and performance criteria. Additional requirements are contained in 49 CFR 171.11, 171.12, and 176.11.

DOE Orders 1540.1,6(f)(1) and 5480.3.7.a, 7.c(3), and 9.b require the contractor to establish and maintain a formal compliance program for transportation and packaging activities, including a quality assurance program.

DOE Order 1540.2 contains hazardous materials packaging program requirements throughout, including safety documentation (3.a and 9.d(9-11)), quality assurance (3.a(5) and 3.b(3)), and many others.

DOE Orders 1000.3C and 5700.6C, 9(a)1 prescribe requirements for self-assessment and quality assurance programs.

DOE-RL Order 5480.1 RLID 5480.3.6, and DOE Order 5480.X (Draft) contain requirements for packaging design documentation, packaging safety analysis, packaging and transportation program control, and training.

Non-performance of tasks mandated by 49 CFR can result in DOT fines and citations. Other activities are necessary in order to maintain a viable transportation program on the site and satisfy contractual obligations to follow DOE Orders.

Not maintaining current certification files could result in fines and citations by DOT. Other onsite packaging tasks must be performed to insure consistent safety criteria and to demonstrate safety accountability to internal and external stakeholders. The health and safety of site workers and offsite residents could actually be compromised in a transportation accident, without the clear safety criteria and packaging assistance provided through the tasks above.

The non-performance of the Packaging Development tasks will almost certainly result in higher costs, progress delays, and criticism from DOE and stakeholders. These tasks are necessary to be cost and schedule effective in carrying out the site mission. They would contribute to successful completion of Tri-Party Agreement milestones. These tasks constitute good business strategy that will positively impact many specific programs.

REGULATORY KEY ISSUES:

The development and clear implementation of the onsite packaging safety program has been ongoing for several years. Final approval of DOE and RL directives affecting onsite transportation may change program direction significantly. Specifically, if onsite transportation is changed to require adherence to offsite (Department of Transportation) transportation

regulations, site restoration activities and tank waste system safety initiatives could be stopped, greatly affecting site safety. This change would impose regulations not intended for DOE site application and would involve a regulating authority that has historically had little interest in DOE site issues. The Department of Transportation is essentially chartered to consider the transportation of hazardous materials in commerce only; This relationship was the subject of past Tiger Team and Department of Transportation reviews at Hanford.

COMP/PROG BENEFITS AT PLANNING LEVEL:

This activity directly supports the everyday safe and efficient packaging and transportation of hazardous materials in compliance with the applicable codes and requirements of the DOE, DOT, NRC, EPA, and local and state governments, thus avoiding fines and citations. The Packaging Safety tasks, in particular, insure safe selection and use of shipping containers, thus protecting site workers and nearby residents. These tasks also demonstrate clear safety accountability to internal and external stakeholders. Packaging Development tasks represent common sense business management. They will prevent schedule delays and preclude wasted or duplicative effort in obtaining or developing needed shipping containers for many different programs. The result is lower cost and faster progress.

CONCERNS AT PLANNING LEVEL:

Should this ADS not be funded, transportation and packaging support will continue to be provided inefficiently through over 100 different cost account task packages and work orders, some as small as \$1,000. Needed program management activities will not be funded at all, resulting in unnecessary cost and inefficiency to many programs across the site.

REQUIRED TECHNICAL DEVELOPMENT:

Although no currently identified technical developments are required to perform the scope of this activity, it is pertinent to note that WHC Transportation and Packaging provides extensive support for EM-56 funded transportation tasks. The leverage provided by this involvement greatly benefits site transportation operations.