Liquid Effluents Program Fiscal Year 1997 Multi-Year Work Plan

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WBS 1.2.2

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ACRONYM LIST

<u>Acronym</u>	<u>Definition</u>
ACES	Access Control and Entry System
ADS	Activity Data Sheet
AKART	All Known, Available, and Reasonable Treatment
ALARA	as low as reasonably achievable
BAT	best available technology
BAT/AKART	Best Available Technology/All Known, Available, and Reasonable methods of prevention, control, and Treatment
BCWS	Budgeted Cost of Work Scheduled
BMP	Best Management Practice
D&D	Decontamination and decommissioning
DMR	Discharge Monitoring Report
DOE	U.S. Department of Energy
DOT	U.S. Department of Transportation
ECO	Environmental Compliance Order
Ecology	State of Washington Department of Ecology
EPA	U.S. Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act of 1986
ERDF	Environmental Restoration Disposal Facility
ESQ	Emergency Safety and Quality Service
ETF	Effluent Treatment Facility
FY	fiscal year
G&A/SWS	general and administrative/site wide support
HPT	health physics technician
HQ	Headquarters
HSRCM	Hanford Site Radiological Control Manual

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<u>Acronym</u>	<u>Definition</u>
RD&D	Research, Development, and Demonstration
RDS	Risk Data Sheets
RL	U.S. Department of Energy, Richland Operations Office
RLWS	Radioactive Liquid Waste System
RPS	Retention Process Sewer
SAP	Sample Analysis Plan
SEPA	State (of Washington) Environmental Policy Act
SMECO	Safe Minimum Environmental Compliant Operations
SWD	State Waste Discharge
TAPS	Toxic Air Pollutants (Permit)
TEDF	Treated Effluent Disposal Facility
Tri-Party Agreement also TPA	Hanford Federal Facility Agreement and Consent Order
TSO	treatment, storage, or disposal
TWRS	Tank Waste Remediation System
WAC	Washington Administrative Code
WBS	Work Breakdown Structure
WDOE	Washington State Department of Ecology also referred to as "Ecology"
WESF	Waste Encapsulation and Storage Facility
WSCF	Waste Sampling and Characterization Facility

<u>Acronym</u>	<u>Definition</u>
HSTB	Hanford Site Technical Baseline
ICD	Interface Control Document
ICF KH	ICF Kaiser Hanford Company
JCS	job control system
LEF	Liquid Effluent Facilities
LEMIS	Liquid Effluent Monitoring Information System
LERF	Liquid Effluent Retention Facility
LLMW	low-level mixed waste
LLW	low-level waste
MCS	Motor Control System
MIP	Maintenance Implementation Plan
MYWP	Multi-Year Work Plan
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
OAC	Official Acceptance of Construction
OSHA	Occupational Safety and Health Administration
OTP	Operability Test Procedure
PBFC	Performance Based Fee Criteria
PEB	Performance Evaluation Board
PFP	Plutonium Finishing Plant
PHMC	Project Hanford Management Contract
PM	Preventive Maintenance
PNNL	Pacific Northwest National Laboratory
PTS	Progress Tracking System
PUREX	Plutonium Uranium Reduction Extraction (Facility)
QA	Quality Assurance
RAEP	Radioactive Air Emissions Program
RCRA	Resource Conservation and Recovery Act

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1.0 TECHNICAL BASELINE

The technical baseline describes the work to be performed and the technical standards that govern the work. The technical baseline for cleaning up the Hanford Site is contained in the Hanford Site Technical Baseline (HSTB) database. The site cleanup is very large and complex, and the HSTB is still being developed. A systems engineering process is being used to define the technical baseline, as described in *Site Systems Engineering Systems Engineering Management Plan* (Grygiel 1996). A printout of the contents of the HSTB for the Liquid Effluents Program is provided in Appendix A.

1.1 PROGRAM MISSION

The Hanford Site cleanup mission is to:

Protect the health and safety of the public, workers, and the environment; control hazardous materials; and utilize land for other missions.

The cleanup mission will be complete when health and safety hazards have been reduced to, or maintained at, acceptable levels; hazards have been converted to safe, stable forms; existing materials, facilities, and waste inventories have been dispositioned or maintained; land has been restored to enable future uses; and only post-closure monitoring activities continue.

The *Hanford Mission Direction Document* (DOE-RL 1996) defines the scope, requirements, and interfaces for the cleanup mission. It specifies what must be accomplished when, and provides a framework for the contractors to determine how to accomplish the mission. Cleanup goals are identified for each category of waste and legacy material in each major geographic area, as applicable. These cleanup goals guide the development of interim and final endpoint targets. An interim target is a feasible, positive action that assures progress toward the final objective(s). A final endpoint target is the overall long-term desired outcome or solution to a problem. In addition, certain surveillance, maintenance, and support activities are needed to ensure the health and safety of the public and site personnel, and to protect the environment. These essential safety operations must occur even should a decision be made to discontinue all cleanup activities. Safety objectives are identified for the minimum essential safety operations.

Project Hanford is the organizational vehicle developed by the U.S. Department of Energy (DOE), Richland Operations Office (RL) for accomplishing the site cleanup work. The Project Hanford Management Contractor (PHMC) will be responsible for planning, integrating, managing, and executing the programs, projects, operations, and other activities at the Hanford Site as described in the *Project Hanford Management Contractor Request for Proposals*, DE-RP06-96RL13200. The PHMC will primarily manage the work and be responsible for planning and integration. The remaining work was divided into projects and will be performed by major subcontractors. Performance objectives and measures are identified to reward those

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To successfully accomplish its mission, the Liquid Effluents Program is organized into the following elements: (1) Program Management, (2) 200 Area Liquid Effluents Facilities (LEF) Operations, and (3) 300 Area LEF Operations. The roles and responsibilities of each of these organizations is described below. Together they enable the Liquid Effluents Program to complete its mission.

1.1.2 Program Management

This activity provides overall coordination, direction, and customer interface for the activities in the Liquid Effluents Program. Administrative support is provided for program documentation, funds management, scheduling, and reporting.

1.1.3 200 Area Liquid Effluents Facilities Operations

This activity provides safe, cost-effective and environmentally sound operation, maintenance, and engineering support for the 200 Area effluent treatment facilities. The facilities included are the following:

- Liquid Effluent Retention Facility (LERF)
- 200 Area Effluent Treatment Facility (ETF)
- 200 Area Treated Effluent Disposal Facility (TEDF)

1.1.4 300 Area Liquid Effluents Facilities Operations

This activity provides safe, cost-effective and environmentally sound operation, maintenance, and engineering support for the 300 Area effluent treatment facilities. The facilities included are the following:

- 300 Area TEDF
- 340 Waste Handling Facility/307 Retention Basins

results which positively impact progress toward cleanup. The incentives focus on cost savings and/or reduction of out-year maintenance costs, expedited completion of critical path milestones, and/or the reduction of risk. The endpoint targets and safety objectives in the *Hanford Mission Direction Document* (DOE-RL 1996) are assigned to specific elements of Project Hanford.

1.1.1 Liquid Effluents Program

The Liquid Effluents Program is an integral part of Project Hanford and cleaning up the Hanford Site. The mission of the Liquid Effluents Program is to:

Responsibly manage current and future liquid effluent streams in a safe, cost-effective, and environmentally-compliant manner. This is achieved through planning and integration; public and stakeholder interaction; definition of requirements for generators; and provision of timely storage, treatment, and disposal capability.

The Liquid Effluents Program is responsible for providing an integrated system for managing liquid effluents that uses a combination of local and central treatment. Implementation of local treatment systems will remain with the generators; central treatment capabilities will be provided by the Liquid Effluents Program.

The Liquid Effluents Program receives, treats (if needed), and disposes of liquid effluents from other projects. Waste acceptance criteria are established for liquid effluents, and compliance with discharge limits is verified. Material transferred to other programs includes solid waste from liquid effluent treatment, samples, and deactivated facilities. Radioactive liquid waste is also collected in the 300 Area and transferred to double-shell tanks in the 200 East Area. Elements of Project Hanford which interface with the Liquid Effluents Program include the following:

- Tank Waste Remediation Systems (TWRS) Project - Includes the Tank Waste Storage Project and Tank Waste Disposal Project
- Spent Nuclear Fuels Project
- Waste Management Project - Includes Solid Waste Disposal and Analytical Services
- Facility Stabilization Project - Includes Plutonium Uranium Reduction Extraction (PUREX) Plant, Plutonium Finishing Plant (PFP), and B Plant/Waste Encapsulation and Storage Facility (WESF)
- Infrastructure Project - Includes Infrastructure Operations and Maintenance
- Environmental Restoration Project - Includes Groundwater Management, Environmental Restoration Disposal Facility (ERDF), and N Area
- Technology Management Project - Includes Pacific Northwest National Laboratory (PNNL) Waste Management

1.2 GOALS AND OBJECTIVES

1.2.1 Endpoint Targets

The Liquid Effluents Program is a service organization and has no specific interim or final endpoint targets assigned to it in the *Hanford Mission Direction Document* (DOE-RL 1996). However, the Liquid Effluents Program does support numerous endpoint targets assigned to other programs. For example, the work by another program to complete an endpoint target may produce a liquid effluent which must be treated. The endpoint targets supported by the Liquid Effluents Program are listed below and sorted by geographical area.

Endpoint Targets Supported by the Liquid Effluents Program

No.	Endpoint Target
Reactors on the River	
1	Spent fuel removed by 12/31/99, K Basins cleaned sufficient to transition to D&D by 10/31/2000.
58	Drain, decontaminate, and stabilize K Basins Facility.
Central Plateau	
8	Groundwater use remains restricted for a yet to be determined period; groundwater intercepted or contained to within the proposed boundaries of the Future Site Uses Working Group (FSUWG).
27	Operate the ERDF to accept waste from remediation of CERCLA units across the Hanford Site.
29	Low-level and low-level mixed (solid) waste from on-site and off-site sources (including PNNL special case wastes) will continue to be disposed of in the 200 Area.
32	Retrieve tank wastes to the extent needed for tank closure, divide into high- and low-level fractions, and immobilize.
43	Continue to provide safe storage for Cs/Sr capsules in the WESF indefinitely. WESF decoupled and a standalone facility by 9/98.
82	Transition the PUREX facility to low-cost, stable deactivated condition and disposition its nuclear materials by 5/97.
83	Transition B Plant to low-cost, stable deactivated condition by 9/98.
84	Complete stabilization of plutonium in PFP (DNFSB 94-1 implementation) by 5/2002 (consider 9/2000).
85	Transition production areas of PFP to a low-cost, stable, deactivated condition by 9/2003 (consider 9/2001) with continued safe, stable interim storage of plutonium.
South 600 Area	
22	Transition high-cost surplus facilities to a low-cost, stable deactivated condition.
89	Transition the 324/327 Buildings to a low-cost, stable deactivated condition and disposition their nuclear materials (including radioactive tank wastes) by 9/2000.

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Objective	Measures	Expectations
WM2. Minimize the impact to the environment by ceasing unpermitted discharge to the soil column and by providing an infrastructure for treatment, storage, and disposal of liquid effluents.	WM2.1. Disposal of all liquid effluents on the Hanford Site considers the overall cost to the government of the method(s) of disposal balanced against the benefit(s) from an economic, health, safety, and environmental standpoint.	WM2.1.1. Submit for DOE approved a sitewide integrated decision-making process and procedures for disposal of liquid effluents on the Hanford Site by February 28, 1997.
	WM2.2. Compliance with DOE Orders, and with federal, state, and local requirements in the operation of the liquid effluent facilities, projects, and operations.	WM2.2.1. Collect appropriate data and propose draft modifications to DOE for existing waste water discharge permits by March 31, 1997, based on above liquid effluent disposal process.
		WM2.2.2. Submit ETF/LERF Part B permit application to RL by January 29, 1997.
		WM2.2.3. Complete WAC-216 permit application for Category 3 miscellaneous streams and submit to RL by August 30, 1997.
		WM2.2.4. Operate 200 Area TEDF, 300 Area TEDF, and ETF with no violations of waste discharge permit limits.
	WM2.3. Consolidate handling and treatment of liquid effluents in the 200 Area.	WM2.3.1. Implement a coordinated management system to operate 242-A, LERF, and ETF by September 30, 1997.
	WM2.4. Complete the 200 Area Phase II Streams (Project W-252) modifications to the 200 Area facilities.	WM2.4.1. Complete Phase II stream BAT/AKART implementation permit revision by January 30, 1997. DELETED
		WM2.4.2. Complete construction of Phase II stream BAT/AKART implementation by June 30, 1997.
	WM2.5. Implement 340 Waste Handling Facility Shutdown Plan.	WM2.5.1. Implement Waste Handling Facility Shutdown Plan at the 340 Waste Handling Facility by January 30, 1997.
	WM2.6. Complete Biennial Evaluation of Tritium Treatment Technology and provide reports as directed by TPA.	WM2.6.1. Submit tritium technology report to RL by July 31, 1997.

1.2.2 Technical Objectives

Performance objectives, measures, and expectations for the projects are identified in the *Project Hanford Management Contract*. The following definitions are used.

Performance Objective - A statement of desired results.

Performance Measure - A quantifiable accomplishment or set of accomplishments providing a yardstick by which progress toward the objective can be gauged.

Expectation - The specific deliverable(s) which have been negotiated.

Listed in the table below are the performance objectives, measures, and expectations for the Liquid Effluents Program which are essential to accomplishing the program mission.

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Central Plateau	
S4	Maintain cesium and strontium capsules in the WESF; maintain pool facilities and infrastructure.
S11	Provide long-term surveillance and monitoring of contaminated groundwater.
S24	Maintain safe storage of Special Nuclear Material in the PFP; maintain worker safety systems; maintain safeguards and security systems; maintain waste management systems.
S25	Maintain safe condition of B Plant prior to deactivation.
S26	Maintain safe condition of PUREX Plant prior to deactivation.
S42	Provide decontamination and maintenance services in support of essential safety operations at the 2706-TA building; equipment decontamination; LLW and Radioactive Mixed Waste (RMW) packaging.
S44	Conduct operations, surveillance and maintenance of the Low-Level Waste Burial Grounds (LLBG).
S54	Maintain Single-Shell Tank (SST) Farm Facilities: maintain SST farm facilities within approved safety envelope, upgrade as necessary; perform surveillance monitoring.
S55	Operate and maintain Double-Shell Tank (DST) Farm Facilities: maintain DST farm facilities within approved safety envelope, upgrade as necessary; perform surveillance monitoring; receive new liquid waste from other activities.
S57	Operate and maintain 242-A Evaporator Facility including feed and receiver tanks; evaporate dilute wastes to conserve waste storage volume.
S65	Conduct operations and maintenance of the 222-S Laboratory complex in support of essential safety operations.
S66	Conduct operations and maintenance of the WSCF complex in support of essential safety operations.
South 600 Area	
S13	Provide long-term surveillance and monitoring of contaminated groundwater.
S49	Provide surveillance, maintenance, and safe operations for the 324, 325 and 327 facilities: maintain inventory systems (including radioactive tank wastes); maintain HVAC, radiation monitoring, and building safeguard systems.
Central Core	
S15	Provide long-term surveillance and monitoring of contaminated groundwater.

1.2.3 Safety Objectives

The following are the safety objectives assigned to the Liquid Effluents Program in the *Hanford Mission Direction Document* (DOE-RL 1996) and sorted by geographical area.

Safety Objectives Assigned to the Liquid Effluents Program

No.	Safety Objective
Reactors on the River	
S64	Conduct effluent monitoring of airborne and liquid releases.
Central Plateau	
S45	Conduct safe operations and maintenance of the LERF.
S46	Conduct safe operations and maintenance of the 200 Area TEDF.
S47	Conduct safe operations and maintenance of the 200 Area ETF.
S48	Conduct effluent monitoring of airborne and liquid releases.
South 600 Area	
S50	Conduct safe operations and maintenance of the 340 Waste Handling Facility until fiscal year (FY) 1998 or until a replacement capability is in place.
S51	Conduct safe operations and maintenance of the 300 Area TEDF.
S68	Conduct effluent monitoring of airborne and liquid releases.
Central Core	
S52	Conduct effluent monitoring of airborne and liquid releases.

The Liquid Effluents Program also supports numerous safety objectives assigned to other programs. For example, the work by another program to complete a safety objective may produce a liquid effluent which must be treated. The safety objectives supported by the Liquid Effluents Program are listed below.

Safety Objectives Supported by the Liquid Effluents Program

No.	Safety Objective
Reactors on the River	
S9	Provide long-term surveillance and monitoring of contaminated groundwater.

1.3 FORECASTING DATA

1.3.1 Waste Type Data

Waste volume forecast data for the Liquid Effluents Program are provided in the following tables. The first table is a summary of all the Liquid Effluents facilities combined, followed by separate tables for each individual facility. The volumes are sorted by waste type and the amount received, generated, transferred, treated, or disposed. The following waste type definitions are provided.

Hazardous Waste - Waste that is designated hazardous by U.S. Environmental Protection Agency (EPA) regulations (40 CFR 261).

Industrial Waste - Waste water which does not contain radioactive or hazardous constituents in sufficient concentrations for the waste to be classified as low-level or mixed waste, but which must be treated before being discharged.

Low-Level Waste - Waste that contains radioactivity and is not classified as high-level waste, transuranic waste, or spent nuclear fuel or byproduct material as defined by DOE Order 5820.2A.

Mixed Waste - Waste containing both radioactive and hazardous components as defined by the Atomic Energy Act and the Resource Conservation and Recovery Act (RCRA), respectively.

Treated Effluent - Waste water which has been treated or which otherwise meets discharge limits.

1.3.2 Nuclear Materials

The Liquid Effluents Program is not responsible for any nuclear materials.

1.3.3 Facilities

Facility forecasting data for the Liquid Effluents Program are provided in the attached table. The major facilities are tracked through acquisition and operation, and plans for disposition of excess and deactivated facilities are shown. A complete listing of all Liquid Effluents Program facilities is contained in the HSTB database.

1.3.4 Infrastructure

The utility and infrastructure support required by the Liquid Effluents Program to complete its mission has been estimated. Facilities in similar geographical areas were considered together. The type of support and amount needed is shown in the following tables.

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Waste Volume Forecast Data

Facility: Liquid Effluents Facilities (All)						
Waste Type	Beginning Inventory (m ³)	Received (m ³)	Generated (m ³)	Transferred (m ³)	Treated (m ³)	Disposed (m ³)
FY 1997						
LLW (Liquid)	2,300	72,100			74,400	
LLMW (Liquid)	3,800	6,100		100	9,800	
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)		1,432,000	382,000			1,814,000
LLW (Solid)			358	358		
LLMW (Solid)	42		15	57		
Hazardous (Solid)	1		1	2		
FY 1998						
LLW (Liquid)		102,100			102,100	
LLMW (Liquid)		18,100		100	18,000	
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)		1,603,000	418,000			2,021,000
LLW (Solid)			415	415		
LLMW (Solid)			17	17		
Hazardous (Solid)			1	1		
FY 1999						
LLW (Liquid)		2,600			2,600	
LLMW (Liquid)		14,200	100	100	14,200	
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)		1,289,000	315,000			1,604,000
LLW (Solid)			201	201		
LLMW (Solid)			19	19		
Hazardous (Solid)			1	1		
FY 2000						
LLW (Liquid)		2,100			2,100	
LLMW (Liquid)		5,100	100	100	5,100	
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)		758,000	305,000			1,063,000
LLW (Solid)			201	201		
LLMW (Solid)			18	18		
Hazardous (Solid)			1	1		

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Waste Volume Forecast Data

Facility: Liquid Effluents Facilities (All)						
Waste Type	Beginning Inventory (m ³)	Received (m ³)	Generated (m ³)	Transferred (m ³)	Treated (m ³)	Disposed (m ³)
FY 2005						
LLW (Liquid)		2,000			2,000	
LLMW (Liquid)		26,600			26,600	
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)		787,000	327,000			1,114,000
LLW (Solid)			186	186		
LLMW (Solid)			46	46		
Hazardous (Solid)			1	1		
FY 2006						
LLW (Liquid)		2,000			2,000	
LLMW (Liquid)		26,400			26,400	
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)		776,000	326,000			1,102,000
LLW (Solid)			186	186		
LLMW (Solid)			46	46		
Hazardous (Solid)			1	1		
FY 2007-2034						
LLW (Liquid)		8,500			8,500	
LLMW (Liquid)		1,222,000			1,222,000	
Industrial Waste (Liquid)		5,660,000			5,660,000	
Treated Effluent (Liquid)		20,980,000	6,890,000			27,870,000
LLW (Solid)			3,600	3,600		
LLMW (Solid)			2,260	2,260		
Hazardous (Solid)			83	83		

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Waste Volume Forecast Data

Facility: Liquid Effluents Facilities (All)						
Waste Type	Beginning Inventory (m ³)	Received (m ³)	Generated (m ³)	Transferred (m ³)	Treated (m ³)	Disposed (m ³)
FY 2001						
LLW (Liquid)		2,000			2,000	
LLMW (Liquid)		5,000	100	100	5,000	
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)		595,000	305,000			900,000
LLW (Solid)			201	201		
LLMW (Solid)			13	13		
Hazardous (Solid)			1	1		
FY 2002						
LLW (Liquid)		4,200			4,200	
LLMW (Liquid)		10,000			10,000	
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)		639,000	312,000			951,000
LLW (Solid)			186	186		
LLMW (Solid)			27	27		
Hazardous (Solid)			1	1		
FY 2003						
LLW (Liquid)		4,200			4,200	
LLMW (Liquid)		23,700			23,700	
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)		658,000	326,000			984,000
LLW (Solid)			187	187		
LLMW (Solid)			53	53		
Hazardous (Solid)			2	2		
FY 2004						
LLW (Liquid)		6,500			6,500	
LLMW (Liquid)		23,700			23,700	
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)		624,000	328,000			952,000
LLW (Solid)			187	187		
LLMW (Solid)			55	55		
Hazardous (Solid)			2	2		

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Waste Volume Forecast Data

Facility: 200 Area Effluent Treatment Facility (ETF)						
Waste Type	Beginning Inventory (m ³)	Received (m ³)	Generated (m ³)	Transferred (m ³)	Treated (m ³)	Disposed (m ³)
FY 2001						
LLW (Liquid)		2,000			2,000	
LLMW (Liquid)		5,000			5,000	
Industrial Waste (Liquid)						
Treated Effluent (Liquid)			7,000			7,000
LLW (Solid)			1	1		
LLMW (Solid)			13	13		
Hazardous (Solid)			1	1		
FY 2002						
LLW (Liquid)		4,200			4,200	
LLMW (Liquid)		10,000			10,000	
Industrial Waste (Liquid)						
Treated Effluent (Liquid)			14,200			14,200
LLW (Solid)			1	1		
LLMW (Solid)			27	27		
Hazardous (Solid)			1	1		
FY 2003						
LLW (Liquid)		4,200			4,200	
LLMW (Liquid)		23,700			23,700	
Industrial Waste (Liquid)						
Treated Effluent (Liquid)			27,900			27,900
LLW (Solid)			2	2		
LLMW (Solid)			53	53		
Hazardous (Solid)			2	2		
FY 2004						
LLW (Liquid)		6,500			6,500	
LLMW (Liquid)		23,700			23,700	
Industrial Waste (Liquid)						
Treated Effluent (Liquid)			30,200			30,200
LLW (Solid)			2	2		
LLMW (Solid)			55	55		
Hazardous (Solid)			2	2		

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Waste Volume Forecast Data

Facility: 200 Area Effluent Treatment Facility (ETF)						
Waste Type	Beginning Inventory (m ³)	Received (m ³)	Generated (m ³)	Transferred (m ³)	Treated (m ³)	Disposed (m ³)
FY 1997						
LLW (Liquid)	2,300	72,100			74,400	
LLMW (Liquid)	3,800	6,000			9,800	
Industrial Waste (Liquid)						
Treated Effluent (Liquid)			84,200			84,200
LLW (Solid)			158	158		
LLMW (Solid)	42		15	57		
Hazardous (Solid)	1		1	2		
FY 1998						
LLW (Liquid)		102,100			102,100	
LLMW (Liquid)		18,000			18,000	
Industrial Waste (Liquid)						
Treated Effluent (Liquid)			120,100			120,100
LLW (Solid)			215	215		
LLMW (Solid)			17	17		
Hazardous (Solid)			1	1		
FY 1999						
LLW (Liquid)		2,600			2,600	
LLMW (Liquid)		14,200			14,200	
Industrial Waste (Liquid)						
Treated Effluent (Liquid)			16,800			16,800
LLW (Solid)			1	1		
LLMW (Solid)			19	19		
Hazardous (Solid)			1	1		
FY 2000						
LLW (Liquid)		2,100			2,100	
LLMW (Liquid)		5,100			5,100	
Industrial Waste (Liquid)						
Treated Effluent (Liquid)			7,200			7,200
LLW (Solid)			1	1		
LLMW (Solid)			18	18		
Hazardous (Solid)			1	1		

Waste Volume Forecast Data

Facility: 200 Area Treated Effluent Disposal Facility (TEDF)						
Waste Type	Beginning Inventory (m³)	Received (m³)	Generated (m³)	Transferred (m³)	Treated (m³)	Disposed (m³)
FY 1997						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)						
Treated Effluent (Liquid)		1,432,000				1,432,000
LLW (Solid)						
LLMW (Solid)						
Hazardous (Solid)						
FY 1998						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)						
Treated Effluent (Liquid)		1,603,000				1,603,000
LLW (Solid)						
LLMW (Solid)						
Hazardous (Solid)						
FY 1999						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)						
Treated Effluent (Liquid)		1,289,000				1,289,000
LLW (Solid)						
LLMW (Solid)						
Hazardous (Solid)						
FY 2000						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)						
Treated Effluent (Liquid)		758,000				758,000
LLW (Solid)						
LLMW (Solid)						
Hazardous (Solid)						

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Waste Volume Forecast Data

Facility: 200 Area Effluent Treatment Facility (ETF)						
Waste Type	Beginning Inventory (m ³)	Received (m ³)	Generated (m ³)	Transferred (m ³)	Treated (m ³)	Disposed (m ³)
FY 2005						
LLW (Liquid)		2,000			2,000	
LLMW (Liquid)		26,600			26,600	
Industrial Waste (Liquid)						
Treated Effluent (Liquid)			28,600			28,600
LLW (Solid)			1	1		
LLMW (Solid)			46	46		
Hazardous (Solid)			1	1		
FY 2006						
LLW (Liquid)		2,000			2,000	
LLMW (Liquid)		26,400			26,400	
Industrial Waste (Liquid)						
Treated Effluent (Liquid)			28,400			28,400
LLW (Solid)			1	1		
LLMW (Solid)			46	46		
Hazardous (Solid)			1	1		
FY 2007-2034						
LLW (Liquid)		8,500			8,500	
LLMW (Liquid)		1,222,000			1,222,000	
Industrial Waste (Liquid)						
Treated Effluent (Liquid)			1,230,000			1,230,000
LLW (Solid)			83	83		
LLMW (Solid)			2,260	2,260		
Hazardous (Solid)			83	83		

Notes:

1. Waste water is treated to meet discharge requirements and sent to a State Approved Land Disposal Site (SALDS).
2. Waste streams to be treated include 242-A Evaporator process condensate, Emergency Dump Basin water, N Basin water, 200-UP-1 groundwater, purge water from groundwater monitoring, excess ERDF leachate, Low-Level Mixed Waste (LLMW) Trench leachate, 222-S Laboratory waste, Waste Sampling and Characterization Facility (WSCF) Laboratory waste, K Basins level control water, water from cold vacuum drying of spent fuel from K Basins, and K Basins water.
3. TWRS privatization will include facilities that will generate waste water which will need to be treated at the ETF. Schedule for Phase 1 is June 2002 - May 2012; Phase 2 is June 2011 - December 2033.
4. Solid waste volumes are from FY 1997 Solid Waste Forecast plus estimated solid waste to ERDF.

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Waste Volume Forecast Data

Facility: 200 Area Treated Effluent Disposal Facility (TEDF)						
Waste Type	Beginning Inventory (m ³)	Received (m ³)	Generated (m ³)	Transferred (m ³)	Treated (m ³)	Disposed (m ³)
FY 2005						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)						
Treated Effluent (Liquid)		787,000				787,000
LLW (Solid)						
LLMW (Solid)						
Hazardous (Solid)						
FY 2006						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)						
Treated Effluent (Liquid)		776,000				776,000
LLW (Solid)						
LLMW (Solid)						
Hazardous (Solid)						
FY 2007-2034						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)						
Treated Effluent (Liquid)		20,980,000				20,980,000
LLW (Solid)						
LLMW (Solid)						
Hazardous (Solid)						

Notes:

1. Waste water received from generators already meets discharge requirements and is sent to a SALDS for disposal.
2. Waste streams for disposal include PUREX chemical sewer, B Plant chemical sewer, T Plant waste water, PFP waste water, 222-S Laboratory waste water, 242-A-81 Water Services Building waste water, and 284-W Power Plant waste water.
3. Project W-252 tie-in will be completed in February 1997. Waste streams to be added include 242-A Evaporator cooling water and steam condensate, 241-A Tank Farm cooling water (related Project W-030 will be completed in June 1997), WESF cooling water, and 284-E Power Plant waste water.
4. TWRS privatization will include facilities that will generate waste water for disposal by the 200 Area TEDF. Schedule for Phase 1 is June 2002 - May 2012; Phase 2 is June 2011 - December 2033.

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Waste Volume Forecast Data

Facility: 200 Area Treated Effluent Disposal Facility (TEDF)						
Waste Type	Beginning Inventory (m ³)	Received (m ³)	Generated (m ³)	Transferred (m ³)	Treated (m ³)	Disposed (m ³)
FY 2001						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)						
Treated Effluent (Liquid)		595,000				595,000
LLW (Solid)						
LLMW (Solid)						
Hazardous (Solid)						
FY 2002						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)						
Treated Effluent (Liquid)		639,000				639,000
LLW (Solid)						
LLMW (Solid)						
Hazardous (Solid)						
FY 2003						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)						
Treated Effluent (Liquid)		658,000				658,000
LLW (Solid)						
LLMW (Solid)						
Hazardous (Solid)						
FY 2004						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)						
Treated Effluent (Liquid)		624,000				624,000
LLW (Solid)						
LLMW (Solid)						
Hazardous (Solid)						

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Waste Volume Forecast Data

Facility: 300 Area Treated Effluent Disposal Facility (TEDF)						
Waste Type	Beginning Inventory (m³)	Received (m³)	Generated (m³)	Transferred (m³)	Treated (m³)	Disposed (m³)
FY 2001						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)			298,000			298,000
LLW (Solid)			185	185		
LLMW (Solid)						
Hazardous (Solid)						
FY 2002						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)			298,000			298,000
LLW (Solid)			185	185		
LLMW (Solid)						
Hazardous (Solid)						
FY 2003						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)			298,000			298,000
LLW (Solid)			185	185		
LLMW (Solid)						
Hazardous (Solid)						
FY 2004						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)			298,000			298,000
LLW (Solid)			185	185		
LLMW (Solid)						
Hazardous (Solid)						

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Waste Volume Forecast Data

Facility: 300 Area Treated Effluent Disposal Facility (TEDF)						
Waste Type	Beginning Inventory (m ³)	Received (m ³)	Generated (m ³)	Transferred (m ³)	Treated (m ³)	Disposed (m ³)
FY 1997						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)			298,000			298,000
LLW (Solid)			185	185		
LLMW (Solid)						
Hazardous (Solid)						
FY 1998						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)			298,000			298,000
LLW (Solid)			185	185		
LLMW (Solid)						
Hazardous (Solid)						
FY 1999						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)			298,000			298,000
LLW (Solid)			185	185		
LLMW (Solid)						
Hazardous (Solid)						
FY 2000						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)			298,000			298,000
LLW (Solid)			185	185		
LLMW (Solid)						
Hazardous (Solid)						

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Waste Volume Forecast Data

Facility: 340 Facility						
Waste Type	Beginning Inventory (m³)	Received (m³)	Generated (m³)	Transferred (m³)	Treated (m³)	Disposed (m³)
FY 1997						
LLW (Liquid)						
LLMW (Liquid)		100		100		
Industrial Waste (Liquid)						
Treated Effluent (Liquid)						
LLW (Solid)			15	15		
LLMW (Solid)						
Hazardous (Solid)						
FY 1998						
LLW (Liquid)						
LLMW (Liquid)		100		100		
Industrial Waste (Liquid)						
Treated Effluent (Liquid)						
LLW (Solid)			15	15		
LLMW (Solid)						
Hazardous (Solid)						
FY 1999						
LLW (Liquid)						
LLMW (Liquid)			100	100		
Industrial Waste (Liquid)						
Treated Effluent (Liquid)						
LLW (Solid)			15	15		
LLMW (Solid)						
Hazardous (Solid)						
FY 2000						
LLW (Liquid)						
LLMW (Liquid)			100	100		
Industrial Waste (Liquid)						
Treated Effluent (Liquid)						
LLW (Solid)			15	15		
LLMW (Solid)						
Hazardous (Solid)						

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Waste Volume Forecast Data

Facility: 300 Area Treated Effluent Disposal Facility (TEDF)						
Waste Type	Beginning Inventory (m³)	Received (m³)	Generated (m³)	Transferred (m³)	Treated (m³)	Disposed (m³)
FY 2005						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)			298,000			298,000
LLW (Solid)			185	185		
LLMW (Solid)						
Hazardous (Solid)						
FY 2006						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)		298,000			298,000	
Treated Effluent (Liquid)			298,000			298,000
LLW (Solid)			185	185		
LLMW (Solid)						
Hazardous (Solid)						
FY 2007-2034						
LLW (Liquid)						
LLMW (Liquid)						
Industrial Waste (Liquid)		5,660,000			5,660,000	
Treated Effluent (Liquid)			5,660,000			5,660,000
LLW (Solid)			3,520	3,520		
LLMW (Solid)						
Hazardous (Solid)						

Notes:

1. Volume of waste water received is based on current average feed rate of 150 gpm.
2. End of life in FY 2025 is based on 30-yr design life and December 1994 start date.
3. Treated effluent is discharged to the Columbia River.
4. Solid waste volumes are from FY 1997 Solid Waste Forecast.

Facility Forecast Data

Bldg No.	Description	Responsibility			
		Operation	Deactivation	D & D	Closure
242-AL-42/ -43/-44	Liquid Effluent Retention Facility (LERF)	EM-30	EM-60	EM-40	EM-40
2025E	Effluent Treatment Facility (ETF)	EM-30	EM-60	EM-40	EM-40
216E-43-A/-B	200 Area Treated Effluent Disposal Facility (TEDF)	EM-30	EM-60	N/A	N/A
310	300 Area Treated Effluent Disposal Facility (TEDF)	EM-30	EM-60	N/A	N/A
340/340-A/ 340-B	340 Waste Handling Facility	EM-30	EM-60	EM-40	EM-40
307	307 Retention Basins	EM-30	EM-60	EM-40	EM-40

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Waste Volume Forecast Data

Facility: 340 Facility						
Waste Type	Beginning Inventory (m ³)	Received (m ³)	Generated (m ³)	Transferred (m ³)	Treated (m ³)	Disposed (m ³)
FY 2001						
LLW (Liquid)						
LLMW (Liquid)			100	100		
Industrial Waste (Liquid)						
Treated Effluent (Liquid)						
LLW (Solid)			15	15		
LLMW (Solid)						
Hazardous (Solid)						

Notes:

1. Liquid waste is transferred by rail car to the 204-AR Unloading Facility for storage in double-shell tanks.
2. Waste receipts end in FY 1998.
3. Shutdown and cleanout occurs in FY 1999 - 2001. Volume of waste generated is same as during operation.
4. Solid waste volumes are from FY 1997 Solid Waste Forecast.

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Utilities and Infrastructure Needs

Complex: 200 Area Liquid Effluents Facilities												
Type	Code	Units	Demand									
			1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Sedans/Light Trucks	TLT	Avg. vehicles	4	4	4	4	4	4	4	4	4	4
		N/A										
ALLOCATED FACILITIES AND SERVICES												
Lifting Services	FLS	Avg. crane days/yr	5	5	5	5	5	5	5	5	5	5
		N/A										
Owned Office Space	FOO	Avg. sq ft	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
		N/A										
Custodial Services	FCS	Avg. sq ft	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
		N/A										
New Parts (from Fab Shops)	FFS	Avg. labor hr/yr	288	288	288	288	288	288	288	288	288	288
		Peak, labor hr/mo	40	40	40	40	40	40	40	40	40	40
LABORATORY SERVICES												
In-Field Lab Services	LIF	Avg. #samples/yr	224	224	224	224	224	224	224	224	224	224
		Peak, #samples/mo	25	25	25	25	25	25	25	25	25	25
Industrial Hygiene Services	LIH	Avg. #samples/yr	120	120	120	120	120	120	120	120	120	120
		Peak, #samples/mo	15	15	15	15	15	15	15	15	15	15
Analytical Lab Services	LAL	Avg. #samples/yr	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240
		Peak, #samples/mo	150	150	150	150	150	150	150	150	150	150
Radioactive Standards Lab Services (Calibrations)	LRS	Avg. calib/yr	84	84	84	84	84	84	84	84	84	84
		Peak, calib/mo	10	10	10	10	10	10	10	10	10	10
Non-rad Standards Lab Services (Calibrations)	LNS	Avg. calib/yr	100	100	100	100	100	100	100	100	100	100
		Peak, calib/mo	10	10	10	10	10	10	10	10	10	10

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Utilities and Infrastructure Needs

Complex: 200 Area Liquid Effluents Facilities												
Type	Code	Units	Demand									
			1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
UTILITES												
Electricity	UE0	Avg. MW-hr/yr	5,360	5,360	5,360	5,360	5,360	5,360	5,360	5,360	5,360	5,360
		Peak, kW	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750
Raw Water	URW	Avg. Mgal/yr	10	10	10	10	10	10	10	10	10	10
		Peak, gal/min	500	500	500	500	500	500	500	500	500	500
Potable Water	UPW	Avg. Mgal/yr	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
		Peak, gal/min	100	100	100	100	100	100	100	100	100	100
Disposed Liquid Sanitary Waste	ULS	Avg. Mgal/yr	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
		Peak, gal/day	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Disposed Solid Sanitary Waste (Landfill)	USO	Avg. tons/yr	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
		N/A										
Voice Communications Service	UTC	Avg. phones	80	80	80	80	80	80	80	80	80	80
		N/A										
Data Transmission Service	UDT	Avg. computers	60	60	60	60	60	60	60	60	60	60
		N/A										
Pager Service	UWC	Avg. pagers	30	30	30	30	30	30	30	30	30	30
		N/A										
Clean Laundry	UCL	Avg. pounds/yr	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250
		N/A										
TRANSPORTATION SERVICES												
200 Area Taxi Service	TTS	Avg. passenger/yr	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600
		Peak, passenger/day	12	12	12	12	12	12	12	12	12	12
Heavy Equipment	THE	Avg. eqpmt days/yr	10	10	10	10	10	10	10	10	10	10
		N/A										

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Utilities and Infrastructure Needs

Complex: 300 Area Liquid Effluents Facilities												
Type	Code	Units	Demand									
			1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Rail Transportation Services	TRR	Avg. rail cars/yr	6	6	6	6	6	0	0	0	0	0
		N/A										
Hanford Road System Heavy Traffic	TRS	Avg. trk loads/yr	12	12	12	12	12	12	12	12	12	12
		Peak, trk loads/day	1	1	1	1	1	1	1	1	1	1
ALLOCATED FACILITIES AND SERVICES												
Lifting Services	FLS	Avg. crane days/yr	6	6	6	6	6	6	6	6	6	6
		N/A										
Owned Office Space	FOO	Avg. sq ft	4,634	4,634	4,634	4,634	4,634	3,338	3,338	3,338	3,338	3,338
		N/A										
Custodial Services	FCS	Avg. sq ft	4,634	4,634	4,634	4,634	4,634	3,338	3,338	3,338	3,338	3,338
		N/A										
New Parts (from Fab Shops)	FFS	Avg. labor hr/yr	144	144	144	144	144	144	144	144	144	144
		Peak, labor hr/mo	12	12	12	12	12	12	12	12	12	12
Maintained Facilities	FBM	Avg. sq ft	22,188	22,188	22,188	22,188	22,188	12,750	12,750	12,750	12,750	12,750
		N/A										
Energy Mgmt Services	FEM	Avg. pro ccts/yr	2	2	2	2	2	2	2	2	2	2
		N/A										
LABORATORY SERVICES												
In-Field Lab Services	LIF	Avg. #samples/yr	2	2	2	2	2	2	2	2	2	2
		Peak, #samples/mo	1	1	1	1	1	1	1	1	1	1
Industrial Hygiene Services	LIH	Avg. #samples/yr	2	2	2	2	2	2	2	2	2	2
		Peak, #samples/mo	1	1	1	1	1	1	1	1	1	1
Analytical Lab Services	LAL	Avg. #samples/yr	360	360	360	360	360	360	360	360	360	360
		Peak, #samples/mo	30	30	30	30	30	30	30	30	30	30

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Utilities and Infrastructure Needs

Complex: 300 Area Liquid Effluents Facilities												
Type	Code	Units	Demand									
			1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
UTILITIES												
Electricity	UE0	Avg. MW-hr/yr	3,600	3,600	3,600	3,600	3,600	3,300	3,300	3,300	3,300	3,300
		Peak, kW	600	600	600	600	600	550	550	550	550	550
Potable Water	UPW	Avg. Mgal/yr	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
		Peak, gal/min	100	100	100	100	100	100	100	100	100	100
Disposed Liquid Sanitary Waste	ULS	Avg. Mgal/yr	0.13	0.13	0.13	0.13	0.13	0.074	0.074	0.074	0.074	0.074
		Peak, gal/day	500	500	500	500	500	300	300	300	300	300
Disposed Solid Sanitary Waste (Landfill)	USO	Avg. tons/yr	10	10	10	10	10	10	10	10	10	10
		N/A										
Voice Communications Service	UTC	Avg. phones	40	40	40	40	40	25	25	25	25	25
		N/A										
Data Transmission Service	UDT	Avg. computers	34	34	34	34	34	20	20	20	20	20
		N/A										
Pager Service	UWC	Avg. pagers	14	14	14	14	14	10	10	10	10	10
		N/A										
Clean Laundry	UCL	Avg. pounds/yr	5,000	5,000	5,000	5,000	5,000	500	500	500	500	500
		N/A										
TRANSPORTATION SERVICES												
Heavy Trucks	THT	Avg. vehicle-hr/yr	144	144	144	144	144	144	144	144	144	144
		Peak, vehicle-hr/day	8	8	8	8	8	8	8	8	8	8
Heavy Equipment	THE	Avg. eqpmt days/yr	6	6	6	6	6	6	6	6	6	6
		N/A										
Sedans/Light Trucks	TLT	Avg. vehicles	3	3	3	3	3	3	3	3	3	3
		N/A										

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Utilities and Infrastructure Needs

Complex: Liquid Effluents Program												
Type	Code	Units	Demand									
			1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
UTILITIES												
Voice Communications Service	UTC	Avg. phones	13	13	13	13	13	13	13	13	13	13
		N/A										
Data Transmission Service	UDT	Avg. computers	15	15	15	15	15	15	15	15	15	15
		N/A										
Pager Service	UWC	Avg. pagers	4	4	4	4	4	4	4	4	4	4
		N/A										
ALLOCATED FACILITIES AND SERVICES												
Leased Office Space	FOL	Avg. sq ft	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100
		N/A										
Custodial Services	FCS	Avg. sq ft	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100
		N/A										

Utilities and Infrastructure Needs

Complex: 300 Area Liquid Effluents Facilities												
Type	Code	Units	Demand									
			1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Radioactive Standards Lab Service (Calibrations)	LRS	Avg, calib/yr	10	10	10	10	10	0	0	0	0	0
		Peak, calib/mo	2	2	2	2	2	0	0	0	0	0
Non-rad Standards Lab Services (Calibrations)	LNS	Avg, calib/yr	5	5	5	5	5	5	5	5	5	5
		Peak, calib/mo	1	1	1	1	1	1	1	1	1	1

1.4 DRIVERS

1.4.1 Key Drivers

Following are the key drivers for the Liquid Effluents Program. The key drivers are the basis for the program mission in that they define what work must be done. The goals and objectives for the Liquid Effluents Program are derived from these documents. Included are several operating permits for the Liquid Effluent facilities. The permits contain requirements that drive program activities, act as schedule constraints, or restrict operations.

Source	Title
DOE/RL-96-14 (Draft)	Hanford Mission Direction Document
DE-RP06-96RL13200	Project Hanford Management Contractor Request for Proposals
Tri-Party Agreement	Hanford Federal Facility Agreement and Consent Order
DE 91NM-177	Consent Order
ST-4502	State Waste Discharge Permit for the 200 Area TEDF
ST-4500	State Waste Discharge Permit for the 200 Area ETF
60 FR 31115	Federal Register Notice of U.S. EPA Approval of the 200 Area Effluent Treatment Facility Delisting Petition, DOE/RL-92-72
DOE/RL-93-03	Hanford Facility Dangerous Waste Permit Application, 200 Area Effluent Treatment Facility (RCRA Part A and B)
DOE/RL-90-43	Liquid Effluent Retention Facility Dangerous Waste Permit Application (RCRA Part A and B)
WA-002591-7	National Pollutant Discharge Elimination System Permit for the 300 Area TEDF
DOE/RL-93-93	Plan and Schedule for Disposition and Regulatory Compliance for Miscellaneous Streams
N/A	Memorandum of Understanding--Disposition and Transport of Excess Water from 100-K Basins to the 200 Area ETF
N/A	Memorandum of Understanding--Storage and Treatment of Water from N Reactor Fuel Storage Basin and 1300-N Emergency Dump Basin
N/A	Memorandum of Understanding--Treatment of Groundwater from 200-UP-1 Operable Unit at the 200 Area ETF
N/A	Memorandum of Understanding for Use of the Radioactive Liquid Waste Sewer System
N/A	Liquid Effluent Retention Facility Interim Memorandum of Understanding

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Source	Title
Revised Code of Washington	
RCW 43.21C	Washington Clean Air Act
RCW 70.94	Washington Clean Air Act
RCW 70.105	Washington Hazardous Waste Management
RCW 70.105D	Model Toxics Control Act
RCW 90.48	Water Pollution Control Act
RCW 90.58	Shoreline Management Act
Washington Administrative Code	
WAC 173-14 to 20	Permits for Developments on Shorelines of the State; Shoreline Management Act
WAC 173-200	Water Quality Standards for Ground Waters of the State of Washington
WAC 173-201A	Water Quality Standards for Surface Waters of the State of Washington
WAC 173-216	State Waste Discharge Permit Program
WAC 173-218	Underground Injection Control Program
WAC 173-230	Certification of Operators of Wastewater Treatment Plants
WAC 173-240	Submission of Plans and Reports for Construction of Wastewater Facilities
WAC 173-303	Dangerous Waste Regulations
WAC 173-304	Minimum Functional Standards for Solid Waste Handling
WAC 173-400	General Regulations for Air Pollution Sources
WAC 173-401	Operating Permit Regulation
WAC 173-460	Controls for New Sources of Toxic Air Pollutants
WAC 173-480	Ambient Air Quality Standards and Emission Limits for Radionuclides
WAC 197-11	SEPA Rules and WAC 173-802 SEPA Procedures
WAC 246-247	Radiation Protection - Air Emissions
WAC 246-272	On-site Sewage System
DOE Orders and Directives	
DOE Order 232.1	Occurrence Reporting and Processing of Operations Information

1.4.2 Regulations and Other Drivers

Following are the regulations and other drivers which govern execution of the Liquid Effluents Program mission (i.e., how the work is performed).

Source	Title
Federal Statutes	
42 USC 4321	National Environmental Policy Act (NEPA)
42 USC 6901	Resource Conservation and Recovery Act (RCRA)
49 USC 1801	Hazardous Materials Transportation Act
Code of Federal Regulations	
10 CFR 20	Standards for Protection Against Radiation
10 CFR 830	Nuclear Safety Management
10 CFR 835	Occupational Radiation Protection
10 CFR 1021	Compliance With the National Environmental Policy Act
29 CFR 1910	Occupational Safety and Health Standards
29 CFR 1926	Safety and Health Regulations for Construction
40 CFR 52	Approval and Promulgation of Implementation Plans
40 CFR 60	Standards of Performance for New Stationary Sources
40 CFR 61	National Emission Standards for Hazardous Air Pollutants
40 CFR 122	EPA Administered Permit Programs: The National Pollutant Discharge Elimination System
40 CFR 125	Criteria and Standards for the National Pollutant Discharge Elimination System
40 CFR 260 to 266	Hazardous Waste Management
40 CFR 268	Land Disposal Restrictions
40 CFR 270	EPA Administered Permit Programs: The Hazardous Waste Permit Program
40 CFR 302	Designation, Reportable Quantities, and Notification
40 CFR 370	Hazardous Chemical Reporting: Community Right-to-Know
40 CFR 372	Toxic Chemical Release Reporting: Community Right-to-Know
49 CFR 100 to 179	DOT Hazardous Materials Transportation Regulations

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Source	Title
Westinghouse Hanford Company Controlled Manuals	
WHC-CM-1-3	Management Requirements and Procedures
WHC-CM-1-4	Corrective Action Management Manual
WHC-CM-1-5	Standard Operating Practices
WHC-CM-1-8	Work Management Manual
WHC-CM-1-10	Safety Manual
WHC-CM-1-11	Industrial Hygiene Manual
WHC-CM-2-1	Procurement Manual and Procedures
WHC-CM-2-2	Material Management Manual
WHC-CM-2-3	Property Management Manual
WHC-CM-2-4	Management Control System
WHC-CM-2-14	Hazardous Material Packaging and Shipping
WHC-CM-2-15	Training Standards
WHC-CM-2-17	Budget Formulation
WHC-CM-3-5	Document Control and Record Management
WHC-CM-4-2	Quality Assurance Manual
WHC-CM-4-29	Nuclear Criticality Safety Manual
WHC-CM-4-33	Security Manual
WHC-CM-4-40	Industrial Hygiene Manual
WHC-CM-4-41	Fire Protection Program Manual
WHC-CM-4-46	Safety Analysis Manual
WHC-CM-6-1	Standard Engineering Practices
WHC-CM-6-2	Project Management
WHC-CM-7-5	Environmental Compliance
Other Documents	
HSRCM-1	Hanford Site Radiological Control Manual
DOE/EH-0173T	Environmental Regulatory Guide for Radiological Effluent Monitoring and Environmental Surveillance (January 1991)
WHC-EP-0063-4	Hanford Site Solid Waste Acceptance Criteria
WHC-EP-0137	Best Available Technology (Economically Achievable) Guidance Document for the Hanford Site

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Source	Title
RLID 430.1	Systems Engineering Criteria Document and Implementing Directive
RLPD 430.1	Hanford Site Systems Engineering Policy
DOE Order 4330.4B	Maintenance Management Program
DOE Order 4700.1	Project Management System
DOE Order 5400.1	General Environmental Protection Program
DOE Order 5400.5	Radiation Protection of the Public and the Environment
DOE Order 5480.3	Safety Requirements for the Packaging and Transportation of Hazardous Materials, Hazardous Substances, and Hazardous Wastes
DOE Order 5480.4	Environmental Protection, Safety, and Health Protection Standards
DOE Order 5480.10	Contractor Industrial Hygiene Program
DOE Order 5480.19	Conduct of Operations Requirements for DOE Facilities
DOE Order 5480.20A	Personnel Selection, Qualification, and Training Requirements for DOE Nuclear Facilities
DOE Order 5480.21	Unreviewed Safety Questions
DOE Order 5480.22	Technical Safety Requirements
DOE Order 5480.23	Nuclear Safety Analysis Reports
DOE Order 5480.24	Nuclear Criticality Safety
DOE Order 5484.1	Environmental Protection, Safety, and Health Protection Information Reporting Requirements
DOE Order 5700.6C	Quality Assurance
DOE Order 5820.2A	Radioactive Waste Management
RLID 5000.1	Baseline Execution and Management Process
RLID 5000.2	Long Range Planning Process
RLID 5480.31	Startup and Restart of Facilities Operational Readiness Review and Readiness Assessments
RLIP 5484.1A	Environmental Protection, Safety, and Health Protection Information Reporting Requirements
RLP 5000.11	Schedule Validation
RLP 5700.9	Cost Estimating Validation

1.5 FUNCTIONAL DEFINITIONS

Following are the functions to be performed by the Liquid Effluents Program. The numbering of the functions corresponds to that of the HSTB database. Upper-level functions in the function hierarchy are (0) Clean Up Hanford, and (4) Remedy Unsafe and Unacceptable Conditions.

- (4.5) Manage Liquid Effluents - Integrated liquid effluent management is provided to support cleanup of the Hanford Site. Current and future liquid effluents are managed in a safe, responsible, cost effective, and legally compliant manner.
- (4.5.1) Liquid Effluents Program Management/Administrative Support - Coordination, direction, and customer interface is provided for the Liquid Effluents Program. Administrative support is provided for program documentation, funds management, scheduling, and reporting.
- (4.5.2) Store Liquid Effluents - Liquid effluents which meet acceptance criteria are temporarily stored while awaiting treatment or transfer to double-shell tanks.
- (4.5.3) Treat Liquid Effluents - Liquid effluents are treated by physical and/or chemical processes to reduce the concentration of contaminants to below discharge limits.
- (4.5.4) Dispose of Treated Liquid Effluents - Treated effluents are disposed of to the soil column or the Columbia River in accordance with established permits.
- (4.5.5) Shutdown/Transfer Excess Liquid Effluent Facilities - Liquid effluent facilities are shutdown after completing their mission and transferred to the Transition Projects or Landlord programs in accordance with established turnover criteria.

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Source	Title
WHC-EP-0438-1	A Guide for Preparing Hanford Site Facility Effluent Monitoring Plans
WHC-IP-0931	200 Area Liquid Effluent Facilities Administrative Policies
WHC-IP-0932	200 Area Liquid Effluent Facilities Conduct of Operations
WHC-IP-1000	300 Area Liquid Effluent Facilities Administration
WHC-IP-1026	Engineering Practice Guidelines
WHC-IP-1043	Westinghouse Occupational ALARA Program
95-LEP-015	LERF Treatment Exemption
WHC-SD-ETF-WAC-001	Acceptance of Feed Streams for Treatment at the LERF/ETF Complex
WHC-SD-W105-SAR-001	LERF Safety Analysis Report
WHC-SD-C018H-HC-002	200 Area Effluent Treatment Facility Hazard Categorization Report
WHC-SD-ETF-ASA-001	200 Area Effluent Treatment Facility Auditable Safety Analysis
WHC-SD-WM-SAD-025	Hanford 300 Area Treated Effluent Disposal Facility Inventory at Risk Calculations and Safety Analysis
WHC-SD-WM-ISB-003	340 Waste Handling Facility Interim Safety Basis (ISB)
WHC-SD-WM-SAD-027	Hanford 300 Area Retention Process Sewer Inventory at Risk Calculations and Safety Analysis
WHC-SD-WM-EV-053	Double-Shell Tank System Waste Analysis Plan
WHC-SD-RE-SAP-013	Safety Analysis Report for Packaging on Site Railroad Liquid Waste Tank Cars
WHC-SD-W049H-ICD-001	200 Area Treated Effluent Disposal Facility Interface Control Document
WHC-SD-WM-PICD-001	Interface Control Document Between Liquid Effluent Services and Solid Waste Disposal Division
WHC-SD-WM-ICD-038	Interface Control Document for Untreated Liquid Effluents (TWRS Project Phase I privatization contractor liquid effluents to ETF)
WHC-SD-WM-ICD-039	Interface Control Document for Treated Liquid Effluents (TWRS Project Phase I privatization contractor liquid effluents to 200 Area TEDF)

1.6 PROGRAM LIFE-CYCLE REQUIREMENTS

Following are the life-cycle requirements which apply to the Liquid Effluents Program. Included are requirements for management, acquisition, operations, maintenance, and deactivation.

1.6.1 Management Requirements

Management of the Liquid Effluents Program is performed in accordance with the drivers and regulations listed in Section 1.4. The following additional management requirements have been specified.

- Manage current and future Hanford Site liquid effluents, including collecting, treating, and disposing of liquid effluent wastes. The program uses an integrated liquid effluent treatment system with a combination of local and central treatment systems to achieve cost-effective liquid effluent disposal. Current liquid effluent facilities include the 200 Area LERF, 200 Area TEDF, 300 Area TEDF, and the 340 Facility. [*Project Hanford Management Contract Request for Proposals*, Section C, "Statement of Work," Paragraph 3.B(1)(k)]
- Agreement to treat K Basins level control water is documented in "Memorandum of Understanding--Disposition and Transport of Excess Water from 100-K Basins to the 200 Area Effluent Treatment Facility."
- Agreement to treat N Basin water in the ETF is documented in "Memorandum of Understanding--Storage and Treatment of Water from N Reactor Fuel Storage Basin and 1300-N Emergency Dump Basin."
- Agreement to treat groundwater from the 200-UP-1 operable unit in the ETF is documented in "Memorandum of Understanding--Treatment of Groundwater from 200-UP-1 Operable Unit at the 200 Area Effluent Treatment Facility."
- Agreement on use of the radioactive liquid waste system in the 300 Area for waste transfers to the 340 Facility is documented in "Memorandum of Understanding for Use of the Radioactive Liquid Waste Sewer System."
- Agreement on responsibility for operating the LERF is documented in "Liquid Effluent Retention Facility Interim Memorandum of Understanding."
- The interface between the Liquid Effluents Program and generators which discharge to the 200 Area TEDF is defined in *200 Area TEDF Interface Control Document* (Crane 1996).

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- Safe Operation of 340 Facility - Operation and maintenance of the 340 Facility shall be in accordance with *340 Waste Handling Facility Interim Safety Basis (ISB)* (Bendixsen 1995).
- Safe Operation of 307 Basins - Operation and maintenance of the 307 Basins shall be in accordance with *Hanford 300 Area Retention Process Sewer Inventory at Risk Calculations and Safety Analysis* (Berneski 1995).
- 200 Area TEDF Waste Acceptance - Facilities discharging to the 200 Area TEDF must meet the discharge limits specified in the WAC 173-216 State Waste Discharge Permit No. ST-4502. Implementation of best available technology (BAT)/All Known, Available, and Reasonable Treatment (AKART) is the responsibility of the generators.
- 200 Area TEDF Discharge Limits - Discharge limits for the 200 Area TEDF are specified in the WAC 173-216 State Waste Discharge Permit No. ST-4502. Constituents not identified in permits are subject to limits in WAC 173-200, *Water Quality Standards for Ground Waters of the State of Washington*, and 4 percent of the derived concentration guide values in DOE Order 5400.5, *Radiation Protection of the Public and the Environment*, as applicable.
- Acceptability of Waste for Storage in LERF - Before new wastes can be accepted for storage in LERF, their compatibility with the LERF liner materials shall be evaluated.
- Time Limit for Storage in LERF - Waste will be stored in LERF for up to one year prior to treatment in the ETF. [LERF Treatment Exemption (95-LEP-015), 40 CFR 268.4]
- Solids in LERF - Solids shall not be allowed to accumulate in the LERF basins which may require special cleanout actions. [LERF Treatment Exemption (95-LEP-015), 40 CFR 268.4.]
- ETF Waste Acceptance - An assessment shall be made for new wastes as to whether treatment in the ETF constitutes BAT. Waste acceptance guidelines for the ETF are provided in *Acceptance of Feed Streams for Treatment at the LERF/ETF Complex* (McDonald 1994).
- ETF Discharge Limits - Discharge limits for the ETF are specified in the WAC 173-216 State Waste Discharge Permit No. ST-4500, and the U.S. Environmental Protection Agency (EPA) approval of the *200 Area Effluent Treatment Facility Delisting Petition*, DOE/RL-92-72 (documented in 60 FR 31115 and codified in 40 CFR 261, Appendix IX, Table 2). Constituents not identified in permits are subject to limits in WAC 173-200, *Water Quality Standards for Ground Waters of the State of Washington*, and 4 percent of the derived concentration guide values in DOE Order 5400.5, *Radiation Protection of the Public and the Environment*, as applicable.

- The interface between the Liquid Effluents Program and Solid Waste Disposal is defined in *Interface Control Document Between Liquid Effluent Services and Solid Waste Disposal Division* (Greager 1996).
- The interface between the Liquid Effluents Program and the TWRS Phase I privatization contractor for waste water transferred to the ETF is defined in *Interface Control Document for Untreated Liquid Effluents* (Graves 1996a).
- The interface between the Liquid Effluents Program and the TWRS Phase I privatization contractor for waste water transferred to the 200 Area TEDF is defined in *Interface Control Document for Treated Liquid Effluents* (Graves 1996b).

1.6.2 Acquisition Requirements

The Liquid Effluents facilities are relatively new (LERF, ETF, 200 Area TEDF, and 300 Area TEDF), or about to be shut down (340 Facility). Significant facility modifications or equipment purchases are assumed not to be needed for the next several years. Acquisitions for the Liquid Effluents Program are performed in accordance with the drivers and regulations listed in Section 1.4. No additional acquisition requirements have been specified.

1.6.3 Operations and Maintenance Requirements

Operations and maintenance of the Liquid Effluents facilities are performed in accordance with the drivers and regulations listed in Section 1.4. The following additional operations and maintenance requirements have been specified.

- Support to Others - Operate treatment facilities and systems for liquid effluents. [*Project Hanford Management Contract Request for Proposals*, Section C, "Statement of Work," Paragraph 3.B(1)(l)]
- Safe Operation of LERF - Operation and maintenance of the LERF shall be in accordance with *LERF Safety Analysis Report* (Woeland 1991).
- Safe Operation of ETF - Operation and maintenance of the ETF shall be in accordance with *200 Area Effluent Treatment Facility Auditable Safety Analysis* (Crane 1995).
- Safe Operation of 200 Area TEDF - The 200 Area TEDF is a general use facility and safety documentation is not required per DOE Order 5481.1B. Operation and maintenance of the 200 Area TEDF shall be in accordance with the general safety requirements in WHC-CM-1-10, *Safety Manual*.
- Safe Operation of 300 Area TEDF - Operation and maintenance of the 300 Area TEDF shall be in accordance with *Hanford 300 Area Treated Effluent Disposal Facility Inventory at Risk Calculations and Safety Analysis* (Olander 1995).

1.7 PROGRAM ISSUES AND ASSUMPTIONS

The following issues have been identified which, if not resolved, may impact the Liquid Effluents Program cost, schedule, and technical baseline.

- **Issue** - Specific issues, concerns, and strategies for shutdown of the 340 Facility are discussed in *340 Waste Handling Facility Deactivation Plan* (Berneski and Stordeur 1996). The 340 Facility will no longer receive waste after FY 1998 based on an accelerated schedule. Initially, nothing will be done to preclude accepting waste at the 340 Facility after this date. The 340 Facility will be cleaned out and custody transferred to Transition Projects for deactivation. The PNNL will provide a new waste handling facility with storage and truck loadout capability for the 325 Building. The TWRS Project will modify the 204-AR Unloading Facility to allow waste transfers by truck. However, funding for the new waste handling facility in the 325 Building and for modifications to the 204-AR Unloading Facility has not been established.

Assumption - The new waste handling facility in the 325 Building and modifications to the 204-AR Unloading Facility are completed to allow shutdown of the 340 Facility as planned. Discharges from the 324, 326, 327, and 329 Buildings cease when the 340 Facility shuts down.

- **Issue** - The estimated cost of work planned by the Liquid Effluents Program for FY 1998 exceeds the available budget by \$2.5 million.

Assumption - A cost savings of \$2.5 million in FY 1998 is assumed based on re-engineering and consolidation of operations between the ETF and the 242-A Evaporator. An implementation strategy is being developed.

- **Issue** - Cleanup of the Hanford Site is being accelerated and made more efficient under Project Hanford. Some programs will undergo major changes. Waste volume projections will vary from current estimates. Plans for treating and disposing of liquid effluents will be affected.

Assumption - The Liquid Effluents facilities will be fully utilized in cleaning up the Hanford Site. Operating costs will remain level (with escalation) in the future. Allowance is included for uncertainties in feed volume and composition.

- 300 Area TEDF Waste Acceptance - Waste acceptance criteria for the 300 Area TEDF are specified in *300 Area TEDF Administration* (Poole 1994).
- 300 Area TEDF Discharge Limits - Discharge limits for the 300 Area TEDF are specified in the National Pollutant Discharge Elimination System (NPDES) Permit No. WA-002591-7. Constituents not identified in permits are subject to limits in WAC 173-201A, *Water Quality Standards for Surface Waters of the State of Washington*, and 4 percent of the derived concentration guide values in DOE Order 5400.5, *Radiation Protection of the Public and the Environment*, as applicable.
- 340 Facility Waste Acceptance - Limits on the volume and composition of solid and liquid waste that can be stored in the 340 Facility are specified in *340 Waste Handling Facility Interim Safety Basis (ISB)* (Bendixsen 1995).
- Liquid Waste Transfers to Tank Farms - Profile sheets are prepared for liquid waste transferred to tank farms from the 340 Facility. The profile sheets are compared to tank farm specifications in order to determine the acceptability of the waste. Waste acceptance criteria and information requirements for liquid waste transferred to tank farms are specified in *Double-Shell Tank System Waste Analysis Plan* (Mulkey and Jones 1995). Liquid waste transfers must also comply with the requirements in *Safety Analysis Report for Packaging On-Site Railroad Liquid Waste Tank Cars* (Mercado 1993).
- Solid Waste Transfers to the Central Waste Complex - Solid low-level waste (LLW) and low-level mixed waste (LLMW) transferred to the Central Waste Complex from Liquid Effluents facilities shall meet the acceptance criteria for onsite storage and disposal specified in *Hanford Site Solid Waste Acceptance Criteria* (WHC 1993).

1.6.4 Deactivation Requirements

Deactivation of the Liquid Effluents facilities is performed in accordance with the drivers and regulations listed in Section 1.4. The following additional deactivation requirement has been specified:

- Shutdown/Transfer of Excess Facilities - Facilities which reach the end of their mission and are removed from operational status shall meet the acceptance criteria for turnover of surplus facilities for deactivation and decommissioning as specified in WHC-CM-1-3, *Management Requirements and Procedures*, MRP 6.15, "Facility Shutdown, Standby, and Transfer."

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2.0 WORK BREAKDOWN STRUCTURE

2.1 WORK BREAKDOWN STRUCTURE HIERARCHY

The following figure shows the Work Breakdown Structure (WBS) Hierarchy for the Liquid Effluent Program. The WBS is given to the cost account level and codes are shown for the PHMC, the DOE-RL, and the DOE Headquarters (HQ) WBSs, as applicable. Activity Data Sheets (ADS) are indicated at the activity level.

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2.1 WORK BREAKDOWN STRUCTURE HIERARCHY

WHC WBS / RL WBS / HQ WBS

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2.2 WORK BREAKDOWN STRUCTURE DICTIONARY

WORK BREAKDOWN STRUCTURE DICTIONARY		
1 PROJECT TITLE/PARTICIPANT Liquid Effluents Program	2 DATE 06/09/97	3 DOE HQ WBS CODE 1.3.7.3.4
4 DOE-RL WBS ELEMENT CODE 1.2.2.1.1.0000	5 WBS ELEMENT TITLE Program Management	
6 CONTRACTOR WBS ELEMENT CODE 1A2111	7 REVISION # AND AUTHORIZATION Revision 0	8 DATE October 1, 1996
9 APPROVED CHANGES		
10 SYSTEM DESIGN DESCRIPTION None	11 BUDGET AND REPORTING NUMBER EW3130020	

A. COST ELEMENT

Labor costs, materials and equipment, purchased services, services from other Hanford contractors, internal company charges, functional overhead, and general and administrative/site wide support (G&A/SWS).

B. TECHNICAL CONTENT

The overall objective of the Program Management/Administration activity is to provide direction, coordination, and customer interface to those activities required to meet the major mission to manage current and future liquid effluent streams in a safe, responsible, cost effective, and legally compliant manner. The most immediate objective is to end the practice of using the soil column on the Hanford Site to "treat" contaminated liquid effluents.

- Provide Program manager and activity engineering support to coordinate those activities required to meet the program, Tri-Party Agreement (TPA), and Consent Order milestones.
- Provide financial and scheduling support to the program. Prepare annual ADS, Risk Data Sheets (RDS), and Multi-Year Work Plan (MYWP). Prepare and issue program funding documents directing work to cost account managers, monitor monthly performance, and report through the Progress Tracking System (PTS) and other statusung reports.
- Provide Systems Engineering for defining work to be performed and establishing interfaces with other programs.

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WORK BREAKDOWN STRUCTURE DICTIONARY		
1 PROJECT TITLE/PARTICIPANT Liquid Effluents Program	2 DATE 09/10/96	3 DOE HQ WBS CODE 1.3.7.3.4
4 DOE-RL WBS ELEMENT CODE 1.2.2.1.1.0000	5 WBS ELEMENT TITLE Program Fees and Miscellaneous Charges	
6 CONTRACTOR WBS ELEMENT CODE 1A2112	7 REVISION # AND AUTHORIZATION Revision 0	8 DATE October 1, 1996
9 APPROVED CHANGES		
10 SYSTEM DESIGN DESCRIPTION None	11 BUDGET AND REPORTING NUMBER EW3130020	

A. COST ELEMENT:

Program Reserve

B. TECHNICAL CONTENT:

Provide budget in anticipation of fee earned for Performance-Based Fee Criteria (PBFC). These PBFC had not yet been negotiated between DOE-RL and the PHMC when this document was prepared.

- Develop a Safety Improvement Plan in accordance with the Voluntary Protection Program guidelines. Promote the goals and objectives identified in the Safety Improvement Plan. Provide management leadership, encourage employee involvement, perform worksite analyses, control and prevent hazards, and conduct safety and health training as applicable. Support reviews, audits, and assessments of the safety of Liquid Effluents Program activities.

ENGINEERING SUPPORT - Provide cognizant/process engineering support (WHC-CM-6-1, EP 5.2) to facilitate reliable operation of the TEDF. Promptly respond to system operating anomalies to prevent any service interruptions to either the TEDF or generator facilities. Provide technical input/evaluations to continually upgrade/maintain the TEDF Operating Procedures, Alarm Response Procedures, and design documentation. This includes generating/approving engineering documentation to alter the facility hardware/software configuration to improve operational performance. Perform actual control system software program modifications. Maintain the Interface Control Document (ICD) and appropriate verbal communications with the generator facilities to ensure these facilities respond to tasks for which they are accountable.

1A221102 - 200 Area TEDF SMECO Maintenance - The work scope is divided into three major areas.

PERFORMANCE MAINTENANCE SCHEDULES/PREDICTIVE MAINTENANCE - Plan/schedule/perform instrument calibrations, equipment performance maintenance, and predictive maintenance tests as scheduled. Provide maintenance and technical support to the facility as necessary. Review the results from these preventive/ predictive maintenance activities and implement program improvements necessary to optimize resource usage. Provide maintenance procedure/Job Control System (JCS) data sheet revisions as appropriate.

CORRECTIVE MAINTENANCE - Provide maintenance and technical support to the facility as necessary. Perform maintenance, work control, and engineering activities that support the TEDF. Effectively manage and safely control work activities which include work planning, scheduling, and performing corrective maintenance, configuration control, and related services that impact facility operations. Provide maintenance procedure/JCS data sheet revisions as appropriate.

MATERIAL CONTROL - Maintain tools, equipment, and material inventories as necessary to support efficient facility maintenance. Identify, order, receive, and maintain a spare parts inventory for essential equipment.

1A221103 - 200 Area TEDF SMECO Safety and Environmental Compliance - The work scope is divided into two major areas.

ENVIRONMENTAL MONITORING AND SAMPLING - Coordinate and provide analytical laboratory support for the 200 Area TEDF. This support includes interface with the Waste Sampling and Characterization Facility (WSCF) laboratory, to ensure that sample data support the requirements of the State Waste Discharge (SWD) Permit and the ICD. Included in this work scope is the coordination of sample collection along with the actual analytical laboratory support for the effluent and groundwater samples required by the discharge permit or subsequent submittals. The work scope includes prorated costs for utilization of the Liquid Effluent Monitoring Information System (LEMIS) for the storage, reporting, and archiving of the analytical data.

WORK BREAKDOWN STRUCTURE DICTIONARY		
1 PROJECT TITLE/PARTICIPANT <div style="text-align: center;">Liquid Effluent Program</div>	2 DATE <div style="text-align: center;">09/10/96</div>	3 DOE HQ WBS CODE <div style="text-align: center;">1.3.7.3.4</div>
4 DOE-RL WBS ELEMENT CODE <div style="text-align: center;">1.2.2.1.2.0000</div>	5 WBS ELEMENT TITLE 200 Area Treated Effluent Disposal Facility (TEDF) Safe Minimum Environmental Compliant Operations (SMECO)	
6 CONTRACTOR WBS ELEMENT CODE <div style="text-align: center;">1A2211</div>	7 REVISION # AND AUTHORIZATION <div style="text-align: center;">Revision 0</div>	8 DATE <div style="text-align: center;">October 1, 1996</div>
9 APPROVED CHANGES <div style="height: 40px;"></div>		
10 SYSTEM DESIGN DESCRIPTION <div style="text-align: center;">None</div>	11 BUDGET AND REPORTING NUMBER <div style="text-align: center;">EW3130020</div>	

A. COST ELEMENT

Labor costs, materials and equipment, purchased services, services from other Hanford contractors, internal company charges, department overhead, and G&A/SWS.

B. TECHNICAL CONTENT

Operate and maintain the 200 Area TEDF in a safe and environmentally compliant condition. Operations and maintenance is defined as those surveillances, operations, maintenance, reporting, and support activities required to maintain and operate the facility in accordance with the DOE requirements and the Washington State Department of Ecology (Ecology) Waste Discharge Permit. This facility must support the continued round-the-clock operation of the facilities which discharge into the TEDF. Major facility modifications, upgrades, and testing are not funded in this cost account.

1A221101 - 200 Area TEDF SMECO Operations - The work scope is divided into two major areas:

OPERATE - Provide routine operator activities to support the 200 Area TEDF. Activities classified as routine include control room monitoring, reporting, maintenance of facility logs, support of maintenance activities, Conduct of Operations, response to alarms and indicators, sampling activities, and surveillances and housekeeping of the discharge basins, pumphouses, pipelines, manholes, and sample building.

WORK BREAKDOWN STRUCTURE DICTIONARY		
1 PROJECT TITLE/PARTICIPANT Liquid Effluent Program	2 DATE 09/10/96	3 DOE HQ WBS CODE 1.3.7.3.4
4 DOE-RL WBS ELEMENT CODE 1.2.2.1.2.0000	5 WBS ELEMENT TITLE 200 Area Effluent Treatment Facility (ETF) Safe Minimum Environmental Compliant Operations (SMECO)	
6 CONTRACTOR WBS ELEMENT CODE IA2212	7 REVISION # AND AUTHORIZATION Revision 0	8 DATE October 1, 1996
9 APPROVED CHANGES		
10 SYSTEM DESIGN DESCRIPTION None	11 BUDGET AND REPORTING NUMBER EW3130020	

A. COST ELEMENT

Labor costs, materials and equipment, purchased services, services from other Hanford contractors, internal company charges, department overhead, and G&A/SWS.

B. TECHNICAL CONTENT

Operate and maintain the minimum equipment necessary in a safe and environmentally secure manner to comply with state and federal regulations and permits. Minimum operations and maintenance is defined as those surveillances, operations, maintenance, and support activities required to control the facility in a stand-by mode. The facility support systems will be operated and maintained during this period. Only waste created from housekeeping and maintenance activities will be generated. Only required surveillance, training, and reporting activities necessary to satisfy Washington State, the DOE, and other federal requirements will be performed.

1A221201 - 200 Area ETF SMECO Operations - The work scope is divided into three major areas:

OPERATE - Provide operational support by means of: plant and disposal site surveillances, sampling, response to alarms, waste handling, housekeeping, maintenance of facility logs, Conduct of Operations, and support of maintenance activities. Work package reviews, minimum required training and emergency preparedness drill activities are also conducted during the SMECO Operations.

PERMITTING - Provide Environmental Engineering and Environmental Compliance Officer support for the 200 Area TEDF. Engineering support will include the preparation of the submittals required by the SWD Permit. These submittals include quarterly discharge monitoring reports, and updates to the Operations/Maintenance Matrix. The scope of this task will also include permit modification due to the variability study results, along with associated Sample Analysis Plan (SAP) and ICD revisions. Environmental compliance tasks ensure that the TEDF is operated in an environmentally compliant manner along with the discharge to the TEDF from the generators. A study will also be performed on the 283E Powerhouse Trench, to meet a compliance requirement for the 216 Permit modification. The study is intended to determine future actions required for continued permitting of the flow through the 283E Trench.

1A221104 - 200 Area TEDF SMECO Facility Management - The work scope is divided into four major areas.

PROCEDURES - Perform technical editing, approval coordination, distribution, and maintenance of the facility's administrative, maintenance, operating, and emergency procedures. Review and coordinate application of Company procedures within the organization.

ASSESSMENTS - Prepare facility performance measures and track facility performance. Provide semi-annual Performance Evaluation Board (PEB) input and perform the semi-annual self assessment, manage and track the Management Oversight Program, maintain a drill program, and administer the resulting lessons learned program.

SUPPORTING ORGANIZATIONS - Provide miscellaneous support to TEDF such as weed/pest control, and other support to efficiently operate the facility.

TRAINING - Maintain the TEDF training program to meet the facility's staffing requirements. Maintain the training curriculum in support of TEDF.

ENVIRONMENTAL MONITORING AND SAMPLING - Coordinate and provide analytical laboratory support for the ETF. This support includes interface with the WSCF and offsite laboratory to ensure that sampling data supports the requirements of the State Waste Discharge Permit, the Delisting Petition, and the Resource Conservation and Recovery Act (RCRA) waste analysis plan. Included in this work scope is the coordination of sample collection along with the actual laboratory support. These data will be collected and reported to Ecology on a quarterly basis. This work scope includes prorated costs for utilization of the LEMIS for the storage, reporting, and archiving of these analytical data.

SAFETY - Provide Safety and Quality Assurance (QA) reviews of the ETF operating documents along with Safety and QA oversight of ETF Operations. Provide a basic level of safety overview support to be able to maintain the 200 Area ETF in a safe, minimum, environmentally compliant mode. The support includes, but is not limited to, the areas of Fire Safety, Industrial Hygiene, and Industrial Safety. Provide technical support to maintain and/or update ETF authorization basis documentation.

PERMITTING - Provide Environmental Engineering and Environmental Compliance Officer support for the 200 Area ETF. Engineering support will include the preparation of submittals required by the State Waste Discharge Permit, the Federal Delisting Petition, the RCRA interim Status Requirements, the Toxic Air Permit, and the Radioactive Air Emissions Program (RAEP) permit. Environmental Compliance Officer support will ensure that the ETF is maintained in an environmentally compliant manner. Also included in this task is the preparation of the final RCRA Part B permit application for the ETF and participation in Ecology workshops to incorporate the ETF into the Site Wide RCRA permit. Included in the scope of this task is the maintenance of a waste management program for the control and shipment of mixed, low-level, and hazardous waste generated while the ETF is in SMECO. This task will also provide for the required Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) reporting for the ETF.

TRITIUM - Provide Environmental Engineering support to comply with the requirements of the State Waste Discharge Permit and the requirements of the DOE. These requirements include the development of a tritium tracking system, confirmation of the time for the tritium to reach the Columbia River, and the evaluation of tritium separation technologies.

1A221204 - 200 Area ETF SMECO Facility Management - The work scope is divided into five major areas.

PROJECT MANAGEMENT/ADMINISTRATIVE SUPPORT - Provide ETF management overview and administrative support. Prepare performance appraisals and administer staff development activities.

PROCEDURES - Perform technical editing, approval coordination, distribution, and maintenance of the facility's administrative, maintenance, operating, and emergency procedures. Review and coordinate application of Company procedures within the ETF organization.

ENGINEERING SUPPORT - Provide cognizant/process engineering support (WHC-CM-6-1, WHC-IP-1026) to facilitate the reliability of those systems necessary to support the ETF Standby Operation. Promptly respond to system operating anomalies in standby systems (heating, ventilation, air conditioning, cooling water, compressed air, electrical distribution monitor and control system) to prevent any service interruptions. Provide technical input/evaluations to continually upgrade/maintain the ETF Operating Procedures, Alarm Response Procedures, and design documentation. This includes generating/approving engineering documentation to alter the facility hardware/software configuration to improve standby operational performance. Perform the actual software program modifications. Maintain proper lay-up status of all non-standby systems.

RADIOLOGICAL CONTROL - Provide radiological control support for maintenance activities in accordance with 10CFR835 and the Hanford Site Radiological Control Manual (HSRCM) (DOE-RL 1994). This includes job coverage for maintenance, routine surveys, radiological surveillance program, documentation, follow-up surveys, tracking and trending for reporting purposes, response to radiological alarms, "off-normal" conditions, and emergency response actions. Provide and operate a system to verify employee medical and training status prior to entry into any radiological area in compliance with Access Control and Entry System (ACES).

1A221202 - 200 Area ETF SMECO Maintenance - The work scope is divided into three major areas.

PREVENTIVE/PREDICTIVE MAINTENANCE - Plan/schedule/perform instrument calibrations, equipment Preventive Maintenance (PM) schedules, and predictive maintenance tests as scheduled. Provide maintenance and technical support to the facility as necessary. Review the results from these preventive/predictive maintenance activities and implement program improvements necessary to optimize resource usage. Provide maintenance procedure/JCS data sheet revisions as appropriate.

CORRECTIVE MAINTENANCE - Provide maintenance and technical support to the facility as necessary. Perform maintenance, work control and engineering support activities that will be required to support ETF. Effectively manage and safely control work activities which include work planning, scheduling, and performing corrective maintenance, configuration control, and related services that impact facility operations. Provide maintenance procedure/JCS data sheet revisions as appropriate.

MATERIAL CONTROL - Maintain tools, equipment, and material inventories as necessary to support efficient facility maintenance. Identify, order, receive, and maintain a spare parts inventory for essential equipment.

1A221203 - 200 Area ETF SMECO Safety & Environmental Compliance - The work scope is divided into four major areas.

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WORK BREAKDOWN STRUCTURE DICTIONARY		
1 PROJECT TITLE/PARTICIPANT Liquid Effluent Program	2 DATE 09/10/96	3 DOE HQ WBS CODE 1.3.7.3.4
4 DOE-RL WBS ELEMENT CODE 1.2.2.1.2.0000	5 WBS ELEMENT TITLE 200 Area Liquid Effluent Retention Facility (LERF) Safe Minimum Environmental Compliant Operations (SMECO)	
6 CONTRACTOR WBS ELEMENT CODE 1A2213	7 REVISION # AND AUTHORIZATION Revision 0	8 DATE October 1, 1996
9 APPROVED CHANGES 		
10 SYSTEM DESIGN DESCRIPTION None	11 BUDGET AND REPORTING NUMBER EW3130020	

A. COST ELEMENT

Labor costs, materials and equipment, purchased services, services from other Hanford contractors, internal company charges, department overhead, and G&A/SWS.

B. TECHNICAL CONTENT

Operate and maintain the LERF in a safe and environmentally compliant manner with minimum operations to store the 242-A Evaporator process condensate and other waste feeds until such time that they can be processed by the 200 Area ETF. Minimum operations are defined as those surveillances, maintenance, sampling, and support activities required to maintain the facility in a safe and environmentally compliant condition. Also included in this work scope are the annual clean out requirements required by the RCRA. Stabilization, or disposal will occur at the minimum operations funding level, and activities required to comply with regulatory agreements will be completed. Current routine reporting activities necessary to satisfy regulations for surveillance and maintenance, including Occupational Safety and Health Administration (OSHA), are included in current operating estimates.

1A221301 - 200 Area LERF SMECO Operations - The work scope is divided into three major areas.

OPERATE - Provide operational support by means of surveillance, housekeeping, sampling, and clean-out activities, support to maintenance, maintenance of facility logs, and Conduct of Operations.

ASSESSMENTS - Prepare facility performance measures and track facility performance. Provide semi-annual PEB input and perform the semi-annual self assessment, manage and track the Management Oversight Program, maintain a drill program, and administer the resulting lessons learned program. Coordinate all outside reviews and audits.

SUPPORT ORGANIZATIONS - Provide miscellaneous support to ETF such as janitorial services, weed/pest control, and other support to efficiently maintain the facility.

TRAINING - Maintain the ETF training program to meet the facility's staffing requirements. Maintain the training curriculum in support of the ETF's operation.

1A221206 - 200 Area ETF SMECO New Feeds Analysis - The work scope is divided into two major areas.

ENVIRONMENTAL MONITORING AND SAMPLING (FY 1997) - Provides support for increased or different monitoring and sampling requirements as a result of accepting new feeds into the facility. This includes changes affecting groundwater sampling, analysis, and lab support characterization.

FEASIBILITY - Provide engineering resources necessary to determine feasibility of treating potential new feedstreams at the ETF. Determine scope of potential facility modifications and/or additional treatment processes necessary to successfully treat new waste streams.

1A221304 - 200 Area LERF SMECO Facility Management - The work scope is divided into four major areas:

PROCEDURES - Perform technical editing, approval coordination, distribution, and maintenance of the facility's administrative, operating, maintenance, and emergency procedures. Review and coordinate application of Company procedures within the organization.

ASSESSMENTS - Prepare facility performance measures and track facility performance. Manage and track the Management Oversight Program, maintain a drill program, and administer the resulting lessons-learned program.

SUPPORT ORGANIZATIONS - Provide miscellaneous support to the LERF such as weed/pest control, and other support to efficiently maintain the facility.

TRAINING - Maintain the training program to meet the facility's staffing requirements. Maintain the training curriculum in support of the LERF's operation. Conduct follow-up training in support of initial facility takeover.

ENGINEERING SUPPORT - Provide cognizant/process engineering support (WHC-CM-6-1, EP 5.2) to facilitate reliable operation of the LERF. Promptly respond to operating anomalies to prevent any service interruptions to either the ETF or 242-A Evaporator facilities.

RADIOLOGICAL SUPPORT - Provide radiological control support in accordance with 10CFR835 and the HSRM. Activities include maintenance and upgrade activities, surveillance programs, documentation, tracking and trending of data for reporting purposes, follow-up surveys, sample release, response to off-normal conditions, and emergency response actions. Provide and operate a system to verify employee's medical and training status prior to entry into any radiological area in compliance with ACES.

1A221302 - 200 Area LERF SMECO Maintenance - The work scope is divided into three major areas.

PREVENTIVE/PREDICTIVE MAINTENANCE - Plan/schedule/perform instrument calibrations, equipment PMs, and predictive maintenance tests, as scheduled. Review the results from these preventive/predictive maintenance activities and implement program improvements necessary to optimize resource usage. Provide maintenance procedure/JCS data sheet revisions as appropriate.

CORRECTIVE MAINTENANCE - Provide maintenance and technical support to the facility as necessary. Perform maintenance, work control and engineering support activities required to support the LERF. Effectively manage and safely control work activities which include work planning, scheduling, and performing corrective maintenance, configuration control, and related services that impact facility operations. Provide maintenance procedure/JCS data sheet revisions as appropriate.

MATERIAL CONTROL - Maintain tools, equipment, and material inventories as necessary to support efficient facility maintenance. Identify, order, receive, and maintain a spare parts inventory for essential equipment.

1A221303 - 200 Area LERF SMECO Safety and Environmental Compliance - The work scope is divided into three major areas.

ENVIRONMENTAL MONITORING AND SAMPLING - Provide for all sample analyses of the LERF Basins. This includes laboratory interfacing. This support is needed to ensure compliance with RCRA interim status requirements.

SAFETY - Provide safety reviews of the LERF operating documents and technical support to maintain and/or revise authorization basis documentation.

PERMITTING - Provide environmental engineering support to ensure compliance with RCRA interim status requirements.

TRAINING UPGRADES - Training curriculum upgrade of approximately 27 student modules and supporting exam bank. Ensure technical accuracy and incorporate all lessons-learned from facility operations, testing, plant modifications, procedure changes, and plant and industry events.

MCS SYSTEM LOGIC AND CONTROL FUNCTIONS - Provides support to upgrade MCS Logic and revise Logic diagrams accordingly.

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1 PROJECT TITLE/PARTICIPANT Liquid Effluent Program	2 DATE 09/10/96	3 DOE HQ WBS CODE 1.3.7.3.4
4 DOE-RL WBS ELEMENT CODE 1.2.2.1.2.0000	5 WBS ELEMENT TITLE 200 Area Upgrades and Enhancements	
6 CONTRACTOR WBS ELEMENT CODE 1A2215	7 REVISION # AND AUTHORIZATION Revision 0	8 DATE October 1, 1996
9 APPROVED CHANGES		
10 SYSTEM DESIGN DESCRIPTION None	11 BUDGET AND REPORTING NUMBER EW3130020	

A. COST ELEMENT

Labor costs, materials and equipment, purchased services, services from other Hanford contractors, internal company charges, department overhead, and G&A/SWS.

B. TECHNICAL CONTENT

Ensure facility-specific training materials and plant operations software are current and include all updates from lessons learned. Also, to ensure completion of efforts to direct groundwater feed material to the LERF basins. These efforts directly support the ability to maintain a qualified and technically competent staff and to obtain sufficient feed materials to operate the 200 Area Liquid Effluent Facilities. Because these facilities are relatively new, significant facility modifications or equipment purchases are assumed not to be needed for the next several years. Funding for General Plant Projects is not planned until FY 2002.

1A221504 - UP-1 PIPELINE UPGRADES - Provides procurement, construction, engineering overview, and management during construction for the UP-1 Pipeline connections between the UP-1 pump station and the LERF basins.

1A221505 - ETF UPGRADES - The work scope is divided into two major areas; Training Upgrades and Motor Control System (MCS) Logic and Control Functions. This work is unfunded in FY 1997 and FY 1998.

ENGINEERING SUPPORT - Provide incremental cognizant/process engineering support (WHC-CM-6-1, EP 5.2) to facilitate the reliable operation of the ETF. Promptly respond to system operating anomalies to prevent any service interruptions.

RADIOLOGICAL CONTROL - Provide radiological control support for maintenance and operations activities in accordance with 10CFR835 and the HSRCM. This includes job coverage for maintenance, routine surveys, radiological surveillance program, documentation, follow-up surveys, tracking and trending for reporting purposes, response to radiological alarms, "off-normal" conditions, and emergency response actions. Provide and operate a system to verify employee's medical and training status prior to entry into any radiological area in compliance with ACES.

1A221602 - MAINTENANCE - The work scope is divided into two major areas.

CORRECTIVE MAINTENANCE - Provide maintenance and technical support to the facility as necessary. Perform maintenance, work control, and engineering support activities that will be required to operate the ETF. Effectively manage and safely control work activities which include work planning, scheduling, and performing corrective maintenance, configuration control, and related services that impact facility operations. Provide maintenance procedure/JCS data sheet revisions as appropriate.

MATERIAL CONTROL - Incremental materials required as a result of plant operations to process 242-A Evaporator condensate.

1A221603 - SAFETY AND ENVIRONMENTAL COMPLIANCE - The work scope is divided into three major areas.

ENVIRONMENTAL MONITORING AND SAMPLING - Coordinate and provide sample analyses to support the two planned campaigns to process 242-A Evaporator feed.

WASTE HANDLING - Provide support to hazardous waste, low-level and mixed waste handling for the operation of the ETF during treatment of process condensate. This includes the tasks and costs necessary to characterize the waste and ship the waste from the ETF to the Central Waste Complex. Included is the implementation of the Waste Management Program during the operation of ETF. This includes the Operations support for solid waste handling procedures, JCS support to the checklists, and waste shipping support.

SAFETY - Provides support from industrial safety for the liquid effluent facilities operations and safety related lab analyses.

1A221604 - FACILITY MANAGEMENT - The work scope is divided into four major areas.

PROCEDURES - Perform technical editing, approval coordination, distribution, and maintenance of the facility's administrative, maintenance, and operating procedures.

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WORK BREAKDOWN STRUCTURE DICTIONARY		
1 PROJECT TITLE/PARTICIPANT Liquid Effluent Program	2 DATE 09/10/96	3 DOE HQ WBS CODE 1.3.7.3.4
4 DOE-RL WBS ELEMENT CODE 1.2.2.1.2.0000	5 WBS ELEMENT TITLE 200 Area ETF Evaporator Campaign	
6 CONTRACTOR WBS ELEMENT CODE 1A2216	7 REVISION # AND AUTHORIZATION Revision 0	8 DATE October 1, 1996
9 APPROVED CHANGES		
10 SYSTEM DESIGN DESCRIPTION None	11 BUDGET AND REPORTING NUMBER EW3130020	

A. COST ELEMENT

Labor costs, materials and equipment, purchased services, services from other Hanford contractors, internal company charges, department overhead, and G&A/SWS.

B. TECHNICAL CONTENT

Operate and maintain the 200 Area ETF in accordance with the operating schedule in a safe, cost effective, and environmentally compliant manner. This includes operation of the ETF in such a manner as to treat the 242-A Evaporator Process Condensate in two annual ETF campaigns. Although waste volume projections vary from year to year, cost projections for processing remain level (with escalation) in the outyears. Because significant changes in planning for major programs (e.g., TWRS) are anticipated, this conservative budgeting approach will be used until waste volume projections are better defined. Additionally, future funding needs to be maintained to accommodate indeterminate feeds and uncertainties in potential feed constituents.

1A221601 - OPERATIONS - The work scope is divided into three major areas.

OPERATE - Maintain the facility to high standards in areas of housekeeping and Conduct of Operations. Operations will be required to perform necessary sampling and compliance with the operating permit. Additionally, Operations will perform in-house sample verifications for process control. Perform routine operating activities that support the 200 Area ETF. These routine activities will consist of control room activities, and support to sampling, surveillances, maintenance, waste handling, and shipping tasks.

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WORK BREAKDOWN STRUCTURE DICTIONARY		
1 PROJECT TITLE/PARTICIPANT Liquid Effluent Program	2 DATE 09/10/96	3 DOE HQ WBS CODE 1.3.7.3.4
4 DOE-RL WBS ELEMENT CODE 1.2.2.1.2.0000	5 WBS ELEMENT TITLE 200 Area ETF Non-Evaporator Campaign	
6 CONTRACTOR WBS ELEMENT CODE 1A2217	7 REVISION # AND AUTHORIZATION Revision 0	8 DATE October 1, 1996
9 APPROVED CHANGES		
10 SYSTEM DESIGN DESCRIPTION None	11 BUDGET AND REPORTING NUMBER EW3130020	

A. COST ELEMENT

Labor costs, materials and equipment, purchased services, services from other Hanford contractors, internal company charges, department overhead, and G&A/SWS.

B. TECHNICAL CONTENT

Operate and maintain the 200 Area ETF in accordance with the operating schedule in a safe, cost effective, and environmentally compliant manner. This includes operation of the ETF in such a manner as to treat non 242-A Evaporator feed. Although waste volume projections vary from year to year, cost projections for processing remain level (with escalation) in the outyears. Because significant changes in planning for major programs (e.g., TWRS) are anticipated, this conservative budgeting approach will be used until waste volume projections are better defined. Additionally, future funding needs to be maintained to accomodate indeterminate feeds and uncertainties in potential feed constituents.

1A221701 - OPERATIONS - The work scope is divided into three major areas.

OPERATE - Maintain the facility in high standards in the area of housekeeping and Conduct of Operations. Operations will be required to perform necessary sampling for process and compliance with operating permit. Additionally, Operations will perform in-house sample verifications for process control. Perform routine operating activities that support the 200 Area ETF. These routine activities will consist of control room activities, and support to sampling, surveillances, maintenance, waste handling, and shipping tasks. Perform surveillance duties on pump stations, equipment, manholes, and pipeline.

ASSESSMENTS - Prepare facility performance measures and track facility performance resulting from the 242-A Evaporator campaigns..

SUPPORT ORGANIZATIONS - Administer procurement of miscellaneous materials and support from other organizations to efficiently operate the facility.

TRAINING - Maintain the ETF training program/curriculum in support of ETF operations.

SUPPORT ORGANIZATIONS - Administer procurement of miscellaneous materials and support from other organizations to efficiently operate the facility.

TRAINING - Maintain the ETF training program/curriculum in support of ETF operations.

ENGINEERING SUPPORT - Provide incremental cognizant/process engineering support (WHC-CM-6-1, EP 5.2) to facilitate the reliable operation of the ETF. Promptly respond to system operating anomalies to prevent any service interruptions.

RADIOLOGICAL CONTROL - Provide radiological control support for maintenance activities in accordance with 10CFR835 and the HSRM. This includes job coverage for maintenance, routine surveys, radiological surveillance program, documentation, follow-up surveys, tracking and trending for reporting purposes, response to radiological alarms, "off-normal" conditions, and emergency response actions. Provide and operate a system to verify employee's medical and training status prior to entry into any radiological area in compliance with ACES.

1A221702 - MAINTENANCE - The work scope has two major areas.

CORRECTIVE MAINTENANCE - Provide maintenance and technical support to the facility as necessary. Perform maintenance, work control, and engineering support activities that will be required to support the ETF. Effectively manage and safely control work activities which include work planning, scheduling, and performing corrective maintenance, configuration control, and related services that impact facility operations. Provide maintenance procedure/JCS data sheet revisions as appropriate.

MATERIAL CONTROL - Incremental materials required as a result of operations to process feed other than 242A Evaporator condensate.

1A221703 - SAFETY AND ENVIRONMENTAL COMPLIANCE - The work scope is divided into two major areas.

ENVIRONMENTAL MONITORING AND SAMPLING - Coordinate and provide sample analyses to support planned non-evaporator campaigns.

WASTE HANDLING - Provide support to hazardous waste, low-level waste, and mixed waste handling during the operation and treatment of the N Basin and UP-1 groundwater. This support includes the tasks and costs necessary to characterize the waste and ship to the Central Waste Complex. Included is the implementation of the Waste Management Program during the operation of the ETF. This includes the operation support for solid waste handling procedures, JCS support to the checklist, and waste shipping support.

1A221704 - FACILITY MANAGEMENT - The work scope is divided into four major areas.

PROCEDURES - Perform technical editing, approval coordination, distribution, and maintenance of the facility's administrative, maintenance and operating procedures resulting from the two planned non-evaporator campaigns.

ASSESSMENTS - Prepare facility performance measures and track facility performance resulting from the two planned non-evaporator campaigns.

and risk is minimal, a graded approach will be taken when implementing potentially expensive or restrictive upgrades or procedures.

Provide for waste management activities by operations personnel at the 300 Area TEDF, including disposal of hazardous wastes, receipt of chemicals for plant operations, and other miscellaneous tasks which may be required, such as surveillances.

Monitor and operate the 300 Area process sewer which provides the wastewater flow that is treated at the 300 Area TEDF. Provide process engineering services, including cognizant engineering support through configuration control, engineering change notices, direction to operations, and other engineering practices.

The 300 Area LEF staff will perform 300 Area TEDF process sampling and NPDES permit sampling in adherence to the sampling plan to assure efficient, safe plant operations which result in permit compliant discharges from the facility. Provide for activities from outside organizations in support of the 300 Area TEDF waste management such as Transportation, WSCF, Utilities, etc.

1A231002 - 300 Area TEDF SMECO Maintenance:

Provide a trained maintenance, planning, maintenance engineering and material control staff to support the 300 Area TEDF operations.

Fully implement the work management system. Prepare and issue maintenance schedules as required by operations.

Issue scheduled reports and performance indicators for maintenance control.

Accomplish required instrument calibrations and corrective maintenance in an efficient manner that supports continuity of plant operations.

Provide a preventive and predictive maintenance program.

Ensure required chemicals, materials, and parts are ordered, received, and properly controlled.

1A231003 - 300 Area TEDF SMECO Safety & Environmental Compliance:

Environmental Compliance Officer partial support to the 300 Area TEDF to control, coordinate, and respond to Regulatory requirements and compliance items for this facility.

Provide for safety and environmental compliance activities from outside organizations in support of the 300 Area TEDF. Includes Emergency, safety, and quality service (ESQ), Permitting, Fire Department, etc.

WORK BREAKDOWN STRUCTURE DICTIONARY		
1 PROJECT TITLE/PARTICIPANT Liquid Effluents Program	2 DATE 05/20/96	3 DOE HQ WBS CODE 1.3.7.3.4
4 DOE-RL WBS ELEMENT CODE 1.2.2.1.3	5 WBS ELEMENT TITLE 300 Area Treated Effluent Disposal Facility (TEDF) Safe Minimum Environmental Compliant Operations (SMECO)	
6 CONTRACTOR WBS ELEMENT CODE 1A2310	7 REVISION # AND AUTHORIZATION Revision 0	8 DATE October 1, 1996
9 APPROVED CHANGES		
10 SYSTEM DESIGN DESCRIPTION None	11 BUDGET AND REPORTING NUMBER EW3130020	

A. COST ELEMENT

Labor costs, materials and equipment, purchased services, support from other Hanford contractors, internal company charges, department overhead, and G&A/SWS.

B. TECHNICAL CONTENT

Provide safe, cost effective, and environmentally sound operations of 300 Area TEDF. The scope of this effort includes the following:

- operation of 300 Area TEDF
- operation and monitoring of the 300 Area Process Sewer

1A231001 - 300 Area TEDF SMECO Operations:

Provides for routine operator activities to support the 300 Area TEDF. Activities classified as routine include housekeeping, response to alarms and indicators, validation of procedures, review of required reading assignments, maintenance of facility logs and associated documentation, manning the 300 Area TEDF Control Room, and other miscellaneous tasks required to support operations.

Operations shall follow Conduct of Operations as outlined in the Conduct of Operations matrix, DOE Order 5480.19. Much of the cost associated with operating the facility is attributed to compliance with Conduct of Operations requirements. Where safety will not be compromised

WORK BREAKDOWN STRUCTURE DICTIONARY		
1 PROJECT TITLE/PARTICIPANT Liquid Effluents Program	2 DATE 05/22/96	3 DOE HQ WBS CODE 1.3.7.3.4
4 DOE-RL WBS ELEMENT CODE 1.2.2.1.3.0000	5 WBS ELEMENT TITLE 340 Facility Safe Minimum Environmental Compliant Operations (SMECO)	
6 CONTRACTOR WBS ELEMENT CODE 1A2340	7 REVISION # AND AUTHORIZATION Revision 0	8 DATE October 1, 1996
9 APPROVED CHANGES		
10 SYSTEM DESIGN DESCRIPTION None	11 BUDGET AND REPORTING NUMBER EW3130020	

A. COST ELEMENT

Labor costs, materials and equipment, purchased services, services from other Hanford contractors, internal company charges, department overhead, and G&A/SWS.

B. TECHNICAL CONTENT

Provide safe, cost effective, and environmentally sound operations of the 340 Waste Storage and Handling Facility. The scope of this effort includes the following:

- operation of 340 Facility
- operation and monitoring of the Radioactive Liquid Waste System, 307 Basins, and the Retention Process Sewer (RPS)
- compliant railcar waste shipments to 200E Tank Farms

1A234001 - 340 Facility SMECO Operations:

Provides for routine operator activities to support the 340 Facility. Activities classified as routine include housekeeping, periodic inspection and cleaning of the valve boxes, response to alarms and indicators, validation of procedures, review of required reading assignments, maintenance of facility logs and associated documentation, and other miscellaneous tasks required to support operations.

Provide for waste management activities by the operations personnel at the 340 Facility, including railcar shipments in order to meet the 90-day clock requirements, disposal of

1A231004 - 300 Area TEDF SMECO Facility Management:

Provide management direction for 300 Area TEDF operations. Includes management control over operations for the 300 Area TEDF and sewer systems, as well as employee development, program oversight and operational reporting. Work scope includes required training attendance by operations and administrative staff, as well as training development costs when needed, and class costs. Required training includes certification training for operators and management, facility drills, emergency preparedness, and other mandated training.

Provide for activities from outside organizations in support of the 300 Area TEDF management including laundry and custodial, locksmith, light duty fleet, and non-regulated waste disposal, etc.

Maintain conduct of operations, provide quality assurance, and accident analysis.

Provide for activities from outside organizations in support of 340 Facility Management including laundry and custodial, respirators, locksmith, light duty fleet, non-regulated waste disposal, etc.

radioactive solid waste at the 340-B facility, disposal of wastes, and other miscellaneous tasks which may be required such as surveillances, etc.

Provide process engineering services, including cognizant engineering support through configuration control, engineering change notices, direction to operations, and other engineering practices.

Provide for activities from outside organizations in support of 340 Facility waste management such as Railcar Services, Health Physics, Hanford Patrol, etc.

1A234002 - 340 Facility SMECO Maintenance:

Provide a trained maintenance, planning, maintenance engineering, and material control staff to support the 340 Facility operations.

Fully implement the work management system.

Prepare and issue maintenance schedules as required by operations. Issue scheduled reports and performance indicators as required by operations.

Accomplish required instrument calibrations and corrective maintenance in an efficient manner that supports continuity of plant operations.

Provide a preventive and predictive maintenance program.

Ensure required materials and parts are ordered, received, and properly controlled.

1A234003 - 340 Facility SMECO Safety & Environmental Compliance:

Environmental Compliance Officer partial support to the 340 Facility to control, coordinate, and respond to Regulatory requirements and compliance items for this facility.

Provide for safety and environmental compliance activities from outside organizations in support of the 340 Facility; includes ESQ, Fire Department, etc..

1A234004 - 340 Facility SMECO Facility Management:

Provide management direction for 340 Facility operations, which includes management control over the 340 Facility and the 307 Basins, as well as employee development, program oversight, and operational reporting. Work scope includes required training attendance by operations and administrative staff, as well as training development costs when needed, and class costs. Required training includes certification training for operators and management, facility drills, emergency preparedness, and other mandated training.

WORK BREAKDOWN STRUCTURE DICTIONARY		
1 PROJECT TITLE/PARTICIPANT Liquid Effluents Program	2 DATE 09/10/96	3 DOE HQ WBS CODE 1.3.7.3.4
4 DOE-RL WBS ELEMENT CODE 1.2.2.1.3.0000	5 WBS ELEMENT TITLE 340 Facility Closeout Activities	
6 CONTRACTOR WBS ELEMENT CODE 1A234X	7 REVISION # AND AUTHORIZATION Revision 0	8 DATE October 1, 1996
9 APPROVED CHANGES		
10 SYSTEM DESIGN DESCRIPTION None	11 BUDGET AND REPORTING NUMBER EW3130020	

A. COST ELEMENT

Labor costs, materials and equipment, purchased services, services from other Hanford contractors, internal company charges, department overhead, and G&A/SWS.

B. TECHNICAL CONTENT

Identify those systems essential to the safe operation of the 340 Facility and provide for their continued maintenance; to evaluate remaining 340 Facility systems with respect to the risk of failure prior to termination; to define and implement preliminary facility stabilization actions that can be accomplished prior to the post-shutdown terminal clean-out; to address the process of decoupling the RPS from the Radioactive Liquid Waste System (RLWS); and to review, select, design, and implement upgrade options that accommodate this. Additionally, up-front actions may be taken on any improvements that could facilitate long-term surveillance and maintenance, such as weatherization, fire safety, lighting, ventilation, monitoring, security, and any residual waste/contamination isolation/containment.

1A234X01 - 340 Facility Closeout Activities:

Closeout activities initiated in FY 1996 will continue in FY 1997. Under consideration are the cleanout of standby storage tanks or abandoned sections of RLWS; the installation of basin cover, truck port, and in-line radiation monitor; and the purchase of a standby treatment package to deal with waste solutions unable to satisfy TEDF feed criteria.

WHC-SP-1097, Rev. 2
LEP FY 1997 Work Plan (WBS 1.2.2)

WORK BREAKDOWN STRUCTURE DICTIONARY		
1 PROJECT TITLE/PARTICIPANT Liquid Effluents Program	2 DATE 09/10/96	3 DOE HQ WBS CODE 1.3.7.3.4
4 DOE-RL WBS ELEMENT CODE 1.2.2.1.3.0000	5 WBS ELEMENT TITLE 300 Area TEDF Enhancements	
6 CONTRACTOR WBS ELEMENT CODE 1A2317	7 REVISION # AND AUTHORIZATION Revision 0	8 DATE October 1, 1996
9 APPROVED CHANGES		
10 SYSTEM DESIGN DESCRIPTION None	11 BUDGET AND REPORTING NUMBER EW3130020	

A. COST ELEMENT

Labor costs, materials and equipment, purchased services, services from other Hanford contractors, internal company charges, department overhead, and G&A/SWS.

B. TECHNICAL CONTENT

Provide safe, efficient operation of the 300 Area TEDF, but at a level which includes needed and requested work scope which has been deemed to be of slightly less priority than minimal base operations. Because the 300 Area TEDF is a relatively new facility, significant facility modifications or equipment purchases are assumed not to be needed for the next few years. Additional expense funds are planned for TEDF enhancements in FY 1999, after four years of operation. Funding for General Plant Projects is not planned until FY 2000.

1A231704 - 300 Area TEDF Enhanced Facility Management:

Additional work scope to provide non-matrixed training such as employee development and off-site technical training. This work is unfunded in FY 1997 and FY 1998.

1A241306 - Best Management Practices:

Finalize a Best Management Practices (BMP) Engineering Report. This report will identify options for the selection and implementation of BMP. Selection of the proper BMP will identify contaminants, flow rates, alternatives, costs, practices, and procedures that will satisfy the guidelines in the Plan and Schedule and those provided by Ecology. Using the criteria in the Plan and Schedule, there are approximately 100 Miscellaneous Streams that must be addressed in the BMP report. A list of these streams was submitted to Ecology in May 1995. For each stream, a preferred alternative will be selected and justified in the BMP Engineering report.

1A241307 - Miscellaneous Streams Inventories:

Prepare and submit a revised inventory of Miscellaneous Streams as directed in the Plan and Schedule.

WORK BREAKDOWN STRUCTURE DICTIONARY		
1 PROJECT TITLE/PARTICIPANT Liquid Effluents Program	2 DATE 09/10/96	3 DOE HQ WBS CODE 1.3.7.3.4
4 DOE-RL WBS ELEMENT CODE 1.2.2.1.4.0000	5 WBS ELEMENT TITLE Miscellaneous Streams	
6 CONTRACTOR WBS ELEMENT CODE 1A2413	7 REVISION # AND AUTHORIZATION Revision 0	8 DATE October 1, 1996
9 APPROVED CHANGES		
10 SYSTEM DESIGN DESCRIPTION None	11 BUDGET AND REPORTING NUMBER EW3130020	

A. COST ELEMENT

Labor costs, materials and equipment, purchased services, services from other Hanford contractors, internal company charges, department overhead, and G&A/SWS.

B. TECHNICAL CONTENT

Meet the commitments set forth in the Plan and Schedule and ensure that all future miscellaneous streams are in compliance with the requirements of the Plan and Schedule.

1A241304 - Miscellaneous Stream Permitting:

Develop strategy, gather information, and prepare permit applications. Schedule, attend, and document meetings related to permit applications and/or draft permits.

Complete WAC 173-216 Permit Implementation Plan.

Provide advice and guidance to facilities on Miscellaneous Stream issues.

Oversee the maintenance of stream permits.

1A250207 - Liquid Effluents Program Support to Construction

Program office oversight, expense fund management, criteria document control, and other program related interface activities to support the BAT/AKART implementation are also expense funded.

1A250210 - Startup Checklist

The plants perform their own readiness and provide funds for that work. The TEDF, however, has some minor interfaces, both administrative and physical, that will require some startup activity. Because the TEDF is funded out of the Liquid Effluents Program, this startup activity is funded in this budget.

WHC-SP-1097, Rev. 2
LEP FY 1997 Work Plan (WBS 1.2.2)

WORK BREAKDOWN STRUCTURE DICTIONARY		
1 PROJECT TITLE/PARTICIPANT Liquid Effluents Program	2 DATE 09/10/96	3 DOE HQ WBS CODE 1.3.7.3.15
4 DOE-RL WBS ELEMENT CODE 1.2.2.1.5	5 WBS ELEMENT TITLE Phase II Streams Project W-252	
6 CONTRACTOR WBS ELEMENT CODE 1A2502	7 REVISION # AND AUTHORIZATION Revision 0	8 DATE October 1, 1996
9 APPROVED CHANGES		
10 SYSTEM DESIGN DESCRIPTION None	11 BUDGET AND REPORTING NUMBER EW3130020	

A. COST ELEMENT

Labor costs, materials and equipment, purchased services, services from other Hanford contractors, internal company charges, department overhead, and G&A/SWS.

B. TECHNICAL CONTENT

This activity supports the October 1997 implementation of BAT/AKART for the 200 Areas Phase II Streams. This work scope is required by TPA Milestone M-17-00B.

1A250201 - Permitting

Implementing BAT/AKART for the Phase II streams covered by this project will require modification of existing wastewater permits in the 200 Area. This task provides the funds for the permitting organization to rewrite and obtain the necessary approvals for those modifications.

1A250203 - Non-Liquid Effluents Program Construction Support

Project W-252 provides design and construction funds to achieve the necessary facility modifications to implement the BAT/AKART. The capital funds for the project provide most of this work; however, there is some project related work such as design reviews, facility interface, health physics technician (HPT) support, and other reviews that are expense funded activities.

2.3 WORK BREAKDOWN STRUCTURE RESPONSIBILITY ASSIGNMENT MATRIX

The following tables show the Contractor and RL Site Work Breakdown Structures and the corresponding programmatic responsibility assignments.

2.3.1. Contractor Work Breakdown Structure Index and Programmatic Responsibility Assignment Matrix					
PROGRAM ELEMENT	ACTIVITY	COST ACCOUNT	TITLE	RESP MANAGER	RESP ORG
1A2	1A21	1A2111	Program Management	FT Green	86500
		1A2112	Program Fees / Misc Charges	FT Green	86500
	1A22	1A2211	200 A TEDF SMECO	DW Lindsey	86200
		1A2212	200 A ETF SMECO	DW Lindsey	86200
		1A2213	200 A LERF SMECO	DW Lindsey	86200
		1A2215	200 A Enhancements	DW Lindsey	86200
		1A2216	200 A ETF Evaporator Processing	DW Lindsey	86200
		1A2217	200 A ETF Non-Evaporator Processing	DW Lindsey	86200
	1A23	1A2310	300 A TEDF SMECO	LW Roberts	86700
		1A2340	340 Facility SMECO	LW Roberts	86700
		1A234X	340 Facility Closeout	LW Roberts	86700
		1A2317	300 A TEDF Enhancements	LW Roberts	86700
	1A24	1A2413	Miscellaneous Streams	DW Lindsey	86200
	1A25	1A2502	Phase II Streams BAT/AKART Implementation	DW Lindsey	86200
2A2			Liquid Effluents Program Capital Equipment	FT Green	86500
3A2	3A25	3A2500	Phase II Streams BAT/AKART Implementation	KS Pedersen	8K680

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3.3 MILESTONE DESCRIPTION SHEETS	3.3-1

2.3.2. RL Site Work Breakdown Structure Index and Programmatic Responsibility Assignment Matrix

PROGRAM ELEMENT	ACTIVITY	COST ACCOUNT	TITLE	RESP MANAGER	RESP ORG
1.2.2.1	1.2.2.1.1	1.2.2.1.1.0000	Program Management	FT Green	86500
		1.2.2.1.1.0000	Program Fees / Misc Charges	FT Green	86500
	1.2.2.1.2	1.2.2.1.2.0000	200 A TEDF SMECO	DW Lindsey	86200
		1.2.2.1.2.0000	200 A ETF SMECO	DW Lindsey	86200
		1.2.2.1.2.0000	200 A LERF SMECO	DW Lindsey	86200
		1.2.2.1.2.0000	200 A Enhancements	DW Lindsey	86200
		1.2.2.1.2.0000	200 A ETF Evaporator Processing	DW Lindsey	86200
		1.2.2.1.2.0000	200 A ETF Non-Evaporator Processing	DW Lindsey	86200
	1.2.2.1.3	1.2.2.1.3.0000	300 A TEDF SMECO	LW Roberts	86700
		1.2.2.1.3.0000	340 Facility SMECO	LW Roberts	86700
		1.2.2.1.3.0000	340 Facility Closeout	LW Roberts	86700
		1.2.2.1.3.0000	300 A TEDF Enhancements	LW Roberts	86700
	1.2.2.1.4	1.2.2.1.4.0000	Miscellaneous Streams	DW Lindsey	86200
	1.2.2.1.5	1.2.2.1.5.0000	Phase II Streams BAT/AKART Implementation	DW Lindsey	86200
2A2	1.2.2.1	1.2.2.1	Liquid Effluents Program Capital Equipment	FT Green	86500
3A2	1.2.2.1.5	1.2.2.1.5.0000	Phase II Streams BAT/AKART Implementation	KS Pedersen	8K680

3.0 SCHEDULE BASELINE

3.1 PROGRAM MASTER BASELINE SCHEDULE

The following two schedules represent the Liquids Effluents Program Master Baseline Schedule for the execution year and for the execution year through FY 2002.

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**LIQUID EFFLUENT SERVICES
PROGRAM MASTER
BASELINE SCHEDULE**

FY 97
DRAWN BY Steve Sanborn 373-3284

ACTIVITY	DESCRIPTION	MS TYPE	START/ FINISH	1996			1997								
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1A2111	PROGRAM MANAGEMENT		10/02/95 03/28/01												
1A22	200 AREA OPERATIONS		01/03/95 08/04/97												
1A2211	200A TREATED EFFLUENT DISPOSAL FACILITY (TEDF)		10/02/95 09/28/93												
SWD_TEDF_FEED01	T PLANT EFFLUENT		10/02/95 09/28/29												
SAS_TEDF_FEED01	222-S LAB EFFLUENT		10/02/95 09/28/29												
KEH_TEDF_FEED01	242-A-81 WATER EVAPORATO R SERVICES BLDG EFFLUENT		10/02/95 09/28/29												
KEH_TEDF_FEED02	284-E POWER PLANT (INCL W-252 EFFLUENT)		10/02/95 09/28/29												
TWAS_TEDF_FEED01	241 TANK FARM COOLING (INCL. W-252 EFFLUENT		10/02/95 09/28/33												
1KP4M1	PUREX EFFLUENT		10/02/95 12/02/97												
1KW00	B PLANT EFFLUENT (INCL. W-252 EFFLUENT)		10/02/95 08/07/13												
TWAS_TEDF_FEED02	242-A EVAPORATOR EFFLUENT		10/02/95 09/28/11												
TRAN_TEDF_FEED03	PFP EFFLUENT		10/02/95 09/28/07												
TWAS_TEDF_FEED03	PROJECT W-252 EFFLUENT		04/02/97 05/04/29												
1A2212	200A EFFLUENT TREATMENT FACILITIES (ETF)		10/01/96 09/28/35												
1A2212030D57	COMPLETE BIENNIAL TRITIU M EVALUATION TECHNOLOGY	T-TPA INTERIM	08/29/97 08/29/97												
ER ETF_FEED01	N BASIN WATER		10/01/96 09/29/97												
TRAN ETF_FEED01	MISC. FACILITY DEACTIVATION WASTE		10/01/96 09/28/07												
1A2213	200A LIQUID EFFLUENT RET ENTION FACILITY (LEAF)		10/02/95 09/28/01												
242-A_EVAP ETF	RECEIVE PROCESS CONCENTRA TE FROM 242-A EVAPORATA		10/02/95 09/30/98												
OUTAGE	READINESS ASSESSMENT (OUT YEARS)		10/02/96 12/31/96												
1A2215	200 AREA ENHANCEMENTS		10/02/95 09/28/01												
1A23	300 AREA OPERATIONS		10/02/95 03/23/26												

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**LIQUID EFFLUENTS SERVICES
PROG. MASTER
BASELINE SCHEDULE**

FISCAL YEARS 1997 - 2001
Drawn by Steve Sanborn 373-3284

Drawn by Steve Sandorn 373-3294

ACTIVITY	DESCRIPTION	MS TYPE	START/ FINISH	1995	1996	1997	1998	1999	2000	2001					
				OCT	JAN	APR	JUL	OCT	JAN	APR	JUL	OCT	JAN	APR	JUL
				FY 1997			FY 1998			FY 1999			FY 2000		
1A2111	PROGRAM MANAGEMENT		10/02/95 09/28/01												
1A22	200 AREA OPERATIONS		01/03/95 08/04/97												
1A2211	200A TREATED EFFLUENT DISPOSAL FACILITY (TEDF)		10/02/95 09/28/33												
SWD_TEDF_FEED01	T PLANT EFFLUENT		10/02/95 09/28/29												
SAS_TEDF_FEED01	222-S LAB EFFLUENT		10/02/95 09/28/29												
KEH_TEDF_FEED01	242-A-81 WATER EVAPORATO R SERVICES BLDG EFFLUENT		10/02/95 09/28/29												
KEH_TEDF_FEED02	284-E POWER PLANT (INCL W-252 EFFLUENT)		10/02/95 09/28/29												
TWRS_TEDF_FEED01	241 TANK FARM COOLING (INCL W-252 EFFLUENT		10/02/95 09/28/33												
1KP4M1	PUREX EFFLUENT		10/02/95 12/02/97												
1KW00	B PLANT EFFLUENT (INCL W-252 EFFLUENT)		10/02/95 08/07/13												
TWRS_TEDF_FEED02	242-A EVAPORATOR EFFLUENT		10/02/95 09/28/11												
TRAM_TEDF_FEED03	PPF EFFLUENT		10/02/95 09/28/07												
TWRS_TEDF_FEED03	PROJECT W-252 EFFLUENT		04/02/97 05/04/29												
1A2212	200A EFFLUENT TREATMENT FACILITIES (ETP)		10/01/96 09/28/35												
1A2212030057	COMPLETE BIENNIAL TRAITIU M EVALUATION TECHNOLOGY	T-TPA INTERIM	08/29/97 08/29/97												
1A2212030063	COMPLETE BIENNIAL TRAITIU M EVALUATION TECHNOLOGY	T-TPA INTERIM	08/31/99 08/31/99												
1A2212030067	COMPLETE BIENNIAL TRAITIU M EVALUATION TECHNOLOGY	T-TPA INTERIM	08/31/01 08/31/01												
ER ETF_FEED01	N BASIN WATER		10/01/96 09/29/97												
TRAM ETF_FEED01	MISC. FACILITY DEACTIVATION WASTE		10/01/96 09/28/07												
ER ETF_FEED02	ERDF LEACHATE		10/02/97 09/28/29												
SNF ETF_FEED01	K FUEL WASTE CLEANUP		10/01/98 09/29/00												

N-25-050

N-25-05F

N-25-05B

WHC-SP-1097, Rev. 2

**LIQUID EFFLUENTS SERVICES
PROGRAM MASTER
BASELINE SCHEDULE**

FY 97
DRAWN BY Steve Sanborn 373-3294

ACTIVITY	DESCRIPTION	MS TYPE	START/ FINISH	1996			1997								
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1A231	300A 310 FACILITY OPERATIONS		10/02/95 04/01/02												
1A234	300A 340 FACILITY OPERATIONS		10/02/95 04/01/02												
1A2413	MISCELLANEOUS STREAMS		10/02/95 11/04/99												
1A2502	BRT IMPLEMENTATION PHASE II STREAMS		10/02/95 10/31/97												

3.2 MILESTONE LIST

The following table lists the Liquid Effluents Program milestones from FY 1994 through FY 2006. Actual completion is indicated as appropriate.

ACTIVITY	DESCRIPTION	MS TYPE	START/ FINISH	1995	1996				1997				1998				1999				2000				2001			
					OCT	JAN	APR	JUL	OCT	JAN	APR	JUL	OCT	JAN	APR	JUL	OCT	JAN	APR	JUL	OCT	JAN	APR	JUL	OCT	JAN	APR	JUL
					FY 1997				FY 1998				FY 1999				FY 2000				FY 2001							
1A2213	200A LIQUID EFFLUENT RETENTION FACILITY (LERF)		10/02/95 09/28/01																									
242-A_EVAP ETF	RECEIVE PROCESS CONCENTRATE FROM 242-A EVAPORATOR		10/02/95 09/30/98																									
1A2216	200A EVAPORATOR CAMPAIGNS		10/01/97 09/30/03																									
1A2217	200A NON-EVAPORATOR CAMPAIGNS		10/01/97 09/30/03																									
OUTAGE	READINESS ASSESSMENT (OUT YEARS)		10/02/96 12/31/96																									
1A2215	200 AREA ENHANCEMENTS		10/02/95 09/28/01																									
1A23	300 AREA OPERATIONS		10/02/95 03/23/96																									
1A231	300A 310 FACILITY OPERATIONS		10/02/95 04/01/02																									
1A234	300A 340 FACILITY OPERATIONS		10/02/95 04/01/02																									
1A2413	MISCELLANEOUS STREAMS		10/02/95 11/04/99																									
1A2502	BAT IMPLEMENTATION PHASE II STREAMS		10/02/95 10/31/97																									
1A2502_M	BAT IMPLEMENTATION PHASE II STREAMS	T-TPA INTERIM	10/31/97 10/31/97																									

N-17-008

Liquid Effluents Program Milestones					
Milestone Type	Control Number	RL WBS	ADS Number	Milestone Description	Milestone Completion Date
	FY 1995				
RL	LEP-94-024	1.2.2.1.2	2300-0	Submit Operations and Maintenance Document to Ecology for Compliance with WAC 173-240-150 (200 Area ETF) Completed 11/30/94	11/30/94 RL 12/31/94 Ecology
RL	LEP-94-002	1.2.2.1.2	2300-0	Readiness Review Team Declares Readiness (200 Area ETF) C/R LET-95-025 revised date Completed 10/19/95	03-31-95 10/19/95 to RL
RL	LEP-94-004	1.2.2.1.2	2300-0	Complete On Job Training (200 Area ETF personnel) C/R LET-95-025 deleted milestone - duplicate of LEP-95-033	04-27-95 deleted
RL	LEP-94-028	1.2.2.1.1	2300-0	Complete Operational Testing of LERF Basin #44 Completed 07/29/94	11/15/94 to RL
RL	LEP-94-032	1.2.2.1.5	2300-0	Initiate ADP Plan Preparation (Project W-252, Phase II Streams) Completed 10/11/94	12/01/94 to RL
RL	LEP-95-037	1.2.2.1.3	2300-0	300 Area TEDF Facility Manager Declares 300 Area TEDF Readiness Assessment to be Complete Completed 10/31/94	10/31/94 to RL
RL	LEP-95-043	1.2.2.1.3	2300-0	WHC Readiness Assessment Team Declares 300 Area TEDF Readiness to RL Completed 10/31/94	11/14/94 to RL
TPA - RL	LEP-95-036 M-17-09	1.2.2.1.3	2300-0	Operate 300 Area Treated Effluent Disposal Facility. Completed 12/28/94	12/31/94 to RL
TPA - RL	LEP-95-041 M-26-03	1.2.2.1.1	2300-0	Cease Discharge 242-A Evaporator Process Condensate to LERF Basins. Deleted C/R M-26-95-01	12-31-94 08-31-95 deleted

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Liquid Effluents Program Milestones				Milestone Type	Control Number	RL WBS	ADS Number	Milestone Description	Milestone Completion Date
RL	LEP-95-040	1.2.2.1.3	2300-0					Complete Project W-353, "300 Area Diverter Upgrades" C/R LET-95-011 changed date Completed 08/15/96	95-34-96 02/28/96 to RL
TPA - RL	LEP-95-002 M-17-00A	1.2.2.1.1	2300-0					Complete Liquid Effluent Treatment Facility/Upgrades for Phase I Streams Completed 05/26/95	06/30/95 to RL
TPA - RL	LEP-95-007 M-26-04	1.2.2.1.1	2300-0					Remove All Hazardous Waste Residues From LERF Units Deleted - C/R M-26-95-01	95-36-96 99-34-96
TPA - RL	LEP-95-008 M-17-08	1.2.2.1.2	2300-0					Operate The 200 Area Treated Effluent Disposal Facility Completed 04/25/95	06/30/95 to RL
TPA - RL	LEP-95-009 M-17-08B	1.2.2.1.2	2300-0					Implement BAT/AKART - 200 Area TEDF Streams Completed 05/26/95	06/30/95 to RL
TPA - RL	LEP-95-010 M-17-10	1.2.2.1.1	2300-0					Cease Discharge to Hazardous Waste Land Disposal Units Completed 06/27/95	06/30/95 to RL
TPA - RL	LEP-95-011 M-17-14	1.2.2.1.2	2300-0					Initiate Operations - 200 Area Effluent Treatment Facility (This milestone must be completed by 03/30/96 to fulfill the requirements of M-17-000A) Completed 12/19/95	06/30/95 to RL
TPA - RL	LEP-95-018 M-17-29	1.2.2.1.2	2300-0					Implement BAT/AKART for 242-A Evaporator Process Condensate (200 Area ETF Startup) (This milestone must be completed by 03/30/96 to fulfill the requirements of M-17-000A) Completed 12/19/95	06/30/95 to RL
TPA - RL	LEP-95-029 M-26-05B	1.2.2.1.4	2300-0					Complete Annual Evaluation of Tritium Treatment Technology (WHC to RL 07/31/95; RL to Ecology/EPA 08/31/95) Completed to RL 07/31/95; to Ecology/EPA 08/24/95	07/31/95 to RL 08/31/95 to RL

Liquid Effluents Program Milestones					
Milestone Type	Control Number	RL WBS	ADS Number	Milestone Description	Milestone Completion Date
RL	LEP-95-038	1.2.2.1.3	2300-0	Complete Project W-345, 307 Basins Maintenance Expense Project Completed 03/24/95	12/31/94 to RL
RL	LEP-95-028	1.2.2.1.5	2300-1	Initiate Definitive Design for Phase II Stream BAT/AKART Project W-252 Completed 01/12/95	01/30/95 to RL
RL	LEP-95-030	1.2.2.1.4	2300-0	Complete Groundwater Impact Assessment for 216-B3 Pond Completed 01/25/95	01/31/95 to RL
RL	LEP-95-031	1.2.2.1.4	2300-0	Complete Groundwater Impact Assessment for T-1 Ditch Completed 02/23/95	02/28/95 to RL
RL	LEP-95-032	1.2.2.1.4	2300-0	Complete Groundwater Impact Assessment for T-4-2 Ditch Completed 02/23/95	02/28/95 to RL
RL	LEP-95-033	1.2.2.1.2	2300-0	Complete the 200 Area ETF Nuclear Process Operator Initial Certification C/R LET-95-025 revised date Completed 10/09/95	09-17-95 10/12/95 to RL
RL	LEP-95-042	1.2.2.1.2	2300-0	WHC Declares 200 Area TEDF Readiness Completed 04/18/95	05/01/95 to RL
RL	LEP-95-039	1.2.2.1.3	2300-0	NESHAPS - 340 Facility Stack Monitor (Project W-337) Construction Upgrades Complete Completed 12/16/94	12/30/94 to RL
RL	LEP-95-034	1.2.2.1.2	2300-0	WHC Declares 200 Area ETF Facility Readiness to DOE-RL C/R LET-95-025 revised date Completed 10/23/95	05-01-95 10/22/95 to RL
RL	LEP-95-035	1.2.2.1.2	2300-0	Complete Operations Test Procedures for the 200 Area Liquid Effluent Treatment Facility C/R LET-95-025 deleted milestone	02-28-95 deleted

Liquid Effluents Program Milestones					
Milestone Type	Control Number	RL WBS	ADS Number	Milestone Description	Milestone Completion Date
RL	LEP-96-009	1.2.2.1.4 1A2413	2300-0	Prepare Best Management Practices (BMP) Engineering Report for the Site-wide Miscellaneous Streams Program Completed to RL 07/01/96 to WDOE 07/30/96	7/26/96 to RL 08/09/96 to WDOE
RL	LEP-96-010	1.2.2.1.4 1A2413	2300-0	Submit an annual update of Miscellaneous Stream Inventory Completed 08/30/96	08/30/96 to RL
	LEP-96-011			Milestone Number Not Used	
RL	LEP-96-012	1.2.2.1.2 1A2211	2300-0	200 Area TEDF Discharge Monitoring Report to Demonstrate Compliance with WAC 216 Permit. (Due quarterly, NLT 30 days following the completed reporting period) Complete to RL 11/15/95 to RL 02/14/96 to RL 05/16/96 Revised CR/LET-96-012 to RL 07/31/96	11/15/95 to RL 02/15/96 to RL 05/16/96 to RL 08/16/96 to RL +14 days to WDOE
RL	LEP-96-013	1.2.2.1.2 1A2211	2300-0	Perform Annual Review/Update of 200 Area TEDF WAC-216 Permit Spill Control/Contingency Plans Complete to RL 04/12/96 to WDOE 04/18/96	04/17/96 to RL 05/17/96 to WDOE
RL	LEP-96-014	1.2.2.1.2 1A2211	2300-0	Perform Annual Review/Update of 200 Area TEDF WAC-216 Permit Solid Waste Control Plans Complete to RL 04/12/96 to WDOE 04/18/96	04/17/96 to RL 05/17/96 to WDOE
	LEP-96-015			Milestone Number Not Used	

Liquid Effluents Program Milestones					
Milestone Type	Control Number	RL WBS	ADS Number	Milestone Description	Milestone Completion Date
	FY 1996				
RL	LEP-96-001	1.2.2.1.5 1A2502	2300-1	Complete Definitive Design for Phase II Stream BAT/AKART Implementation Project W-252 Completed 10/05/95	02/28/96 to RL
RL	LEP-96-002	1.2.2.1.5 1A2502	2300-1	Start Construction of Phase II Stream BAT/AKART Implementation Project W-252 Completed 02/02/96	05/30/96 to RL
TPA-RL	LEP-96-003 M-26-05C	1.2.2.1.2 1A2212	2300-0	Complete Annual Evaluation of Tritium Treatment Technology (WHIC to RL-07-31-96; RL to Ecology/EPA-08-31-96) C/R LET-96-009 deleted; TPA C/R M-26-96-01	07-31-96 08-31-96
RL	LEP-96-004	1.2.2.1.2 1A2213	2300-0	Process All LERF Material Inventory and Declare ETF in Suitable Standby Condition. C/R LET-96-009 Revised date Completed 06/05/96	06-30-96 07/03/96 to RL
RL	LEP-96-005	1.2.2.1.2 1A2211	2300-0	Dispose of 150 Million Gallons of Treated Effluent Through the 200 Area TEDF Completed 06/21/96	09/30/96 to RL
RL	LEP-96-006	1.2.2.1.3 1A2310	2300-0	Treat and Dispose of 50 Million Gallons of Process Wastewater Through the 300 Area TEDF Completed 04/30/96	09/30/96 to RL
RL	LEP-96-007	1.2.2.1.4 1A2413	2300-0	Complete WAC-216 Permit Application for Category 1 Miscellaneous Streams Completed to RL 10/12/95; to WDOE 11/07/95	11/15/95 to RL 11/30/95 to WDOE
RL	LEP-96-008	1.2.2.1.4 1A2413	2300-0	Complete WAC-216 Permit Application for Category 2 Miscellaneous Streams Completed 08/12/96	09/15/96 to RL

Liquid Effluents Program Milestones					
Milestone Type	Control Number	RL WBS	ADS Number	Milestone Description	Milestone Completion Date
RL	LEP-96-026	1.2.2.1.2 1A2212	2300-0	Submit Report of Annual Review/Update of ETF Operations and Maintenance Manuals Completed 08/27/96 to RL	10/12/96 to RL
RL	LEP-96-027	1.2.2.1.2 1A2213	2300-0	Submit LERF Sampling Report To RL 10/06/96; to WDOE 10/25/95	10/08/95 to RL 11/08/95 to WDOE
RL	LEP-96-028	1.2.2.1.2 1A2212	2300-0	Submit ETF Effluent and Groundwater Discharge Monitoring Reports (Due quarterly, NLT 60 days following the completed reporting period) Completed 02/14/96 to RL 05/16/96 to RL 07/31/96 to RL	02/15/96 to RL 05/16/96 to RL 08/15/96 to RL 11/15/96 to RL +14 days to WDOE
RL	LEP-96-029	1.2.2.1.2 1A2211	2300-0	Submit 200 Area TEDF Effluent Variability Study Results Completed to RL 06/17/96 to Ecology 07/17/96	06/17/96 to RL 07/17/96 to WDOE
	LEP-96-030			Milestone Number Not Used	
RL	LEP-96-031	1.2.2.1.2 1A2211	2300-0	Submit Report of Annual Review/Update of 200 Area TEDF Operations and Maintenance Manuals Completed to RL 04/12/96; to WDOE 04/18/96	04/17/96 to RL 05/17/96 to WDOE
RL	LEP-96-032	1.2.2.1.2 1A2212	2300-0	Report ETF Verification Tank Test Results Completed to RL 02/16/96; to EPA 02/26/96	02/29/96 to RL 03/29/96 to EPA
RL	LEP-96-033	1.2.2.1.2 1A2214	2300-0	Provide EPA-HQ Two Week Notice of ETF Startup Completed 10/05/95	11/18/95 to RL
RL	LEP-96-034	1.2.2.1.2 1A2211	2300-0	Submit Annual Report on 200 Area LEF Activities Completed to RL 01/19/96; to WDOE 03/01/96	02/01/96 to RL 03/01/96 to WDOE
RL	LEP-96-035	1.2.2.1.5 1A2502	2300-1	Issue Application for Minor Modification to TEDF 216 Permit to Accept B Plant Cooling Effluent C/R LET-96-009 Milestone established Completed 06/27/96	07/01/96 to RL

WHC-SP-1097, Rev. 2
 LEP FY 1997 Work Plan (WBS 1.2.2)

Liquid Effluents Program Milestones					
Milestone Type	Control Number	RL WBS	ADS Number	Milestone Description	Milestone Completion Date
RL	LEP-96-016	1.2.2.1.2 1A2211	2300-0	Operate 200 Area TEDF Within SWD Permit Enforcement Limits and Early Warning Values Complete submittals on 12/18/95 02/29/96 05/16/96 09/30/96 missed	12/31/95 to RL 03/31/96 to RL 06/30/96 to RL 09/30/96 to RL
RL	LEP-96-017	1.2.2.1.3 1A2310	2300-0	Prepare and Submit 300 Area TEDF NPDES Permit Modification Completed 07/12/96	08/15/96 to RL
RL	LEP-96-018	1.2.2.1.3 1A2340	2300-0	Complete Tank Integrity Assessment for 340 Facility Vault Tanks Completed to RL 05/30/96; to WDOE 06/15/96	09/15/96 to RL
RL	LEP-96-019	1.2.2.1.3 1A2340	2300-0	Prepare 340 Waste Handling Facility Shutdown Plan Completed 08/21/96	09/15/96 to RL
RL	LEP-96-020	1.2.2.1.2 1A2212	2300-0	Submit ETF Volatile Organic Carbon Emissions Test Plan Completed to RL 10/03/95 to RL; to WDOE 10/16/96	10/30/95 to RL 11/30/95 to WDOE
RL	LEP-96-021	1.2.2.1.2 1A2212	2300-0	Submit ETF Volatile Organic Carbon Emission Test Report Completed to RL 02/14/96; to WDOE 03/11/96	03/01/96 to RL 04/01/96 to WDOE
RL	LEP-96-022	1.2.2.1.2 1A2212	2300-0	Submit ETF Groundwater Monitoring Plan (Draft) Completed to RL 12/20/95; to WDOE 01/27/96	12/30/95 to RL 01/30/96 to WDOE
RL	LEP-96-023	1.2.2.1.2 1A2212	2300-0	Submit ETF Groundwater Monitoring Plan (Final) (Due to WDOE 30 days after receipt of WDOE comments on draft submission - see LEP-96-022) Completed 03/20/96	open
RL	LEP-96-024	1.2.2.1.2 1A2213	2300-0	Submit Final LERF Sampling Plan (as part of the Waste Analysis Plan) Completed 10/05/95	10/30/95 to RL
RL	LEP-96-025	1.2.2.1.2 1A2212	2300-0	Submit ETF Operations and Maintenance Manuals Matrix Completed 08/30/95	10/30/95 to RL

Liquid Effluents Program Milestones					
Milestone Type	Control Number	RL WBS	ADS Number	Milestone Description	Milestone Completion Date
RL	LEP-97-011	1.2.2.1.2 1A2211	2300-0	200 Area TEDF Discharge Monitoring Report to Demonstrate Compliance with WAC 246 Permit (Due quarterly, NLT 30 days following the completed reporting period) Delete - C/R LET-96-008 milestone duplicate of LEP-97-006	44/46/96 to RL 02/46/97 to RL 06/46/97 to RL 07/46/97 to RL 40/46/96 to RL +14 days to WDOE
RL	LEP-97-012	1.2.2.1.2 1A2211	2300-0	Operate 200 Area TEDF in accordance with SWD Permit No. ST-4502	09/30/97 to RL
RL	LEP-97-013	1.2.2.1.2 1A2212	2300-0	Operate 200 Area ETF in accordance with SWD Permit No. ST-4500.	09/30/97 to RL
RL	LEP-97-014	1.2.2.1.2 1A2211	2300-0	Submit 200 Area TEDF Effluent and Groundwater Discharge Monitoring Reports (Quarterly) Delete - C/R LET-96-008 Milestone duplicate of LEP-97-006	40/46/97 to RL 01/46/97 to RL 04/46/97 to RL 07/46/97 to RL +14 days to WDOE
RL	LEP-97-015	1.2.2.1.3 1A2340	2300-0	Implement 340 Facility Shutdown Plan	01/30/97 to RL
RL	LEP-97-016	1.2.2.1.3 1A2340	2300-0	Review 340 Facility Authorization Basis	09/30/97 to RL
RL	LEP-97-017	1.2.2.1.3 1A2310	2300-0	Operate 300 Area TEDF within NPDES Permit Enforcement Limits	12/31/96 to RL 03/31/97 to RL 06/30/97 to RL 09/30/97 to RL
RL	LEP-97-018	1.2.2.1.3 1A2340	2300-0	340 Waste Handling Facility Shipments	09/30/97 to RL
RL	LEP-97-019	1.2.2.1.3 1A2310	2300-0	Review Operating and Maintenance Requirements for 310 (TEDF)	06/30/97 to RL

Liquid Effluents Program Milestones					
Milestone Type	Control Number	RL WBS	ADS Number	Milestone Description	Milestone Completion Date
	FY 1997				
FO	LEP-97-001	1.2.2.1.5	2300-1	Complete Phase II Stream BAT/AKART Implementation Project 216 Permit Revision Application	10/01/96 to RL
FO	LEP-97-002	1.2.2.1.5	2300-1	Complete Construction of Phase II Stream BAT/AKART Implementation Project W-252 C/R LET-96-009 Revised	06-30-97 01/31/97 to RL
TPA - HQ	LEP-97-003 M-26-05D	1.2.2.1.2	2300-0	Complete Biennial Evaluation of Tritium Treatment Technology	07/31/97 to RL
FO	LEP-97-004	1.2.2.1.4	2300-0	Complete WAC-216 Permit Application for Category 3 Miscellaneous Streams	08/30/97 to RL
FO	LEP-97-005	1.2.2.1.4	2300-0	Submit an annual update of Miscellaneous Stream Inventory	08/30/97 to RL
RL	LEP-97-006	1.2.2.1.2	2300-0	200 Area TEDF Discharge Monitoring Report to Demonstrate Compliance with WAC 216 Permit. (Due quarterly, NLT 30 days following the completed reporting period) (Revised by C/R LET-96-012 to allow 60 days for report submittal)	11/16/96 to RL 02/16/97 to RL 05/16/97 to RL 08/15/97 to RL
RL	LEP-97-007	1.2.2.1.2	2300-0	Perform Annual Review/Update of 200 Area TEDF WAC-216 Permit Spill Control/Contingency Plans C/R LET-96-008 Corrected	03/17/97 to RL
RL	LEP-97-008	1.2.2.1.2	2300-0	Perform Annual Review/Update of 200 Area TEDF WAC-216 Permit Solid Waste Control Plans C/R LET-96-008 Corrected	03/17/97 to RL
RL	LEP-97-009	1.2.2.1.2	2300-0	200 Area TEDF Operations and Maintenance Plans and Summary Matrix Annual Update IAW WAC-216 Permit C/R LET-96-008 Corrected	04/17/97 to RL
RL	LEP-97-010	1.2.2.1.2	2300-0	Submit ETF/LERF Part B Permit Application	06/15/97 to RL

Liquid Effluents Program Milestones					
Milestone Type	Control Number	RL WBS	ADS Number	Milestone Description	Milestone Completion Date
TPA - RL	LEP-98-004 M-26-05E	1.2.2.1.2	2300-0	Complete Annual Evaluation of Tritium Treatment Technology (WHC to RL 07-31-98; RL to Ecology/EPA 08-31-98) Deleted - C/R LET-96-009 (TPA C/R M-26-96-01)	07-31-98 to RL 08-31-98 to WDOE
RL	LEP-98-005	1.2.2.1.4	2300-0	Complete WAC-216 Permit Application for Category 4 Miscellaneous Streams	08/30/98 to RL
RL	LEP-98-006	1.2.2.1.4	2300-0	Submit an annual update of Miscellaneous Stream Inventory	08/30/98 to RL
RL	LEP-98-007	1.2.2.1.2	2300-0	200 Area TEDF Discharge Monitoring Report to Demonstrate Compliance with WAC 216 Permit. (Due quarterly, NLT 60 days following the completed reporting period)	11/16/97 to RL 02/16/98 to RL 04/16/98 to RL 08/16/98 to RL
RL	LEP-98-008	1.2.2.1.2	2300-0	Perform Annual Update of 200 Area TEDF WAC-216 Permit Spill Control/Contingency Plans	03/17/98 to RL
RL	LEP-98-009	1.2.2.1.2	2300-0	Perform Annual Review/Update of 200 Area TEDF WAC-216 Permit Solid Waste Control Plans	03/17/98 to RL
RL	LEP-98-010	1.2.2.1.2	2300-0	200 Area TEDF Operations and Maintenance Plans and Summary Matrix Annual Update IAW WAC-216 Permit	05/17/98 to RL
	LEP-98-011			Milestone Number Not Used	
RL	LEP-98-012	1.2.2.1.2 1A2211	2300-0	Operate 200 Area TEDF in accordance with SWD Permit No. ST-5402	09/30/98 to RL
RL	LEP-98-013	1.2.2.1.2 1A2212	2300-0	Operate 200 Area ETF in accordance with SWD Permit No. ST-4500.	09/30/98 to RL
RL	LEP-98-014	1.2.2.1.2 1A2211	2300-0	Submit 200 Area TEDF Effluent and Groundwater Discharge Monitoring Reports (Quarterly) Delete - C/R LET-96-008 Milestone duplicate of LEP-98-007	04/15/98 to RL 04/15/98 to RL 07/15/98 to RL 10/15/98 to RL 11/15/98 to WDOE

Liquid Effluents Program Milestones					
Milestone Type	Control Number	RL WBS	ADS Number	Milestone Description	Milestone Completion Date
RL	LEP-97-020	1.2.2.1.3 1A2340	2300-0	Review Operating and Maintenance Requirements for 340 Facility	06/30/97 to RL
RL	LEP-97-021	1.2.2.1.2 1A22	2300-0	Sitewide Process and Procedures for Disposal of Hanford Liquid Effluents	02/28/97 to RL
RL	LEP-97-022	1.2.2.1.2 1A22	2300-0	Modifications to Existing Wastewater Discharge Permits	03/31/97 to RL
RL	LEP-97-023	1.2.2.1.2 1A22	2300-0	200 Area LEF Coordinated Management System	09/30/97 to RL
RL	LEP-97-024	1.2.2.1.2 1A2211	2300-0	Submit 283E Trench Alternatives Study to RL	01/31/97 to RL
RL	LEP-97-025	1.2.2.1.2	2300-0	Annual Review/Update of 200 Area ETF Operations and Maintenance Manuals	10/12/96 to RL
RL	LEP-97-026	1.2.2.1.3	2300-0	340 Waste Handling Facility Maintenance Implementation Plan	09/30/97 to RL
RL	LEP-97-027	1.2.2.1.2	2300-0	Readiness to Accept 200 Area UP-1 Groundwater in LERF	01/31/97 to RL
RL	LEP-97-028	1.2.2.1.2	2300-0	Complete Treatment of UP-1 Groundwater and N Basin Water in 200 Area ETF	07/31/97 to RL
	FY 1998				
RL	LEP-98-001	1.2.2.1.5	2300-1	Initiate Operation of Project W-252 System Redirecting B Pond Discharge to the 200 Area TEDF	04/01/97 to RL
	LEP-98-002			Milestone Number Not Used	
TPA - RL	LEP-98-003 M-17-00B	1.2.2.1.5	2300-1	Implement BAT/AKART For All Phase II Liquid Effluent Streams	10/31/97 to RL

Liquid Effluents Program Milestones					
Milestone Type	Control Number	RL WBS	ADS Number	Milestone Description	Milestone Completion Date
RL	LEP-99-008	1.2.2.1.2 1A2211	2300-0	Operate 200 Area TEDF in accordance with SWD Permit No. ST-4502.	09/30/99 to RL
RL	LEP-99-009	1.2.2.1.2 1A2212	2300-0	Operate 200 Area ETF in accordance with SWD Permit No. ST-4500.	09/30/99 to RL
RL	LEP-99-010	1.2.2.1.2 1A2211	2300-0	Submit 200 Area TEDF Effluent and Groundwater Discharge Monitoring Reports (Quarterly) Delete C/R LET-96-008 Milestone duplicate of LEP-99-002	04/16/00 to RL 04/16/00 to RL 07/16/00 to RL 10/16/00 to RL +14 days to WDOE
RL	LEP-99-011	1.2.2.1.2	2300-0	Annual Review/Update of 200 Area ETF Operations and Maintenance Manuals	09/30/99 to RL
	FY 2000				
TPA - RL	LEP-00-001 M-26-05G	1.2.2.1.2	2300-0	Complete Annual Evaluation of Tritium Treatment Technology (WAC to RL 07-31-00; RL to Ecology/EPA 08-31-00) C/R LET-96-009 Deleted	07-31-00 08-31-00
RL	LEP-00-002	1.2.2.1.2	2300-0	200 Area TEDF Discharge Monitoring Report to Demonstrate Compliance with WAC 216 Permit. (Due quarterly, NLT 60 days following the completed reporting period)	11/16/99 to RL 02/16/00 to RL 05/16/00 to RL 08/16/00 to RL
RL	LEP-00-003	1.2.2.1.2	2300-0	Submit Reapplication for State Waste Discharge Permit for 200 Area TEDF	01/18/00 to RL
RL	LEP-00-004	1.2.2.1.2	2300-0	Perform Annual Update of 200 Area TEDF WAC-216 Permit Spill Control/Contingency Plans C/R LET-96-008 Revised	03/17/00 to RL
RL	LEP-00-005	1.2.2.1.2	2300-0	Perform Annual Review/Update of 200 Area TEDF WAC-216 Permit Solid Waste Control Plans C/R LET-96-008 Revised	03/17/00 to RL

Liquid Effluents Program Milestones					
Milestone Type	Control Number	RL WBS	ADS Number	Milestone Description	Milestone Completion Date
RL	LEP-98-015	1.2.2.1.2	2300-0	Annual Review/Update of 200 Area ETF Operations and Maintenance Manuals	09/30/98 to RL
RL	LEP-98-016	1.2.2.1.2	2300-0	Treat UP-1 groundwater and N Basin water in 200 Area ETF.	10/31/97 to RL
	FY 1999				
TPA - RL	LEP-99-001 M-26-05F	1.2.2.1.2	2300-0	Complete Biennial Evaluation of Tritium Treatment Technology (to RL 07/31/99; RL to Ecology/EPA 08/31/99)	07-31-99 to RL
RL	LEP-99-002	1.2.2.1.2	2300-0	200 Area TEDF Discharge Monitoring Report to Demonstrate Compliance with WAC 216 Permit. (Due quarterly, NLT 60 days following the completed reporting period)	11/16/98 to RL 02/16/99 to RL 05/16/99 to RL 08/16/99 to RL
RL	LEP-99-003	1.2.2.1.2	2300-0	Perform Annual Update of 200 Area TEDF WAC-216 Permit Spill Control/Contingency Plans C/R LET-96-008 Revised	03/17/99 to RL
RL	LEP-99-004	1.2.2.1.2	2300-0	Perform Annual Review/Update of 200 Area TEDF WAC-216 Permit Solid Waste Control Plans C/R LET-96-008 Revised	03/17/99 to RL
RL	LEP-99-005	1.2.2.1.2	2300-0	200 Area TEDF Operations and Maintenance Plans and Summary Matrix Annual Update IAW WAC-216 Permit C/R LET-96-008 Revised	04/17/99 to RL
RL	LEP-99-006	1.2.2.1.3	2300-0	Complete Draft 300 Area NPDES Permit Reapplication (Final Re-application due to EPA November 1999, see milestone LEP-00-011)	11/30/98 to RL
RL	LEP-99-007	1.2.2.1.2 1A2211	2300-0	200 Area TEDF Discharge Monitoring Report to Demonstrate Compliance with WAC 216 Permit (Due quarterly, NLT 30 days following the completed reporting period) Delete C/R LET-96-008 Milestone duplicate of LEP-99-002	10/16/98 to RL 01/16/99 to RL 04/16/99 to RL 07/16/99 to RL +14 days to WDOE

Liquid Effluents Program Milestones					
Milestone Type	Control Number	RL WBS	ADS Number	Milestone Description	Milestone Completion Date
RL	LEP-01-003	1.2.2.1.2	2300-0	Perform Annual Update of 200 Area TEDF WAC-216 Permit Spill Control/Contingency Plans C/R LET-96-008 Revised	03/17/01 to RL
RL	LEP-01-004	1.2.2.1.2	2300-0	Perform Annual Review/Update of 200 Area TEDF WAC-216 Permit Solid Waste Control Plans C/R LET-96-008 Revised	03/17/01 to RL
RL	LEP-01-005	1.2.2.1.2	2300-0	200 Area TEDF Operations and Maintenance Plans and Summary Matrix Annual Update IAW WAC-216 Permit C/R LET-96-008 Revised	04/17/01 to RL
RL	LEP-01-006	1.2.2.1.2 1A2211	2300-0	200 Area TEDF Discharge Monitoring Report to Demonstrate Compliance with WAC 216 Permit. (Due quarterly, NLT 30 days following the completed reporting period) Delete C/R LET-96-008 Milestone duplicate of LEP-01-002	04/16/01 to RL 04/16/01 to RL 04/16/01 to RL 07/16/01 to RL +14 days to WDOE
RL	LEP-01-007	1.2.2.1.2 1A2211	2300-0	Operate 200 Area TEDF in accordance with SWD Permit No. ST-4502.	09/30/01 to RL
RL	LEP-01-008	1.2.2.1.2 1A2212	2300-0	Operate 200 Area ETF in accordance with SWD Permit No. ST-4500.	09/30/01 to RL
RL	LEP-01-009	1.2.2.1.2 1A2211	2300-0	Submit 200 Area TEDF Effluent and Groundwater Discharge Monitoring Reports (Quarterly) Delete C/R LET-96-008 Milestone duplicate of LEP-01-002	04/16/01 to RL 04/16/01 to RL 07/16/01 to RL 10/16/01 to RL +14 days to WDOE
RL	LEP-01-010	1.2.2.1.2	2300-0	Annual Review/Update of 200 Area ETF Operations and Maintenance Manuals	09/30/01 to RL
	FY 2002				
	LEP-02-001			Not used	

Liquid Effluents Program Milestones					
Milestone Type	Control Number	RL WBS	ADS Number	Milestone Description	Milestone Completion Date
RL	LEP-00-006	1.2.2.1.2	2300-0	200 Area TEDF Operations and Maintenance Plans and Summary Matrix Annual Update IAW WAC-216 Permit C/R LET-96-008 Revised	04/17/00 to RL
RL	LEP-00-007	1.2.2.1.2 1A2211	2300-0	200 Area TEDF Discharge Monitoring Report to Demonstrate Compliance with WAC 216 Permit (Due quarterly, NLT 30 days following the completed reporting period) Deleted C/R LET-96-008 Milestone duplicate of LEP-00-002	10/16/00 to RL 01/16/01 to RL 04/16/01 to RL 07/16/01 to RL +14 days to WDOE
RL	LEP-00-008	1.2.2.1.2 1A2211	2300-0	Operate 200 Area TEDF in accordance with SWD Permit No. ST-4502.	09/30/00 to RL
RL	LEP-00-009	1.2.2.1.2 1A2212	2300-0	Operate 200 Area ETF in accordance with SWD Permit No. ST-4500.	09/30/00 to RL
RL	LEP-00-010	1.2.2.1.2 1A2211	2300-0	Submit 200 Area TEDF Effluent and Groundwater Discharge Monitoring Reports (Quarterly) Deleted C/R LET-96-008 Milestone duplicate of LEP-00-002	01/16/00 to RL 04/16/00 to RL 07/16/00 to RL 10/16/00 to RL +14 days to WDOE
RL	LEP-00-011	1.2.2.1.3	2300-0	Submit Final Version of Reapplication for 300 Area NPDES Permit for approval and submittal to the EPA.	11/30/99 to RL
RL	LEP-00-012	1.2.2.1.2	2300-0	Annual Review/Update of 200 Area ETF Operations and Maintenance Manuals	09/30/00 to RL
	FY 2001				
TPA - RL	LEP-01-001 M-26-05H	1.2.2.1.2	2300-0	Complete Biennial Evaluation of Tritium Treatment Technology (to RL 07/31/01; RL to Ecology/EPA 08/31/01)	07-31-01 to RL 08-31-01 to RL
RL	LEP-01-002	1.2.2.1.2	2300-0	200 Area TEDF Discharge Monitoring Report to Demonstrate Compliance with WAC 216 Permit. (Due quarterly, NLT 60 days following the completed reporting period)	11/16/00 to RL 02/16/01 to RL 05/16/01 to RL 08/16/01 to RL

Liquid Effluents Program Milestones					
Milestone Type	Control Number	RL WBS	ADS Number	Milestone Description	Milestone Completion Date
RL	LEP-03-004	1.2.2.1.2	2300-0	Perform Annual Review/Update of 200 Area TEDF WAC 216 Permit Solid Waste Control Plans	03/17/03 to RL
RL	LEP-03-005	1.2.2.1.2	2300-0	200 Area TEDF Operations and maintenance Plans and Summary Matrix Annual Update IAW WAC 216 Permit	04/17/03 to RL
	LEP-03-006			Not used	
RL	LEP-03-007	1.2.2.1.2	2300-0	Operate 200 Area TEDF in accordance with SWD Permit No. ST-4502.	09/30/03 to RL
RL	LEP-03-008	1.2.2.1.2	2300-0	Operate 200 Area ETF in accordance with SWD Permit No. ST-4500.	09/30/03 to RL
RL	LEP-03-009	1.2.2.1.2	2300-0	Annual Review/Update of 200 Area ETF Operations and Maintenance Manuals	09/30/03 to RL
	FY 2004				
	LEP-04-001			Not used	
RL	LEP-04-002	1.2.2.1.2	2300-0	200 Area TEDF Discharge Monitoring Report to Demonstrate Compliance with WAC 216 Permit (Due quarterly, NLT 60 days following the completed reporting period)	11/16/03 to RL 02/16/04 to RL 05/16/04 to RL 08/16/04 to RL
RL	LEP-04-003	1.2.2.1.2	2300-0	Perform Annual Update of 200 Area TEDF WAC 216 Permit Spill Control/Contingency Plans	03/17/04 to RL
RL	LEP-04-004	1.2.2.1.2	2300-0	Perform Annual Review/Update of 200 Area TEDF WAC 216 Permit Solid Waste Control Plans	03/17/04 to RL
RL	LEP-04-005	1.2.2.1.2	2300-0	200 Area TEDF Operations and Maintenance Plans and Summary Matrix Annual Update IAW WAC 216 Permit	04/17/04 to RL
	LEP-04-006			Not used	
RL	LEP-04-007	1.2.2.1.2	2300-0	Operate 200 Area TEDF in accordance with SWD Permit No. ST- 4502.	09/30/04 to RL

Liquid Effluents Program Milestones					
Milestone Type	Control Number	RL WBS	ADS Number	Milestone Description	Milestone Completion Date
RL	LEP-02-002	1.2.2.1.2	2300-0	200 Area TEDF Discharge Monitoring Report to Demonstrate Compliance with WAC 216 Permit. (Due quarterly, NLT 60 days following the completed reporting period)	11/16/01 to RL 02/16/02 to RL 05/16/02 to RL 08/16/02 to RL
RL	LEP-02-003	1.2.2.1.2	2300-0	Perform Annual Update of 200 Area TEDF WAC-216 Permit Spill Control/Contingency Plans	03/17/02 to RL
RL	LEP-02-004	1.2.2.1.2	2300-0	Perform Annual Review/Update of 200 Area TEDF WAC-216 Permit Solid Waste Control Plans	03/17/02 to RL
RL	LEP-02-005	1.2.2.1.2	2300-0	200 Area TEDF Operations and Maintenance Plans and Summary Matrix Annual Update IAW WAC-216 Permit	04/17/02 to RL
RL	LEP-02-006	1.2.2.1.2	2300-0	Not used	
RL	LEP-02-007	1.2.2.1.2	2300-0	Operate 200 Area TEDF in accordance with SWD Permit No. ST-4502.	09/30/02 to RL
RL	LEP-02-008	1.2.2.1.2	2300-0	Operate 200 Area ETF in accordance with SWD Permit No. ST-4500.	09/30/02 to RL
RL	LEP-02-009	1.2.2.1.2	2300-0	Annual Review/Update of 200 Area ETF Operations and Maintenance Manuals	09/30/02 to RL
	FY 2003				
TPA-RL	LEP-03-001 M-26-OSH	1.2.2.1.2	2300-0	Complete Biennial Evaluation of Tritium Treatment Technology (to RL 07/31/03, RL to Ecology/EPA 08/31/03)	07/31/03 to RL 08/31/03 to RL
RL	LEP-03-002	1.2.2.1.2	2300-0	200 Area TEDF Discharge Monitoring Report to Demonstrate Compliance with WAC 216 Permit (Due quarterly, NLT 60 days following the completed reporting period)	11/16/02 to RL 02/16/03 to RL 05/16/03 to RL 08/16/03 to RL
RL	LEP-03-003	1.2.2.1.2	2300-0	Perform Annual Update of 200 Area TEDF WAC 216 Permit Spill Control/Contingency Plans	03/17/03 to RL

Liquid Effluents Program Milestones					
Milestone Type	Control Number	RL WBS	ADS Number	Milestone Description	Milestone Completion Date
RL	LEP-05-010	1.2.2.1.3	2300-0	Prepare and Submit Reapplication for 300 Area TEDF NPDES Permit Modification	11/30/04 to RL
RL	LEP-05-011	1.2.2.1.2	2300-0	Submit Reapplication for State Waste Discharge Permit for 200 Area TEDF	01/18/05 to RL
RL	LEP-05-012	1.2.2.1.2	2300-0	Submit Reapplication for State Waste Discharge Permit for 200 Area ETF	03/30/05 to RL
	FY 2006				
	LEP-06-001			Not used	
RL	LEP-06-002	1.2.2.1.2	2300-0	200 Area TEDF Discharge Monitoring Report to Demonstrate Compliance with WAC 216 Permit (Due quarterly, NLT 60 days following the completed reporting period)	11/16/05 to RL 02/16/06 to RL 05/16/06 to RL 08/16/06 to RL
RL	LEP-06-003	1.2.2.1.2	2300-0	Perform Annual Update of 200 Area TEDF WAC 216 Permit Spill Control/Contingency Plans	03/17/06 to RL
RL	LEP-06-004	1.2.2.1.2	2300-0	Perform Annual Review/Update of 200 Area TEDF WAC 216 Permit Solid Waste Control Plans	03/17/06 to RL
RL	LEP-06-005	1.2.2.1.2	2300-0	200 Area TEDF Operations and Maintenance Plans and Summary Matrix Annual Update IAW WAC 216 Permit	04/17/06 to RL
	LEP-06-006			Not used	
RL	LEP-06-007	1.2.2.1.2	2300-0	Operate 200 Area TEDF in accordance with SWD Permit No. ST-4502.	09/30/06 to RL
RL	LEP-06-008	1.2.2.1.2	2300-0	Operate 200 Area ETF in accordance with SWD Permit No. ST-4500.	09/30/06 to RL
RL	LEP-06-009	1.2.2.1.2	2300-0	Annual Review/Update of 200 Area ETF Operations and Maintenance Manuals	09/30/06 to RL

Liquid Effluents Program Milestones					
Milestone Type	Control Number	RL WBS	ADS Number	Milestone Description	Milestone Completion Date
RL	LEP-04-008	1.2.2.1.2	2300-0	Operate 200 Area ETF in accordance with SWD Permit No. ST-4500.	09/30/04 to RL
RL	LEP-04-009	1.2.2.1.2	2300-0	Annual Review/Update of 200 Area ETF Operations and Maintenance Manuals	09/30/04 to RL
RL	LEP-04-010	1.2.2.1.3	2300-0	Prepare and Submit Reapplication for 300 Area TEDF NPDES Permit Modification	11/30/03 to RL
	FY 2005				
TPA - RL	LEP-05-001 M-26-05H	1.2.2.1.2	2300-0	Complete Biennial Evaluation of Tritium Treatment Technology (WHC to RL 07/31/05; RL to Ecology/EPA 08/31/05)	07/31/05 to RL 08/31/05 to RL
RL	LEP-05-002	1.2.2.1.2	2300-0	200 Area TEDF Discharge Monitoring Report to Demonstrate Compliance with WAC 216 Permit (Due quarterly, NLT 60 days following the completed reporting period)	11/16/04 to RL 02/16/05 to RL 05/16/05 to RL 08/16/05 to RL
RL	LEP-05-003	1.2.2.1.2	2300-0	Perform Annual Update of 200 Area TEDF WAC 216 Permit Spill Control/Contingency Plans	03/17/05 to RL
RL	LEP-05-004	1.2.2.1.2	2300-0	Perform Annual Review/Update of 200 Area TEDF WAC 216 Permit Solid Waste Control Plans	03/17/05 to RL
RL	LEP-05-005	1.2.2.1.2	2300-0	200 Area TEDF Operations and Maintenance Plans and Summary Matrix Annual Update IAW WAC 216 Permit	04/17/05 to RL
	LEP-05-006			Not used	
RL	LEP-05-007	1.2.2.1.2	2300-0	Operate 200 Area TEDF in accordance with SWD Permit No. ST-4502.	09/30/05 to RL
RL	LEP-05-008	1.2.2.1.2	2300-0	Operate 200 Area ETF in accordance with SWD Permit No. ST-4500.	09/30/05 to RL
RL	LEP-05-009	1.2.2.1.2	2300-0	Annual Review/Update of 200 Area ETF Operations and Maintenance Manuals	09/30/05 to RL

3.3. MILESTONE DESCRIPTION SHEETS

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Complete Phase II Streams BAT/AKART Implementation 216 Permit Revision Application			Date: 08/31/96
Assigned To: D. W. Lindsey			CIN:
Program WBS Designator: 1.2.2.1.5			Due Date: 10/01/96 to RL
Control Number: LEP-97-001			Rev:
MILESTONE TYPE:	DIVISION:	DELIVERABLE:	ADDRESS TO:
☐ DOE-HQ ☐ DOE-RL ☒ DOE-FO ☐ CONTRACTOR	☒ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	☐ Report ☐ Letter ☐ Drawings ☒ Other (specify) Permit Application	☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Prepare and submit to RL a completed 216 Permit revision application for Phase II streams BAT/AKART Implementation.			
Description of what constitutes completion of this milestone: Transmittal of completed 216 Permit revision application to RL. This milestone supports RL transmittal of the application to Ecology on 10/15/96.			
Cost Account Manager:		Program/Project Manager	
D. W. Lindsey		A. J. DiLiberto	
Program Element Manager		DOE Monitor	
		E. M. Bowers	

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Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Complete Biennial Annual Evaluation of Tritium Treatment Technology (M-26-05B-H D, F, H)			Date: 05/24/96
Assigned To: D. W. Lindsey			CIN: LET-96-009 TPA C/R M-26-96-01
Program WBS Designator: 1.2.2.1.2			Due Date: 07/31/97-05 to RL
Control Number: LEP-97-003; LEP-98-004 ; LEP-99-001, LEP-00-001 ; LEP-01-001, LEP-03-001, LEP-05-001			Rev: 1
MILESTONE TYPE: ☒ DOE-HQ ☐ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☐ DOE ☐ RCRA ☒ TPA Number <u>M-26-05B-H-D-F-H</u>	DELIVERABLE: ☒ Report ☐ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Prepare an annual biennial report to evaluate the development status of tritium treatment technology that would be pertinent to the cleanup of tritiated waste water (the 242-A Evaporator Process Condensate liquid effluent) and tritium contaminated groundwater on the Hanford Site. This milestone supports Performance Measure Expectation WM2.6.1.			
Description of what constitutes completion of this milestone: Submit a completed tritium technology report to RL. This is the first of biennial rather than annual reporting against this milestone. This milestone supports an RL commitment to submit a biennial tritium evaluation to Ecology and EPA by 08/31.			
Cost Account Manager:		Date	Program/Project Manager
D. W. Lindsey			A. J. DiLiberto
Program Element Manager		Date	DOE Monitor
			E. M. Bowers

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Complete Construction of Phase II Stream BAT/AKART Implementation Project W-252 (ADS 2300-1)			Date: 08/31/94
Assigned To: D. W. Lindsey			CIN:
Program WBS Designator: 1.2.2.1.5			Due Date: 05/30/97 01/31/97
Control Number: LEP-97-002			Rev: 1
MILESTONE TYPE: ☐ DOE-HQ ☐ DOE-RL ☒ DOE-FO ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☐ DOE ☐ RCRA ☒ TPA Number <u>M-17-00B</u>	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Operational Acceptance of Construction Section 1 and 2 signed off. This milestone supports Performance Measure Expectation WM2.4.2			
Description of what constitutes completion of this milestone: Operations organization has beneficial occupancy so OTP can proceed. Letter sent to RL with documentation of OAC Sections 1 and 2 signed off.			
Cost Account Manager: D. W. Lindsey		Program/Project Manager A. J. DiLiberto	
Program Element Manager		DOE Monitor	
Date		Date	
E. M. Bowers		Date	

WHC-SP-1097, Rev. 2
LEP FY 1997 Work Plan (WBS 1.2.2)

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Submit an annual update of Miscellaneous Streams Inventory		Date: 06/12/95	
Assigned To: D. W. Lindsey		CIN:	
Program WBS Designator: 1.2.2.1.4		Due Date: 08/30/97-98 to RL	
Control Number: LEP-97-005; LEP-98-006		Rev:	
MILESTONE TYPE: ☐ DOE-HQ ☐ DOE-RL ☒ DOE-FO ☐ CONTRACTOR	DIVISION: ☒ State ☐ Federal ☐ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☒ Report ☐ Letter ☐ Drawings Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Submit an annual update of Miscellaneous Streams inventory			
Description of what constitutes completion of this milestone: WHC submittal of annual update of Miscellaneous Streams inventory to RL. This milestone supports RL submittal of the permit application to Ecology by 09/30 each year. (Update not required after FY 1998.)			
Cost Account Manager:		Program/Project Manager	
Date		Date	
D. W. Lindsey		A. J. DiLiberto	
Program Element Manager		DOE Monitor	
Date		Date	
E. M. Bowers		E. M. Bowers	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Complete WAC-216 Permit Application for Category 3 Miscellaneous Streams			Date: 06/12/95
Assigned To: D. W. Lindsey			CIN:
Program WBS Designator: 1.2.2.1.4			Due Date: 08/30/97 to RL
Control Number: LEP-97-004			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☐ DOE-RL ☒ DOE-FO ☐ CONTRACTOR	DIVISION: ☒ State ☐ Federal ☐ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☐ Letter ☐ Drawings ☒ Other (specify) Permit Application	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Submit a WAC-216 Categorical Permit application for surface water discharges from the coal ramp washdown process, and vehicle wash cleaning and safety shower discharges originating from potable water. This milestone supports Performance Measures Evaluation WM2.2.3.			
Description of what constitutes completion of this milestone: Submittal of the WAC-216 Categorical permit application to RL for the surface water discharge from the coal ramp washdown process and the vehicle wash cleaning and safety shower discharges originating from potable water. This milestone supports RL submittal of the permit application to Ecology by 09/30/97.			
Cost Account Manager:		Program/Project Manager	
Date		Date	
D. W. Lindsey		A. J. DiLiberto	
Program Element Manager		DOE Monitor	
Date		Date	
		E. M. Bowers	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Perform Annual Review/Update of 200 Area TEDF WAC-216 Permit Spill Control/Contingency Plans			Date: 07/19/95
Assigned To: D. W. Lindsey			CIN:
Program WBS Designator: 1.2.2.1.2			Due Date: 03/17/97-06 to RL
Control Number: LEP-97-007, LEP-98-008, LEP-99-003, LEP-00-004, LEP-01-003, LEP-02-003, LEP-03-003, LEP-04-003, LEP-05-003, LEP-06-003			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☒ CONTRACTOR	DIVISION: ☒ State ☐ Federal ☐ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☒ Report ☐ Letter ☒ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☒ Other (specify)
Milestone Description: Review and update spill control plans made available to Ecology upon the effective date of the permit, as needed, or annually as a minimum. See Section G.19 of the permit for complete description of requirements.			
Description of what constitutes completion of this milestone: Letter report to RL indicating that reviews have been completed and identifying changes, if any. For revisions, a letter describing the requested changes will be submitted for approval. This milestone supports RL submittal of the review to Ecology by 04/18 each year.			
Cost Account Manager:		Date	Program/Project Manager
D. W. Lindsey			A. J. DiLiberto
Program Element Manager		Date	DOE Monitor
			E. M. Bowers

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: 200 Area TEDF DMR to Demonstrate Compliance with WAC 216 Permit.		Date: 07/19/95	
Assigned To: D. W. Lindsey		CIN: LET-96-012	
Program WBS Designator: 1.2.2.1.2		Due Date: 11/16/96-05 to RL 02/16/97-06 to RL 05/16/97-06 to RL 08/15/97-06 to RL	
Control Number: LEP-97-006, LEP-98-007, LEP-99-002, LEP-00-002, LEP-01-002, LEP-02-002, LEP-03-002, LEP-04-002, LEP-05-002, LEP-06-002		Rev:	
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☒ State ☐ Federal ☐ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☒ Report ☐ Letter ☒ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Report results to RL of monitoring the total effluent and groundwater to verify compliance with all permit enforcement limits and determine if Early Warning Values are being approached. This monitoring will also be used to verify that BAT/AKART source, treatment, and technology controls are being met. Based on permit, this report is due 30 days after the completed reporting period; however, Ecology has agreed to allow 60 days until further notice. Due dates are based on 60 days. For details see Sections S.9 and G.11 of the permit.			
Description of what constitutes completion of this milestone: Report to RL describing the results of the period's monitoring. This milestone supports RL submittal of the DMRs 60 days from the end of the reporting period.			
Cost Account Manager:		Program/Project Manager	
D. W. Lindsey		A. J. DiLiberto	
Program Element Manager		DOE Monitor	
Date		Date	
E. M. Bowers		E. M. Bowers	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: 200 Area TEDF Operations and Maintenance Plans and Summary Matrix Annual Update IAW WAC-216 Permit			Date: 08/31/96
Assigned To: D. W. Lindsey			CIN:
Program WBS Designator: 1.2.2.1.2			Due Date: 04/17/97-06 to RL
Control Number: LEP-97-009, LEP-98-010, LEP-99-005, LEP-00-006, LEP-01-005, LEP-02-005, LEP-03-005, LEP-04-005, LEP-05-005, LEP-06-005			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☒ State ☐ Federal ☐ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: The SWD Permit for the 200 Area TEDF requires that annually RL submit to Ecology a letter which confirms that an annual review and update of all ETF Operations and Maintenance manuals has been completed. This includes the facility Solid Waste and Spill Control Plans.			
Description of what constitutes completion of this milestone: The transmission of a letter to RL indicating the completion of the annual review. This milestone supports RL submittal of the annual review to Ecology by 05/17 each year.			
Cost Account Manager:		Date	Program/Project Manager
D. W. Lindsey			A. J. DiLiberto
Program Element Manager		Date	DOE Monitor
			E. M. Bowers

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Perform Annual Review/Update of 200 Area TEDF WAC-216 Permit Solid Waste Control Plans			Date: 07/19/95
Assigned To: D. W. Lindsey			CIN:
Program WBS Designator: 1.2.2.1.2			Due Date: 03/17/97-06 to RL
Control Number: LEP-97-008, LEP-98-009, LEP-99-004, LEP-00-005, LEP-01-004, LEP-02-004, LEP-03-004, LEP-04-004, LEP-05-004, LEP-06-004			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☒ State ☒ Federal ☐ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☒ Report ☐ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Solid Waste Control Plans were made available to Ecology by the effective date of the permit. Each plan is required to be reviewed annually and updated as needed. Any proposed revision or modification of the solid waste control plans must be submitted to Ecology for prior approval. See Section G.19 of the permit for complete description.			
Description of what constitutes completion of this milestone: Letter report to RL indicating reviews have been completed. For revisions, a letter describing the requested change will be submitted for approval. This milestone supports the RL submittal of the review to Ecology by 04/18 each year.			
Cost Account Manager: D. W. Lindsey		Program/Project Manager A. J. DiLiberto	Date
Program Element Manager 		DOE Monitor E. M. Bowers	Date

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LEP FY 1997 Work Plan (WBS 1.2.2)

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Operate 200 Area TEDF in accordance with SWD Permit No. ST-4502			Date: 08/25/95
Assigned To: D. W. Lindsey			CIN:
Program WBS Designator: 1.2.2.1.2			Due Date: Quarterly
Control Number: LEP-97-012, LEP-98-012, LEP-99-008, LEP-00-008, LEP-01-007, LEP-02-007, LEP-03-007, LEP-04-007, LEP-05-007, LEP-06-007			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☒ CONTRACTOR	DIVISION: ☒ State ☐ Federal ☒ DOE ☒ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☒ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Operate 200 Area TEDF in accordance with SWD Permit No. ST-4502 with no formal notice of violation from Ecology. This milestone supports Performance Measure Expectation WM2.2.4.			
Description of what constitutes completion of this milestone: Submittal of a letter to RL documenting no Notices of Violation issued by EPA Region X and/or Ecology attributable to the improper operation and maintenance of the 200 Area TEDF. Any violations caused by inappropriate generator discharges to the 200 Area TEDF are specifically excluded from the scope of this measure due to the lack of retention capabilities or real time monitoring at the facilities.			
Cost Account Manager:		Date	
D. W. Lindsey		A. J. DiLiberto	
Program Element Manager		Date	
		DOE Monitor	
		E. M. Bowers	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Submit ETF/LERF Part B Permit Application			Date: 08/31/95
Assigned To: D. W. Lindsey			CIN:
Program WBS Designator: 1.2.2.1.2			Due Date: 06/15/97 to RL
Control Number: LEP-97-010			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☒ State ☐ Federal ☐ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☐ Letter ☐ Drawings ☒ Other (specify) Part B Permit Application	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Revise and submit the combined RCRA ETF/LERF Part B permit application to RL for incorporation into the Hanford Facility RCRA Permit. This milestone supports Performance Measure Expectation WM2.2.2.			
Description of what constitutes completion of this milestone: Submit combined RCRA ETF/LERF Part B permit application to RL. Basis for schedule: draft schedule for the Hanford Facility RCRA Permit, Modification C, schedule for incorporating TSD Units. This milestone supports RL submittal of the permit application to Ecology by 07/01/97.			
Cost Account Manager:		Date	Program/Project Manager
D. W. Lindsey			A. J. DiLiberto
Program Element Manager		Date	DOE Monitor
			E. M. Bowers

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Implement 340 Facility Shutdown Plan		Date: 07/23/96	
Assigned To: L. W. Roberts		CIN:	
Program WBS Designer: 1.2.2.1.3		Due Date: 01/30/97	
Control Number: LEP-97-015		Rev:	
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☒ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☒ Other (specify)
Milestone Description: Prepare a revised 340 Facility Shutdown Plan that identifies FY 1997 and beyond shutdown activities based upon funding, PNNL expectations/support, and Hanford overall site conditions. Also, prepare a status report documenting progress of shutdown activities.			
Description of what constitutes completion of this milestone: Submit a revised 340 Facility Shutdown Plan to RL by 12/31/96 that identifies FY 1997 and beyond shutdown activities based upon funding, PNNL expectations/support, and Hanford overall site conditions. Submit a status report to RL by 09/30/97 documenting progress of shutdown activities identified in the 340 Facility Shutdown Plan. The status report shall clearly document completion of planned activities except where changes in conditions over the baseline 12/31/96 outside of the control of the PHMC have impacted completion of planned project progress..			
Cost Account Manager:		Program/Project Manager	
Date		Date	
L. W. Roberts		A. J. DiLiberto	
Program Element Manager		DOE Monitor	
Date		Date	
E.M. Bowers		E.M. Bowers	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Operate 200 Area ETF in accordance with SWD Permit No. ST-4500.			Date: 08/31/95
Assigned To: D. W. Lindsey			CIN:
Program WBS Designator: 1.2.2.1.2			Due Date: Quarterly
Control Number: LEP-97-013, LEP-98-013, LEP-99-009, LEP-00-009, LEP-01-008, LEP-02-008, LEP-03-008, LEP-04-008, LEP-05-008, LEP-06-008			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☒ State ☐ Federal ☐ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Operate the 200 Area ETF in accordance with SWD Permit No. 4500 with no formal notice of violation from Ecology. This milestone supports Performance Measure Expectation WM2.2.4.			
Description of what constitutes completion of this milestone: Submittal of a letter to RL documenting that no Notices of Violation issued by EPA Region X and/or Ecology attributable to the improper operation and maintenance of the 200 Area ETF. The violation point for the 200 ETF is the sample results from the verification tanks. Any violations measured at the groundwater under the SALDS but not attributable to discharges in excess of ETF discharge limitations are specifically excluded from this measure.			
Cost Account Manager: D. W. Lindsey		Date	Program/Project Manager A. J. DiLiberto
Program Element Manager		Date	DOE Monitor E. M. Bowers

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LEP FY 1997 Work Plan (WBS 1.2.2)

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Operate 300 Area TEDF within NPDES Permit Enforcement Limits			Date: 08/31/96
Assigned To: L. W. Roberts			CIN:
Program WBS Designator: 1.2.2.1.3			Due Date: 12/31/96 to RL 03/31/97 to RL 06/30/97 to RL 09/30/97 to RL
Control Number: LEP-97-017			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☒ CONTRACTOR	DIVISION: ☐ State ☒ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☒ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Operate the 300 Area TEDF with no Notice of Violations from the EPA pertaining to the NPDES permit, and provide timely submission of the monthly DMR. This milestone supports Performance Measure Expectation WM2.2.4.			
Description of what constitutes completion of this milestone: Submittal of a letter to RL documenting no Notices of Violations issued by EPA Region X attributable to the improper operation and maintenance of the 300 Area TEDF. Any violations caused by inappropriate generator discharges to the 300 Area TEDF are specifically excluded from the scope of this measure due to the lack of retention capabilities or real time monitoring at the facilities.			
Cost Account Manager: L. W. Roberts		Date: _____ Program/Project Manager: A. J. DiLiberto	
Program Element Manager:		Date: _____ DOE Monitor: E. M. Bowers	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: 340 Facility Authorization Basis		Date: 07/23/96	
Assigned To: L. W. Roberts		CIN:	
Program WBS Designator: 1.2.2.1.3		Due Date: 09/30/97	
Control Number: LEP-97-016		Rev:	
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number <hr style="width: 50%; margin-left: 0;"/>	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Per DOE Order 5480.23, review the 340 Facility Authorization Basis, which was updated in 1996.			
Description of what constitutes completion of this milestone: Transmit a letter to RL documenting that such a review has been completed and requesting approval of any revisions if necessary.			
Cost Account Manager: _____		Program/Project Manager _____	
L. W. Roberts		A. J. DiLiberto	
Program Element Manager _____		DOE Monitor _____	
		E. M. Bowers	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Review Operating and Maintenance Requirements for 310 (TEDF)			Date: 07/23/96
Assigned To: L. W. Roberts			CIN:
Program WBS Designator: 1.2.2.1.3			Due Date: 06/30/97
Control Number: LEP-97-019			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☒ Report ☐ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Conduct a formal review of DOE orders and Company requirements to promote a more efficient operating methodology at 300 Area TEDF, which will more closely resemble commercial water treatment operations.			
Description of what constitutes completion of this milestone: Submit to RL, for their comment and approval, a report defining operating and maintenance standards relative to DOE Orders and Company policies.			
Cost Account Manager:		Program/Project Manager	
Date		Date	
L. W. Roberts		A. J. DiLiberto	
Program Element Manager		DOE Monitor	
Date		Date	
		E. M. Bowers	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: 340 Waste Handling Facility Shipments			Date: 07/23/96
Assigned To: L. W. Roberts			CIN:
Program WBS Designator: 1.2.2.1.3			Due Date: 09/30/97
Control Number: LEP-97-018			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number <hr style="width: 50%; margin-left: 0;"/>	DELIVERABLE: ☐ Report ☐ Letter ☐ Drawings ☒ Other (specify) No violations	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Shipments of liquid waste from the 340 Facility will take place to maintain compliance with regulatory requirements. Typically, at least one railcar every 90 days, as required by WAC 173-303.			
Description of what constitutes completion of this milestone: No violations of regulatory provisions concerning 90-day clock.			
Cost Account Manager:		Program/Project Manager	
L. W. Roberts		A. J. DiLiberto	
Program Element Manager		DOE Monitor	
Date		Date	
E. M. Bowers		Date	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Sitewide Integrated Decision Making Process and Procedures for Disposal of Hanford Liquid Effluents			Date: 07/24/96
Assigned To: D. W. Lindsey			CIN:
Program WBS Designator: 1.2.2.1.2			Due Date: 02/28/97
Control Number: LEP-97-021			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☒ Report ☐ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Develop a sitewide integrated decision-making process and procedures for disposal of liquid effluents on the Hanford Site. The decision process must allow application of the decision methods to a broad spectrum of liquid effluents ranging from new streams (e.g., new pump and treat groundwater operations) to existing streams diverted from one TSD to another (e.g., 222-S discharges to TWRS diverted to 200 ETF). The plan will include methods for identifying candidate waste streams; developing necessary characterization information; evaluating facility compatibility/treatment efficiencies; cost analysis that adequately identify true cost of options to the government, risk/benefit identification that might impact a strictly financial decision process; and weighted evaluation of all criteria to reach a final decision for individual streams.			
Description of what constitutes completion of this milestone: Develop a liquid effluents decision plan to be used in sitewide decision making for analysis of local versus centralized treatment/disposal options. The plan will be submitted to RL by 02/28/97 for subsequent discussion between RL and the PHMC, consensus building with BHL/PNNL, and plan approval.			
Cost Account Manager: D. W. Lindsey		Date	Program/Project Manager A. J. DiLiberto
Program Element Manager		Date	DOE Monitor E. M. Bowers

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Review Operating and Maintenance Requirements for 340 Facility			Date: 07/23/96
Assigned To: L. W. Roberts			CIN:
Program WBS Designator: 1.2.2.1.3			Due Date: 06/30/97
Control Number: LEP-97-020			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number <div style="border-bottom: 1px solid black; width: 50px; margin-top: 5px;"></div>	DELIVERABLE: ☒ Report ☐ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Conduct a formal review of DOE Orders and Company manuals to identify necessary, ongoing 340 Facility maintenance and operational requirements; primarily in anticipation of 340 Facility closeout.			
Description of what constitutes completion of this milestone: Submit to RL, for their comment and approval, a report defining operating and maintenance standards relative to DOE Orders and Company policies.			
Cost Account Manager: L. W. Roberts		Date	Program/Project Manager A. J. DiLiberto
Program Element Manager		Date	DOE Monitor E. M. Bowers

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: 200 Area LEF Coordinated Management System			Date: 07/24/96
Assigned To: D. W. Lindsey			CIN:
Program WBS Designator: 1.2.2.1.2			Due Date: 09/30/97
Control Number: LEP-97-023			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☐ Letter ☐ Drawings ☒ Other (specify) Plan	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: To consolidate handling and treatment of liquid effluents in the 200 Area, Liquid Effluents Program will implement a coordinated management system to operate 242-A, LERF, and ETF. This milestone supports Performance Measure Expectation WM2.3.1.			
Description of what constitutes completion of this milestone: Develop and submit to RL a management plan and schedule by 03/31/97 to consolidate facility assets for 242-A Evaporator, LERF, and ETF based on the outcome of the re-engineering efforts. Submit a letter report to RL by 09/30/97 documenting successful completion of FY 1997 activities identified in that plan.			
Cost Account Manager:		Date	Program/Project Manager
D. W. Lindsey			A. J. DiLiberto
Program Element Manager		Date	DOE Monitor
			E. M. Bowers

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Modifications to Existing Waste Water Discharge Permits			Date: 07/24/96
Assigned To: D. W. Lindsey			CIN:
Program WBS Designator: 1.2.2.1.2			Due Date: 03/31/97
Control Number: LEP-97-022			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number <hr style="width: 50%; margin-left: 0;"/>	DELIVERABLE: ☒ Report ☐ Letter ☐ Drawings ☒ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☒ Other (specify)
Milestone Description: Collect appropriate data and propose draft modifications to RL for existing waste water discharge permits based on liquid effluent disposal process being developed. Prepare characterization studies in accordance with the 200 ETF SWD Permit No. ST-4500 for UP-1 groundwater, N Area Emergency Dump Basin, and PUREX caustic storage tank waste. This milestone supports Performance Measure Expectation WM2.2.1.			
Description of what constitutes completion of this milestone: Submit characterization studies for identified liquid waste streams to RL by 03/31/97 that comply with the requirements of 200 Area ETF SWD Permit No. ST-4500. Planned streams included in the scope are UP-1 Groundwater, N Area Emergency Dump Basin, and PUREX Caustic Storage Tank.			
Cost Account Manager:		Program/Project Manager	
Date		Date	
D. W. Lindsey		A. J. DiLiberto	
Program Element Manager		DOE Monitor	
Date		Date	
		E. M. Bowers	

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Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Annual Review/Update of 200 Area ETF Operations and Maintenance Manuals			Date: 08/31/96
Assigned To: D. W. Lindsey			CIN:
Program WBS Designator: 1.2.2.1.2			Due Date: 10/12/96 to RL
Control Number: LEP-97-025, LEP-98-015, LEP-99-011, LEP-00-012, LEP-01-010, LEP-02-009, LEP-03-009, LEP-04-009, LEP-05-009, LEP-06-009			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ DOE-FO ☐ CONTRACTOR	DIVISION: ☒ State ☐ Federal ☐ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: The State Waste Discharge Permit for the 200 Area ETF requires that annually RL submit to Ecology a letter which confirms that an annual review and update of all ETF Operations and Maintenance Manuals has been completed..			
Description of what constitutes completion of this milestone: Transmittal of letter to RL, for forwarding to Ecology, stating completion of the annual review. This milestone supports an RL commitment to submit the annual review to Ecology by 11/12 each year.			
Cost Account Manager:		Program/Project Manager	
Date		Date	
D. W. Lindsey		A. J. DiLiberto	
Program Element Manager		DOE Monitor	
Date		Date	
		E. M. Bowers	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Submit 283E Trench Alternatives Study to RL		Date: 10/01/96	
Assigned To: D. W. Lindsey		CIN:	
Program WBS Designator: 1.2.2.1.2		Due Date: 01/31/97 to RL	
Control Number: LEP-97-024		Rev:	
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☒ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Prepare and submit to RL a 283E Trench Alternatives Study that discusses future actions required for continued permitting of flow through the trench..			
Description of what constitutes completion of this milestone: Submittal of 283E Trench Alternatives Study to RL..			
Cost Account Manager:		Program/Project Manager	
Date		Date	
D. W. Lindsey		A. J. DiLiberto	
Program Element Manager		DOE Monitor	
Date		Date	
E. M. Bowers		E. M. Bowers	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Readiness to Accept 200 UP-1 Groundwater in LERF		Date: 08/31/96	
Assigned To: D. W. Lindsey		CIN:	
Program WBS Designator: 1.2.2.1.2		Due Date: 01/31/97	
Control Number: LEP-97-027		Rev:	
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☒ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: LERF ready to accept UP-1 groundwater. Successful completion of this milestone assumes (a) public comment on the cleanup plan for 200 UP-1 operable unit ends on 10/05/96, and (b) RL provides direction to start construction of the cross-site tie-in no later than 09/15/96.			
Description of what constitutes completion of this milestone: Transmittal of letter to RL declaring readiness to receive groundwater in LERF.			
Cost Account Manager: D. W. Lindsey		Program/Project Manager A. J. DiLiberto	
Program Element Manager		DOE Monitor E. M. Bowers	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Maintenance Implementation Plan (MIP)		Date: 08/28/96	
Assigned To: L. W. Roberts		CIN:	
Program WBS Designator: 1.2.2.1.3		Due Date: 09/30/97	
Control Number: LEP-97-026		Rev:	
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Review and, if appropriate, update 340 Waste Handling Facility MIP.			
Description of what constitutes completion of this milestone: Letter notifying RL of completion of review of MIP and, if appropriate, requesting approval of update.			
Cost Account Manager:		Program/Project Manager	
L. W. Roberts		A. J. DiLiberto	
Program Element Manager		DOE Monitor	
E. M. Bowers		Date	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Initiate Operation of Project W-252 System Redirecting B Pond Discharge to the 200 Area ETDF.			Date: 08/31/94
Assigned To: D. W. Lindsey			CIN: LET-96-009
Program WBS Designator: 1.2.2.1.5			Due Date: 09/30/97 04/01/97
Control Number: LEP-98-001			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Cease to discharge to the B Pond system by initiating operation of the Project W-252 system redirecting remaining discharges to the 200 Area TEDF.			
Description of what constitutes completion of this milestone: Letter sent to RL stating that Project W-252 has initiated operations.			
Cost Account Manager: D. W. Lindsey		Date	Program/Project Manager A. J. DiLiberto
Program Element Manager		Date	DOE Monitor E. M. Bowers

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Treat UP-1 Groundwater and N Basin water in 200 Area ETF		Date: 08/31/96	
Assigned To: D. W. Lindsey		CIN:	
Program WBS Designator: 1.2.2.1.2		Due Date: 07/31/97 10/31/97	
Control Number: LEP-97-028, LEP-98-016		Rev:	
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Treat LERF basins 43 and 44 (6.5 M gallons each), containing a combination of UP-1 groundwater and N Basin water, in the 200 Area ETF. Treated effluent will be in compliance with SWD Permit No. ST-4500 and the delisting petition. Due date for the first basin is 07/31/97 (LEP-97-028); due date for the second basin is 10/31/97 (LEP-98-016). Successful completion of this milestone assumes that the Environmental Restoration Program provides UP-1 groundwater at a continuous rate of 50 gpm (50 gpm for 90 days = 6.5 M gallons).			
Description of what constitutes completion of this milestone: Transmittal of a letter to RL stating completion.			
Cost Account Manager: _____ Date _____		Program/Project Manager _____ Date _____	
D. W. Lindsey		A. J. DiLiberto	
Program Element Manager _____ Date _____		DOE Monitor _____ Date _____	
		E. M. Bowers	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Complete WAC-216 Permit Application for Category 4 Miscellaneous Streams			Date: 06/12/95
Assigned To: D. W. Lindsey			CIN:
Program WBS Designator: 1.2.2.1.4			Due Date: 08/30/98 to RL
Control Number: LEP-98-005			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☒ State ☐ Federal ☒ DOE ☒ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☐ Letter ☐ Drawings ☒ Other (specify) Permit Application	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Submit a WAC-216 Categorical Permit application for storm water discharges. (For Category description, see the "Plan and Schedule for Disposition and Regulatory Compliance for Miscellaneous Streams," DOE/RL-93-94, Rev 1)			
Description of what constitutes completion of this milestone: Transmit permit application to RL. This milestone supports RL submittal of the application to Ecology by 09/30/98.			
Cost Account Manager:		Program/Project Manager	
Date		Date	
D. W. Lindsey		A. J. DiLiberto	
Program Element Manager		DOE Monitor	
Date		Date	
		E. M. Bowers	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Implement BAT/AKART for all Phase II Liquid Effluent Streams (ADS 2300-1)			Date: 08/31/94
Assigned To: D. W. Lindsey			CIN:
Program WBS Designator: 1.2.2.1.5			Due Date: 10/31/97
Control Number: LEP-98-003			Rev: 0
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☒ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☒ TPA Number <u>M-17-00B</u>	DELIVERABLE: ☐ Report ☒ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Completion of BAT/AKART for Phase II Streams in each facility.			
Description of what constitutes completion of this milestone: Letter sent to RL with documentation that each Phase II stream facility is tied to the 200 Area TEDF or has been eliminated and BAT/AKART for all Phase II Liquid Effluent streams has been accomplished.			
Cost Account Manager:		Program/Project Manager	
D. W. Lindsey		A. J. DiLiberto	
Program Element Manager		DOE Monitor	
Date		Date	
E. M. Bowers		Date	

Westinghouse Hanford Company MLESTONE DESCRIPTION SHEET			
Title: Submit Reapplication for SWD Permit for 200 Area TEDF		Date: 07/19/95	
Assigned To: D. W. Lindsey		CIN:	
Program WBS Designator: 1.2.2.1.2		Due Date: 01/18/00 to RL 01/18/05 to RL	
Control Number: LEP-00-003, LEP-05-011		Rev:	
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☒ State ☐ Federal ☐ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☐ Letter ☐ Drawings ☒ Other (specify) Permit Application	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Complete and submit an application for permit renewal at least 60 days prior to the specified expiration date for the permit.			
Description of what constitutes completion of this milestone: Submit application for renewal of permit to RL. This milestone supports RL submittal of the application to Ecology by 02/18/00 and 02/18/05.			
Cost Account Manager: _____ Date _____		Program/Project Manager _____ Date _____	
D. W. Lindsey		A. J. DiLiberto	
Program Element Manager _____ Date _____		DOE Monitor _____ Date _____	
		E. M. Bowers	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Prepare and Submit Reapplication for 300 Area TEDF NPDES Permit Modification			Date: 08/25/95
Assigned To: L. W. Roberts			CIN:
Program WBS Designator: 1.2.2.1.3			Due Date: 11/30/98 11/30/99
Control Number: LEP-99-006, LEP-00-011			Rev:
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☐ Letter ☐ Drawings ☒ Other (specify) Permit Application	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Prepare permit reapplication on the NPDES for the 300 Area TEDF, and submit the permit reapplication package to RL for submission to the EPA for issuance.			
Description of what constitutes completion of this milestone: Draft of permit reapplication submitted to RL for review by 11/30/98. Final version prepared and submitted to RL for approval by 11/30/99. RL will subsequently forward the permit reapplication to the EPA.			
Cost Account Manager: L. W. Roberts		Date	Program/Project Manager A. J. DiLiberto
Program Element Manager		Date	DOE Monitor E. M. Bowers

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Prepare and Submit Reapplication for 300 Area TEDF NPDES Permit Modification		Date: 07/19/95	
Assigned To: L. W. Roberts		CIN:	
Program WBS Designator: 1.2.2.1.3		Due Date: 11/30/03 to RL 11/30/04 to RL	
Control Number: LEP-04-010, LEP-05-010		Rev:	
MILESTONE TYPE:	DIVISION:	DELIVERABLE:	ADDRESS TO:
☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	☒ State ☐ Federal ☐ DOE ☐ RCRA ☐ TPA Number	☐ Report ☐ Letter ☐ Drawings ☒ Other (specify) Permit Application	☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Prepare permit reapplication on the NPDES for the 300 Area TEDF, and submit the permit reapplication package to RL for submission to the EPA for issuance.			
Description of what constitutes completion of this milestone: Draft of permit reapplication submitted to RL for review by 11/30/03. Final version prepared and submitted to RL for approval by 11/30/04. RL will subsequently forward the permit reapplication to the EPA. Reapplication for this permit is required every five years.			
Cost Account Manager:	Date	Program/Project Manager	Date
L. W. Roberts		A. J. DiLiberto	
Program Element Manager	Date	DOE Monitor	Date
		E. M. Bowers	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Submit Reapplication for SWD Permit for 200 Area ETF		Date: 07/19/95	
Assigned To: D. W. Lindsey		CIN:	
Program WBS Designator: 1.2.2.1.2		Due Date: 03/30/00 to RL 03/30/05 to RL	
Control Number: LEP-00-013, LEP-05-012		Rev:	
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☒ State ☐ Federal ☐ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☐ Report ☐ Letter ☐ Drawings ☒ Other (specify) Permit Application	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☐ Other (specify)
Milestone Description: Complete and submit an application for permit renewal at least 60 days prior to the specified expiration date for the permit.			
Description of what constitutes completion of this milestone: Submit application for renewal of permit to RL. This milestone supports RL submittal of the application to Ecology by 04/30/00 and 04/30/05.			
Cost Account Manager: _____ Date _____		Program/Project Manager _____ Date _____	
D. W. Lindsey		A. J. DiLiberto	
Program Element Manager _____ Date _____		DOE Monitor _____ Date _____	
		E. M. Bowers	

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4.0 COST BASELINE

4.1 BUDGET AUTHORITY AND COST BASELINE SUMMARIES BY YEAR

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4.1.1 BUDGET AUTHORITY SUMMARY BY YEAR BY ADS (\$000)

RL WBS	ADS #	WHS WBS	TITLE	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	TOTAL
1.2.2.1.	2300-0	1A2	Liquid Effluent Services	25929	23772	28639	31361	30192	32976	32976	32976	32976	32976	304773
1.2.2.1.	2300-1	1A25	Ph II Streams BAT/AKART Imp (Proj W-252)		161									161
SUMMARY (1)				26090	23772	28639	31361	30192	32976	32976	32976	32976	32976	304934

(1) Summary Of All Programmatic ADS's And New B/A (See Section 4.1.2); Does Not Include Carryover.

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4.1.2 BUDGET AUTHORITY BY YEAR BY ADS (\$000)

RL WBS	ADS #	WHC WBS	TITLE	FUND TYPE	PRIOR YEAR	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	TOTAL
1.2.2.1.	2300-0	1A2	Liquid Eff	Expense	0	25849	26192	28539	29261	30092	30876	29876	32876	30876	28367	292804
			Services	CENRTC	330	80	80	100	100	100	100	100	100	100	100	960
				Line Item												0
				GPP	180				2000		2000	3000		2000	4509	13509
				Subtl New B/A	510	25929	26272	28639	31361	30192	32976	32976	32976	32976	32976	307273
				Exp Carryover (1)												0
				Total B/A	510	25929	26272	28639	31361	30192	32976	32976	32976	32976	32976	307273
1.2.2.1.5	2300-1	1A25	Ph II Streams	Expense		161										161
			BAT/AKART	CENRTC												0
			Implemntn	Line Item	2291											0
			(Proj W-252)	GPP												0
				Subtl New B/A	2291	161	0	0	0	0	0	0	0	0	0	161
				Exp Carryover (1)												0
				Total B/A	2291	161	0	0	0	0	0	0	0	0	0	161
RL Directed Productivity Commitment						-2500										-2500
PROGRAM NEW B/A						26090	23772	28639	31361	30192	32976	32976	32976	32976	32976	304934
PROGRAM EXPENSE CARRYOVER						0	0	0	0	0	0	0	0	0	0	0
PROGRAM TOTAL B/A						2801	26090	23772	28639	31361	30192	32976	32976	32976	32976	304934

(1) Includes Only Expense Carryover Approved By Site Management Board (SMB) Prior To 10/1/96.

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4.1.3 COST BASELINE BY YEAR BY ADS (\$000)

RL WBS	ADS	WHC WBS	FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	TOTAL
1.2.2.1.1.0000	2300-0	1A2111	Program Management											
			Expense	1230	1051	1199	1232	1265	1303	1341	1379	1424	1466	12890
			CENRTC											0
			Line Item											0
			GPP											0
			Subt New BCWS	1230	1051	1199	1232	1265	1303	1341	1379	1424	1466	12890
			Exp Carryover (1)											0
			Total BCWS	1230	1051	1199	1232	1265	1303	1341	1379	1424	1466	12890
1.2.2.1.1.0000	2300-0	1A2112	Prog Fees/Misc Chgs											
			Expense	500	500	500	500	500	500	500	500	500	500	5000
			CENRTC											0
			Line Item											0
			GPP											0
			Subt New BCWS	500	500	500	500	500	500	500	500	500	500	5000
			Exp Carryover (1)	0										0
			Total BCWS	500	500	500	500	500	500	500	500	500	500	5000
1.2.2.1.2.0000	2300-0	1A2211	200A TEDF SMECO											
			Expense	3253	3238	3350	3439	3531	3637	3746	3858	3974	4093	36119
			CENRTC											0
			Line Item											0
			GPP											0
			Subt New BCWS	3253	3238	3350	3439	3531	3637	3746	3858	3974	4093	36119
			Exp Carryover (1)	0										0
			Total BCWS	3253	3238	3350	3439	3531	3637	3746	3858	3974	4093	36119
1.2.2.1.2.0000	2300-0	1A2212	200A ETF SMECO											
			Expense	7523	7752	8067	8285	8509	8764	9027	9298	9577	9864	86666
		1A22--	CENRTC	80	40	50	50	50	50	50	50	50	50	520
			Line Item											0
		5A2212	GPP	130										130
			Subt New BCWS	7733	7792	8117	8335	8559	8814	9077	9348	9627	9914	87316
			Exp Carryover (1)	800										800
			Total BCWS	8533	7792	8117	8335	8559	8814	9077	9348	9627	9914	88116

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4.1.3 COST BASELINE BY YEAR BY ADS (\$000)

RL WBS	ADS	WHC WBS	FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	TOTAL
1.2.2.1.3.0000	2300-0	1A2310	300 A TEDF SMECO											
			Expense	3755	3848	4138	4009	4117	4427	4369	4500	4837	4780	42780
		2A23--	CENRTC	80	40	50	50	50	50	50	50	50	50	520
			Line Item											0
			GPP									2000		2000
			Subt New BCWS	3835	3888	4188	4059	4167	4477	4419	4550	6887	4830	45300
			Exp Carryover (1)	150										150
			Total BCWS	3985	3888	4188	4059	4167	4477	4419	4550	6887	4830	45450
1.2.2.1.3.0000	2300-0	1A2340	340 Facility SMECO											
			Expense	3576	3614	3577	3624	3722	3833	2280	2348	500		27073
			CENRTC											0
			Line Item											0
		5A2500	GPP	50										50
			Subt New BCWS	3626	3614	3577	3624	3722	3833	2280	2348	500	0	27123
			Exp Carryover (1)	100										100
			Total BCWS	3726	3614	3577	3624	3722	3833	2280	2348	500	0	27223
1.2.2.1.3.0000	2300-0	1A2317	300A TEDF Enhancements											
			Expense			332	32	32						396
			CENRTC											0
			Line Item											0
		5A23--	GPP				2000							2000
			Subt New BCWS	0	0	332	2032	32	0	0	0	0	0	2396
			Exp Carryover (1)	0										0
			Total BCWS	0	0	332	2032	32	0	0	0	0	0	2396
1.2.2.1.3.0000	2300-0	1A234X	340 Facility Closeout											
			Expense	200		1000	1610	1710	1603	1600	3769	2624		14116
		2A23--	CENRTC	250										250
			Line Item											0
			GPP											0
			Subt New BCWS	450	0	1000	1610	1710	1603	1600	3769	2624	0	14366
			Exp Carryover (1)	251										251
			Total BCWS	701	0	1000	1610	1710	1603	1600	3769	2624	0	14617

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4.1.3 COST BASELINE BY YEAR BY ADS (\$000)

RL WBS	ADS	WHC WBS	FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	TOTAL
1.2.2.1.2.0000	2300-0	1A2213	200A LERF SMECO											
			Expense	1359	1381	1429	1467	1506	1551	1597	1645	1695	1745	15373
			CENRTC											0
			Line Item											0
			GPP											0
			Subt New BCWS	1359	1381	1429	1467	1506	1551	1597	1645	1695	1745	15373
			Exp Carryover (1)	0										0
			Total BCWS	1359	1381	1429	1467	1506	1551	1597	1645	1695	1745	15373
1.2.2.1.2.0000	2300-0	1A2215	200A LEF Enhancements											
			Expense	507		91	93	96						786
			CENRTC											0
			Line Item											0
		5A22--	GPP						2000	3000			4509	9509
			Subt New BCWS	507	0	91	93	96	2000	3000	0	0	4509	10295
			Exp Carryover (1)	0										0
			Total BCWS	507	0	91	93	96	2000	3000	0	0	4509	10295
1.2.2.1.2.0000	2300-0	1A2216	200A ETF Evap Processing											
			Expense	1845	1815	1879	1929	1981	2041	2102	2165	2230	2297	20283
			CENRTC											0
			Line Item											0
			GPP											0
			Subt New BCWS	1845	1815	1879	1929	1981	2041	2102	2165	2230	2297	20283
			Exp Carryover (1)	0										0
			Total BCWS	1845	1815	1879	1929	1981	2041	2102	2165	2230	2297	20283
1.2.2.1.2.0000	2300-0	1A2217	200A ETF Non-Evap Processing											
			Expense	1692	2527	2616	2687	2759	2842	2927	3015	3105	3199	27369
			CENRTC											0
			Line Item											0
			GPP											0
			Subt New BCWS	1692	2527	2616	2687	2759	2842	2927	3015	3105	3199	27369
			Exp Carryover (1)	0										0
			Total BCWS	1692	2527	2616	2687	2759	2842	2927	3015	3105	3199	27369

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4.2 BASIS OF ESTIMATE

Basis of Estimate (Methodology of estimate and scope)

- Estimate Stage: Performance-based
Estimate Category: Baseline
Estimate Methodology: Definitive, Analogy
- The basis of estimate was developed using activity-based cost estimating. Planning for labor hours and nonlabor dollars is shown at the task package level or lower. This detail was used to develop resource-loaded schedules which are the basis for program planning.
- The basis of estimate is documented using "Cost Estimate/Basis of Estimate" worksheets. The worksheets and associated backup materials are packaged at the task package level. These task packages are combined in notebooks by cost account and retained by the Program Office for review and reference.

4.1.3 COST BASELINE BY YEAR BY ADS (\$000)

RL WBS	ADS	WHC WBS	FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	TOTAL
1.2.2.1.4.000	2300-0	1A2413	Miscellaneous Streams											
			Expense	410	466	362	355	365	376	387	399	411	423	3952
			CENRTC											0
			Line Item											0
			GPP											0
			Subt New BCWS	410	466	362	355	365	376	387	399	411	423	3952
			Exp Carryover (1)	30										30
			Total BCWS	440	466	362	355	365	376	387	399	411	423	3982
1.2.2.1.	2300-0		TOTAL 2300-0											
			Expense	25849	26192	28539	29261	30092	30876	29876	32876	30876	28367	292804
			CENRTC	410	80	100	100	100	100	100	100	100	100	1290
			Line Item	0	0	0	0	0	0	0	0	0	0	0
			GPP	180	0	0	2000	0	2000	3000	0	2000	4509	13689
			Subt New BCWS	26439	26272	28639	31361	30192	32976	32976	32976	32976	32976	307783
			Exp Carryover (1)	1331	0	0	0	0	0	0	0	0	0	1331
			Total BCWS	27770	26272	28639	31361	30192	32976	32976	32976	32976	32976	309114
1.2.2.1.5.0000	2300-1	1A2502	Ph II Streams (W-252)											
			Expense	161										161
			CENRTC											0
		3A2500	Line Item	2291										2291
			GPP											0
			Subt New BCWS	2452	0	0	0	0	0	0	0	0	0	2452
			Exp Carryover (1)	50										50
			Total BCWS	2502	0	0	0	0	0	0	0	0	0	2502
RL Directed Productivity Commitment				-2500										-2500
PROGRAM BCWS/PMB				28891	23772	28639	31361	30192	32976	32976	32976	32976	32976	307735
PROGRAM TOTAL				30272	23772	28639	31361	30192	32976	32976	32976	32976	32976	309116

(1) Budgeted Cost Of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB).

(2) Management Reserve And Line Item Contingency Held By RL.

(3) Includes Expected Expense Carryover Requested By Formal Change Control In FY1997.

4.3 PLANNED STAFFING PROFILES (AVERAGED FULL-TIME EQUIVALENTS)

4.3 PLANNED STAFFING PROFILE

Program Average FTE Projections by COCS Categories

Program WBS/Title: 1.2.2.1 / Liquid Effluent Services

COCS	Title	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06
C000	Crafts	12.3	12.1	12.1	12.1	12.0	12.0	12.0	12.0	9.9	9.9
C010	Carpenters	.3	.3								
C020	Electricians	3.5	3.6								
C030	Htg Air-Condit / Refrig Mech (HVAC)										
C040	Machinists										
C050	Masons										
C060	Millwrights	2.5	2.6								
C070	Painters	.2	.2								
C080	Plumbers and Pipefitters	3.5	3.6								
C090	Structural and Metal Workers	1.1	1.1								
C100	Vehicle and Mobile Equipment Mechanics										
C110	Welders										
C120	Other Crafts	1.2	.7								
E000	Engineers	64.3	60.7	61.1	61.3	61.0	59.0	54.1	54.1	52.1	52.1
E010	Chemical Engineers										
E020	Civil Engineers										
E040	Electrical Engineers	1.0	1.0								
E050	Environmental Engineers	12.8	13.7								
E060	Industrial Engineers										
E070	Mechanical Engineers										
E080	Nuclear Engineers										
E090	Petroleum/Mining Engineers										
E100	Plant Engineers	11.8	12.2								
E110	Quality Assurance/Control Engineers	1.2	1.1								
E120	Safety Engineers	1.5	1.5								
E130	Other Engineers	36.0	31.2								
E140	Construction Engineers										

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4.3 PLANNED STAFFING PROFILE

Program Average FTE Projections by COCS Categories

Program WBS/Title: 1.2.2.1 / Liquid Effluent Services

COCS	Title	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06
P000	Prof Admin & Related Occupations	22.4	20.9	21.3	21.5	21.5	19.5	18.4	18.4	18.4	18.4
P010	Accountants and Auditors	5.6	5.3								
P020	Architects										
P030	Buyers, Procurement, Contracting Spec	.7	.7								
P040	Communications Specialists										
P050	Compliance Inspectors	1									
P060	Computer Systems Analysts	5	5								
P070	Cost Estimators, Planners, Schedulers	10.2	8.9								
P080	Health Physicists	1.9	1.9								
P090	Industrial Hygienists										
P100	Lawyers										
P110	Personnel/Labor Relations Specialists										
P120	Physicians										
P130	Physician Assist, Nurses, Oth Medical Supt										
P140	Safeguards and Other Security Specialists										
P150	Trainers	2.8	2.9								
P160	Technical Writers, and Editors										
P170	Other Admin & Professional Occupations	6	7								
R000	Operators	36.3	36.7	36.9	37.0	36.8	33.8	33.8	33.8	33.7	33.7
R010	Chemical System Operators										
R020	Drillers										
R030	Material Moving Equipment Operators										
R040	Nuclear Plant Operators	25.7	26.4								
R050	Nuclear Waste Process Operators	10.4	10.1								
R060	Production Systems Operators										
R070	Utilities Operators	2	2								
R080	Other Operators										

4.3 PLANNED STAFFING PROFILE

Program Average FTE Projections by COCS Categories

Program WBS/Title: 1.2.2.1 / Liquid Effluent Services

COCS	Title	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06
G000	Gen Admin, Secy & Clerical Suppt	9.4	9.4	9.5	9.5	9.5	8.4	8.4	8.4	8.4	8.4
G010	Administrative Assistants	1.2	1.2								
G020	Office Clerks (General)	2.0	1.9								
G030	Office Clerks (Specialized)	1.9	2.0								
G040	Secretaries	4.3	4.3								
G050	Typist and Word Processors										
G060	Other General Admin, Secy, Clerical Suppt										
L000	Laborers, General Service Workers	1.9	1.9	1.9	1.9	1.9	1.7	1.7	1.7	1.7	1.7
L010	Firefighters										
L020	Food Service Workers										
L030	Janitors and Cleaners										
L040	Laundry Workers										
L050	Handlers, Helpers and Laborers (General)	1.5	1.5								
L060	Handlers, Helpers, Laborers (Specialized)										
L070	Light Vehicle Drivers	.3	.3								
L080	Security Guards										
L090	Other Laborers, General Services Workers	.1	.1								
M000	Managers	15.7	17.1	17.3	17.3	17.3	16.3	16.3	16.3	15.1	15.1
M010	First Line Supervisors	11.9	13.1								
M020	General Managers and Executives	3.4	3.8								
M030	Project and Program Managers	.4	.2								
M040	Other Managers										

4.3-2

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LEP FY 1997 Work Plan (WBS 1.2.2)

4.4 BUILDING BLOCKS						
ADS	Description	RL Pri	Fund Type	FY 1997	CUM FY 1997	Justification of Scope/Impact if not funded
2300-0	Program Management - Management, Program Administration, Planning, Scheduling, Reporting, Financial Control, Systems Engineering Support		Exp	1730	1730	Provides planning, budgeting, statusing, performance monitoring, customer interface and program direction. Supports systems engineering and waste volume/feed interfaces. IMPACTS: TPA M-17 and Consent Order DE-91NM-177 missed and TPA Article XLVIII. Paragraphs 148/149 Cost, Schedule, and Scope Planning and Reporting not supported. Loss of engineering oversight for overall technical/regulator concerns and interface with site-wide systems engineering activities.
2300-0	200A TEDF SMECO - Operate 200A TEDF		Exp	3253	4983	Supports minimum safe, compliant operations of the collection and disposal facilities for 200A plants. IMPACTS: Facilities discharging to the 200A TEDF would shut down, cease activities until work-around solutions developed or use emergency means to dispose of effluents (possibly disposal to soil column); affected activities include deactivation work at PUREX and B Plant, cleanout at PPP, and sample analysis at 222S.
2300-0	200A ETF SMECO		Exp	7523	12506	Supports the minimum safe, compliant standby condition of the 200A ETF. IMPACTS: Not available to process LERF contents, resulting in the shutdown of the 242A Evaporator, new waste additions to tank farms restricted or stopped; ability to manage tank wastes limited; no control provided for radiological contamination existing in ETF from previous operation.
2300-0	LERF SMECO - Operate LERF		Exp	1359	13865	Provides temporary storage for 242-A Evaporator condensate. IMPACTS: Operation of 242A Evaporator restricted due to limited storage at 200A ETF for process condensate; waste from other programs (e.g., N Basin) sent to tank farms instead of ETF or alternate treatment method provided; revision of safety documentation and permits due to change in operation.

4.3 PLANNED STAFFING PROFILE

Program Average FTE Projections by COCS Categories

Program WBS/Title: 1.2.2.1 / Liquid Effluent Services

COCS	Title	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06
S000	Scientists	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
S010	Chemists	1.1	1.1								
S020	Environmental Scientists										
S030	Geologists										
S040	Life Scientists										
S050	Materials Scientists										
S060	Mathematicians										
S070	Physicists										
S080	Social Scientists										
S090	Other Scientists	.7	.7								
S100	Computer Scientists										
T000	Technicians	16.0	15.6	15.7	14.8	14.6	12.8	12.8	12.8	11.7	11.7
T010	Computer Operator/Coders										
T020	Drafters	2.3	1.7								
T030	Engineering Technicians										
T040	Environmental Sciences Technicians										
T050	Health Physics Technicians	8.6	8.9								
T060	Industrial Safety and Health Technicians										
T070	Instrument and Control Technicians	4.7	5.0								
T080	Laboratory Technicians	.4									
T090	Media Technicians										
T100	Survey and Mapping										
T110	Other Technicians										
Total		180.1	176.2	177.6	177.2	176.4	165.3	159.3	159.3	152.8	152.8

4.3-4

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2300-0	200A ETF Operations - 242A Evaporator Processing		Exp	1845	23692	Supports processing of LERF basin inventory. <u>IMPACTS:</u> 200A ETF unable to treat process condensate from the 242A Evaporator which would then cease operation; new waste additions to tank farms restricted or stopped; new feeds from Spent Fuels, Environmental Restoration, Facility deactivations, Tank Waste Remediation and other programs would not be processed; existing LERF contents could not be processed within one year limit; new liquid effluent treatment strategy for site required.
2300-0	200A ETF Operations - Non Evaporator Processing (N Basin and Groundwater Feeds) -- First Campaign (Does not include sampling or processing activities for a second campaign, Aug-Sep).		Exp	1692	25384	Supports 200A ETF Operation to treat and dispose of feeds from N Basins and 200 UP-1 Operable Unit (groundwater) in 200W. <u>IMPACTS:</u> Existing pilot scale system to treat groundwater will require extensive upgrades; two month delay in completing pump and treat operation; under-utilization of existing ETF; N Basin feeds would go to tank farms or alternate treatment method provided; existing LERF contents could not be processed within one year limit.
2300-0	200A ETF Enhancements - UP-1 Pipeline Upgrades		Exp	506	25890	Provides for connection of the cross site transfer line to the 200-UP-1 pumping station and to the LERF basins. <u>IMPACTS:</u> Groundwater from the 200-UP-1 Operable Unit could not be treated at 200A ETF; under-utilization of existing ETF.
2300-0	340 Facility Closeout		Exp	200	26090	Provides for evaluation of facility systems in regard to continued safe operations prior to termination; and implementation of facility stabilization actions. <u>IMPACTS:</u> Plans for 340 Facility shutdown and for modifications supporting new waste handling facility not developed; 340 Facility continues operations until FY 1998 and then maintained in hot standby at higher cost until shutdown activities resumed.

2300-0	300A TEDF SMECO - Operate 300A TEDF		Exp	3755	17620	Supports minimum safe, compliant operations of the 300A TEDF. IMPACTS: Facilities served by the 300 Area TEDF would cease operation. Support to site cleanup mission by these facilities would be stopped.
2300-0	340 Facility SMECO		Exp	3576	21196	Supports minimum safe, compliant operation of the 340/307 Facility. IMPACTS: Shutdown 300A labs until alternate waste handling capability provided; support to site cleanup mission by affected facilities delayed; TPA M-44 milestones for core sampling would be missed.
2300-0	Capital Equipment		CE	80	21276	Provides for purchase of capital equipment required for maintaining and operating the Liquid Effluent Facilities. IMPACTS: All equipment necessary for safe and efficient operation of the facilities would not be available.
2300-1	Phase II Streams BAT/AKART Implementation (W-252)		Exp	161	21437	Continues project support to Project W-252 for B Plant to meet 10/97 milestone. IMPACTS: TPA M-17-00B milestone missed; B-Pond discharge not permitted; no waste reduction achieved; continued flow to B-Pond will cause migration of contamination from the contaminated soil / groundwater below B-Pond.
2300-0	Miscellaneous Streams		Exp	410	21847	Implements the Plan and Schedule for Disposal and Regulatory Compliance of Miscellaneous Streams submitted to Ecology in 1/94 as required by Consent Order. Tasks include development of Best Management Practice, Injection Well registrations, and WAC 173-216 permit submittals. IMPACTS: Consent Order DE 91NM-177 milestones would be delayed; potential fines and cease discharge orders impacting PUREX, Tank Farms, UO3, 22S, and steam distribution system; streams would be unpermitted, uninventoried and would flow untreated directly to the environment. Environmental impact unknown but assumed to be low due to their nature.

4.5 LIFE CYCLE COST ESTIMATES (\$000)

The life cycle cost estimates shown on the following pages are based on the following assumptions.

300 Area Treated Effluent Disposal Facility

- Operating costs after FY 2001 are based on FY 2001 estimates plus 2.7 percent escalation. No productivity challenge is assumed.
- The 300 Area TEDF will operate through FY 2025. After that time the facility will be turned over to a private entity for commercial operation. No decontamination and decommissioning (D&D) costs are planned.
- Beginning in FY 1999, the operation of the 307 Basins will be included as part of 300 Area TEDF operations. This transfer is not expected to significantly increase the cost of operating the TEDF.
- Starting in FY 2000 and every five years thereafter, \$2M will be required for general plant upgrades.

340 Waste Handling Facility

- The mission for the 340 Waste Handling Facility ends in September 1998. The facility will be maintained in hot shutdown status from FY 1999 through FY 2001 and then transferred to Transition Projects in FY 2002 for deactivation..
- The major D&D will be performed from FY 2002 through FY 2005 at a cost of approximately \$10M. Additionally, costs for maintaining facility safety and containment until D&D is complete are shown under 340 Facility SMECO. These costs are expected to equal FY 2001 operating costs (plus escalation) in FY 2002 and taper off through FY 2005 as deactivation progresses.

200 Area Effluent Treatment Facility and Liquid Effluent Retention Facility

- Operating costs after FY 2001 are based on FY 2001 estimates plus 2.7 percent escalation. No productivity challenge is assumed.
- The 200 Area ETF and LERF will receive process waste from the TWRS until FY 2029; deactivation waste receipts will end in FY 2034. The ETF/LERF will be turned over to Transition Projects at the end of FY 2034.
- Deactivation and D&D will take approximately four years (FY 2035 through 2038) and will cost approximately \$50M. Additionally, amounts equal to costs for SMECO at

2300-0	200A ETF Operations - Non-Evaporator Processing (N Basin and Groundwater Feeds) -- Second Campaign		Exp	700	26790	Provides for second campaign to process N Basin/ groundwater feeds and associated sampling activities. IMPACTS: Without the second campaign, it is unlikely that the terms and conditions of the 200A UP-1 Record of Decision will be met; and also unlikely that compliance will be achieved with the LERF treatability exemption requiring evaporator process condensate be stored in LERF less than one year. Additionally, a three-month furlough of 15 direct staff will be necessary.
2300-0	340 Facility Closeout		Exp	300	27090	Provides for evaluation of facility systems in regard to preparations for facility shutdown and cleanout. IMPACTS: Plans for 340 Facility shutdown and for modifications supporting new waste handling facility not developed; 340 Facility continues operations until FY 1998 and then maintained in hot standby until shutdown activities resumed.
2300-0	200A ETF Enhancements		Exp	298	27388	Provides for upgrades to 200A Liquid Effluent Facility training curriculum and to MCS logic and logic diagrams. IMPACTS: Inadequate control of the system to prevent shutdowns through intervention. Inadequate incorporation of lessons-learned, plant modifications, and procedure changes into training curriculum.

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LIFE CYCLE COST ESTIMATES (\$000)

	300A Treated Effluent Disposal Facility	340 Waste Handling Facility	200A Effluent Treatment Facility	200A Liquid Effluent Retention Facility	200A Treated Effluent Disposal Facility	Program Management	TOTAL
RDS	R96N0032 R96N0038	R96N0097 R96N0269 R96N0260	R96N0037 R96N0174 R96N0100 R96N0041 R96N0040	R96N0098	R96N0099	R96N0135 R96N0036	
FY 1997	3795	3776	11767	1359	3253	2140	26090
FY 1998	3888	3814	9635	1381	3238	2018	23772
FY 1999	4520	4577	12702	1429	3350	2061	28639
FY 2000	6091	5234	13044	1467	3439	2087	31361
FY 2001	4200	5432	13395	1506	3531	2130	30192
FY 2002	4477	5436	15697	1551	3637	2178	32976
FY 2003	4419	3880	17106	1597	3746	2229	32976
FY 2004	4550	6115	14528	1645	3858	2281	32976
FY 2005	6887	3124	14962	1695	3974	2334	32976
FY 2006	4830		19919	1745	4093	2389	32976
FY 2007	4973		15870	1798	4216	2446	29303
FY 2008	5336		18345	1852	4342	2504	32379
FY 2009	5279		16834	1907	4473	2564	31057
FY 2010	7436		19337	1965	9607	2626	40971
FY 2011	5826		17856	2023	4745	2690	33141
FY 2012	5771		20390	2084	4887	2755	35888
FY 2013	5943		18940	2147	5034	2823	34887
FY 2014	6362		21507	2211	5185	2893	38158
FY 2015	8309		20091	2277	5341	2965	38962
FY 2016	6497		22692	2346	5501	3039	40074
FY 2017	6948		21311	2416	5666	3115	39455
FY 2018	6900		23949	2489	5836	3193	42364
FY 2019	7102		22606	2563	6011	3274	41556
FY 2020	9587		25283	2640	6191	3357	47058

these two facilities will be required during those four years to assure facility safety and containment until D&D is complete.

- Upgrades will be necessary in FY 2002 after approximately five years of operation. Costs for these upgrades are assumed at \$2M in FY 2002, \$3M in FY 2003, \$4.6M in FY 2006, and \$2M every other year thereafter, ending in FY 2032.

200Area Treated Effluent Disposal Facility

- Operating costs after FY 2001 are based on FY 2001 estimates plus 2.7 percent escalation. No productivity challenge is assumed.
- The mission for the 200 Area TEDF will end in FY 2034; deactivation will be completed in FY 2035 at a cost of \$5M.
- A new pond and/or major upgrade will be necessary in FY 2010 at a cost of approximately \$5M.

Program Management / Miscellaneous Streams

- Operating costs after FY 2001 are based on FY 2001 estimates plus 2.7 percent escalation. No productivity challenge is assumed.
- Annual permit fees will be paid to Ecology for WAC-216 Permits for four categories of Miscellaneous Streams.

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	300A Treated Effluent Disposal Facility	340 Waste Handling Facility	200A Effluent Treatment Facility	200A Liquid Effluent Retention Facility	200A Treated Effluent Disposal Facility	Program Management	TOTAL
RDS	R96N0032 R96N0038	R96N0097 R96N0269 R96N0260	R96N0037 R96N0174 R96N0100 R96N0041 R96N0040	R96N0098	R96N0099	R96N0136 R96N0036	
FY 2021	7540		23980	2719	6377	3443	44059
FY 2022	7765		26697	2801	6568	3531	47363
FY 2023	8285		25437	2885	6765	3622	46994
FY 2024	8243		28199	2971	6968	3716	50097
FY 2025	8489		26983	3061	7177	3812	49522
FY 2026			29791	3152	7393	3912	44248
FY 2027			28623	3247	7614	4014	43499
FY 2028			31480	3344	7843	4119	46787
FY 2029			30363	3445	8078	4228	46114
FY 2030			33273	3548	8321	4340	49481
FY 2031			32209	3655	8570	4455	48889
FY 2032			35174	3764	8827	4574	52339
FY 2033			34168	3877	9092	4696	51833
FY 2034			35191	3993	9365	4822	53372
FY 2035			35746	4113	14646	4951	59456
FY 2036			36443	4237		5085	45785
FY 2037			37161	4364		5223	46748
FY 2038			37901	4495		5364	47760
TOTAL	180246	41186	996581	109763	236760	139995	1704533

5.0 EXECUTION YEAR

5.1 PERFORMANCE MEASURES, OBJECTIVES, AND EXPECTATIONS

The performance measures and expectations shown on the following chart are those contained in the PHMC. The basis for the FY 1997 budget and schedule and outyear planning differ from the performance measures as shown below.

- WM2.2.2 "Submit ETF/LERF and 242-A Evaporator Part B permit application to RL by January 29, 1997"

Planning is based on a submittal date of June 15, 1997. The Part B permit application for the 242-A Evaporator will be prepared and submitted separately from the ETF/LERF permit application. The application is due to RL on June 15, 1997 and to Ecology on July 1, 1997. Submittal dates are based on the Modification C schedule developed with Ecology.

- WM2.4.1 "Complete Phase II stream BAT/AKART implementation permit revision by January 30, 1997." (This performance measure has been deleted.)

Planning is based on a revised date of October 1, 1996. The final permit is to be issued by Ecology on January 30, 1997. As this is Ecology's action and is beyond the control of the contractor, RL has agreed that the completion date for this milestone will be October 1, 1996, the date of contractor submittal of the permit application to RL.

- WM2.4.2 "Complete construction of Phase II stream BAT/AKART implementation by June 30, 1997"

Planning for this milestone is based on a completion date of January 30, 1997. This date is documented on Class I change request LET-96-009.

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5.2 PROGRAM PERFORMANCE BASELINE SCHEDULE

The following Program Performance Baseline Schedule is the execution, management, and performance reporting schedule for the execution year. It is resource-loaded and supported by activity-based cost estimates.

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Objective: minimize the impact to the environment by ceasing unpermitted discharge to the soil column and by providing an infrastructure for treatment, storage, and disposal of liquid effluents.

Measures	Expectations	Milestone Number
WM2.1. Disposal of all liquid effluents on the Hanford Site considers the overall cost to the government of the method(s) of disposal balanced against the benefit(s) from an economic, health, safety, and environmental standpoint.	WM2.1.1. Submit for DOE approval a sitewide integrated decision-making process and procedures for disposal of liquid effluents on the Hanford Site by February 28, 1997.	LEP-97-021
WM2.2. Compliance with DOE orders, and with federal, state, and local requirements in the operation of the liquid effluent facilities, projects, and operations.	WM2.2.1. Collect appropriate data and propose draft modification to DOE for existing waste water discharge permits by March 31, 1997, based on above liquid effluent disposal process.	LEP-97-022
	WM2.2.2. Submit ETF/LERF and 242-A Evaporator Part B permit application to RL by January 29, 1997.	LEP-97-010
	WM2.2.3. Complete WAC-216 permit application for Category 3 miscellaneous streams and submit to RL by August 30, 1997.	LEP-97-004
	WM2.2.4. Operate 200 Area TEDF, 300 Area TEDF, and ETF with no violations of waste discharge permit limits.	LEP-97-012 LEP-97-013 LEP-97-017
WM2.3. Consolidate handling and treatment of liquid effluents in the 200 Area.	WM2.3.1. Implement a coordinated management system to operate 242-A, LERF, and ETF by September 30, 1997.	LEP-97-023
WM2.4. Complete the 200 Area Phase II Streams (Project W-252) modifications to the 200 Area facilities.	WM2.4.1. Complete Phase II stream BAT/AKART implementation permit revision by January 30, 1997. DELETED	LEP-97-001
	WM2.4.2. Complete construction of Phase II stream BAT/AKART implementation by June 30, 1997.	LEP-97-002
WM2.5. Implement 340 Waste Handling Facility Shutdown Plan.	WM2.5.1. Implement Waste Handling Facility Shutdown Plan at the 340 Waste Handling Facility by January 30, 1997.	LEP-97-015
WM2.6. Complete Biennial Evaluation of Tritium Treatment Technology and provide reports as directed by TPA.	WM2.6.1. Submit tritium technology report to RL by July 31, 1997.	LEP-97-003

LIQUID EFFL TS SERVICES
Program Performance
Baseline Schedule

Fiscal Year 97
 Drawn by Steve Sanborn 373-3294

	Description	Type	1996													
			OCT	NOV	DEC	1997		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
			7	4	2	30	27	24	24	21	19	16	14	11	8	
			01OCT96													
1A2111 - PROGRAM MANAGEMENT																
1A2111010A	PROGRAM MANAGEMENT															
1A2111010E	PROGRAM PLANNING															
1A2111010N	PROGRAM CONTROL															
1A2211 - 200A TEDF (SMECO)																
1A2211010A	OPERATE															
1A2211010A04	OPERATE 200A TEDF WITHIN SWD PERMIT LIMITS / ENV	K-RL	① LEP-37-012													
1A2211010A06	OPERATE 200A TEDF WITHIN SWD PERMIT LIMITS / ENV	K-RL	① LEP-37-012													
1A2211010A08	OPERATE 200A TEDF WITHIN SWD PERMIT LIMITS / ENV	K-RL	① LEP-37-012													
1A2211010A09	OPERATE 200A TEDF WITHIN SWD PERMIT LIMITS / ENV	K-RL	① LEP-37-012													
1A2211010B	ENGINEERING SUPPORT		① LEP-37-012													
1A2211020A	PREVENTIVE / PREDICTIVE															
1A2211020B	CORRECTIVE MAINTENANCE															
1A2211020C	MATERIAL CONTROL															
1A2211030A	ENVIRONMENTAL MONITORING & SAMPLING															
1A2211030C	PERMITTING															
1A2211030C01	SUBMIT 283E TRENCH ALTERNATIVES STUDY TO RL	K-RL	① LEP-37-024													
1A2211030C06	SUBMIT 283-E TRENCH ALTERNATIVE STUDY	K-RL	① LEP-37-024													
1A2211030C07	SUBMIT TEDF EFFLUENT/GRANDWTR DMR'S 1ST-QTR WDOE	K-RL	① LEP-37-006													
1A2211030C08	SUBMIT TEDF EFFLUENT/GRANDWTR DMR'S 2ND-QTR RL	K-RL	① LEP-37-006													
1A2211030C10	SUBMIT TEDF EFFLUENT/GRANDWTR DMR'S 3RD-QTR RL	K-RL	① LEP-37-006													
1A2211030C12	SUBMIT TEDF EFFLUENT/GRANDWTR DMR'S 4TH-QTR RL	K-RL	① LEP-37-006													
1A2211030C15	PERFORM REVIEW/UPDATE TEDF 216 SPILL CONTROL	K-RL	① LEP-37-007													
1A2211030C16	PERFORM REVIEW/UPDATE TEDF 216 WASTE CNTRL	K-RL	① LEP-37-008													
1A2211030C17	ANNUAL REVIEW/UPDATE TEDF O&M MATRIX	K-RL	① LEP-37-009													
1A2211040B	PROCEDURES															
1A2211040C	ASSESSMENTS															
1A2211040E	SUPPORT ORGANIZATIONS															

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STRIP 1

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1A22. 3	SAFETY		010CT08
1A2213030C	PERMITTING		
1A2213040B	PROCEDURES		
1A2213040C	ASSESSMENTS		
1A2213040E	SUPPORT ORGANIZATIONS		
1A2213040F	TRAINING		
1A2215 - 200A UPGRADES AND ENHANCEMENTS			
1A2215040B	INSTALL PUMP AND TREAT HOOK-UPS		
1A2215040B04	READINESS TO ACCEPT 200A UP-1 GWATER IN LEAF	K-RL	LEP-57-027
1A2215040C	ENGINEERING/RCT SUPPORT		
1A2215040D	AUTHORIZATIONS / INSPECTIONS		
1A2215050A	SITE UPGRADES		
1A2215050B	MCS SYSTEM LOGIC AND CONTROL FUNCTIONS		
1A2216 - 200 A ETF EVAPORATOR CAMPAIGN			
1A2216010A	OPERATE		
1A2216010B	ENGINEERING SUPPORT		
1A2216010C	RADIOLOGICAL CONTROL SUPPORT		
1A2216020A	CORRECTIVE MAINTENANCE		
1A2216020B	MATERIAL CONTROL		
1A2216030A	SAMPLING / RAD INVENTORY		
1A2216030B	SAFETY		
1A2216030D	WASTE HANDLING		
1A2216040B	PROCEDURES		
1A2216040C	ASSESSMENTS		
1A2216040E	SUPPORT ORGANIZATIONS		
1A2216040F	TRAINING		
1A2217 - 200 A ETF NON-EVAPORATOR CAMPAIGN			
1A2217010A	OPERATE		
1A2217010A05	TREAT UP-1 GROUNDWATER/N-BASIN WATER IN 200 ETF	K-RL	LEP-57-028
1A2217010B	ENGINEERING SUPPORT		
1A2217010C	RADIOLOGICAL CONTROL SUPPORT		
1A2217020A	CORRECTIVE MAINTENANCE		
1A2217020B	MATERIAL CONTROL		
1A2217030A	SAMPLING / RAD INVENTORY		

1A2211040F	TRAINING		
1A2212 - 200A ETF (SMECO)			
1A2212010A	OPERATE		
1A2212010A03	OPERATE 200 AREA ETF IN ACCORDANCE WITH PERMITS	K-RL	⊙ LEP-97-013
1A2212010B	ENGINEERING SUPPORT		
1A2212010C	RADIOLOGICAL CONTROL		
1A2212020A	PREVENTIVE / PREDICTIVE		
1A2212020B	CORRECTIVE MAINTENANCE		
1A2212020C	MATERIAL CONTROL		
1A2212030A	ENVIRONMENTAL MONITORING & SAMPLING		
1A2212030B	SAFETY		
1A2212030C	PERMITTING		
1A2212030C64	ETF/LERF/242-A EVAP PART B PERMIT APPLICATION AL	K-RL	⊙ LEP-97-010
1A2212030C66	ANNUAL REV/UPDATE 200A ETF OPER/MAINT MANUALS	K-RL	⊙ LEP-97-025
1A2212030D	TRITIUM		
1A2212030D55	COMP. BIENNIAL TRITIUM EVAL. TCHNLGY TO RL	T-TPA INTERIM	○ LEP-97-003
1A2212040A	PROJECT MANAGEMENT / ADMINISTRATIVE		
1A2212040A03	200A LEF COORDINATED MGMT. SYSTEM	K-RL	⊙ LEP-97-023
1A2212040B	PROCEDURES		
1A2212040C	ASSESSMENTS		
1A2212040E	SUPPORT ORGANIZATIONS		
1A2212040F	TRAINING		
1A2212060A	ENVIRONMENTAL MONITORING & SAMPLING (FY97)		
1A2212060A04	SITEWIDE PROCEDURES DISPOSAL OF LQD EFF ESTAB	K-RL	⊙ LEP-97-021
1A2212060A06	DRAFT MODS FOR EXISTING WASTE WATER PERMIT TO RL	K-RL	⊙ LEP-97-022
1A2212060B	FEASIBILITY STUDY FY-97		
1A2213 - 200A LERF (SMECO)			
1A2213010A	OPERATE		
1A2213010B	ENGINEERING SUPPORT		
1A2213010C	RADIOLOGICAL CONTROL		
1A2213020A	PM'S / PDM'S		
1A2213020B	CORRECTIVE MAINTENANCE		
1A2213020C	MATERIAL CONTROL		
1A2213030A	ENVIRONMENTAL MONITORING & SAMPLING		

1A23. E	OPERATING PROCEDURES- 340		
1A2340020A	MAINTENANCE - (SMECO)		
1A2340020A03	340 WASTE HANDLING FAC. MAINT. IMPL. PLAN	K-RL	
1A2340020B	340 EQUIPMENT/SUPPLIES		LEP-97-026
1A2340020C	340 FAC. - MAINTENANCE PROCEDURES		
1A2340030A	REGULATORY COMPLIANCE		
1A2340030B	SAFETY DOCUMENTATION- 340		
1A2340040A	340 TRAINING		
1A2340040B	SUPPORT ORGANIZATION ACTIVITIES - 340 FACILITY		
1A2340040C	340 FACILITY ADMINISTRATION		
1A2340040C0313	REVIEW 340 FACILITY AUTHORIZATION BASIS	K-RL	LEP-97-016
1A2340040C0315	REVIEW 340 OPERATING / MAINT. REQUIREMENTS	K-RL	LEP-97-020
1A2340040D	FACILITY EVALUATION BOARD AUDIT 340 FACILITY		
1A2347 - 340 FACILITY (ENHANCED)			
1A2347010A	ENHANCED OPERATIONS		
1A2347010C	340 FACILITY ENHANCED COGNIZANT ENGINEERING		
1A2347020A	FACILITY ENHANCEMENTS		
1A2347020B	PROJECT SUPPORT		
1A2347030A	340 SAFETY ANALYSIS REPORT (SAR)		
1A2347040A	CONDUCT OF OPERATIONS UPGRADES		
1A2347040B	SUPPLEMENTAL TRAINING		
1A234X - 340 FACILITY SHUTDOWN ACTIVITIES			
1A234X010A	340 WASTE HANDLING FAC. SHUTDOWN PLAN		
1A234X010A02	IMPLEMENT 340 SHUTDOWN PLAN	K-RL	LEP-97-015
1A2413 - MISCELLANEOUS STREAMS			
1A2413040A	MISC. STMS 216 PERMIT APPLICATION		
1A2413040A17	COMPL. WAC-216 PERMIT APPL. FOR MISC. STREAMS	F-FO	LEP-97-004
1A2413060A	PREPARE BMP REPORT		
1A2413070A	MISCELLANEOUS STREAMS INVENTORY UPDATE		
1A2413070A1515	SUBMIT ANNUAL UPDATE OF MISC. STREAMS INV. TO RL	F-FO	LEP-97-005
1A2502 - PROJECT W-252 PHASE II STREAMS			
1A2502010A	TEOF 216 PERMIT REVISION APPLICATION PROCESS		
1A2502010A05	COMPL. PH II STREAM BAT/AKAT IMPL. 216 APPL.	F-FO	LEP-97-001
1A2502030A	NON-LES CONSTRUCTION SUPPORT - 97		

1A2217030D	WASTE HANDLING			
1A2217040B	PROCEDURES			
1A2217040C	ASSESSMENTS			
1A2217040E	SUPPORT ORGANIZATIONS			
1A2217040F	TRAINING			
1A2310 - 310 FACILITY PLANT OPERATIONS (SMECO)				
1A2310010A	310 FACILITY PLANT OPERATIONS (SMECO)			
1A2310010A03	TREAT/DISPOSE 50 MIL. GAL OF PROCESS BY 9/30/96	F-FD	LEP-96-006	
1A2310010A05	OPER. 300A TEOF WITHIN NPOES ENFORCEMENT LIMITS	K-RL		LEP-97-017
1A2310010A07	REVIEW OPERATING AND MAINTENANCE REQ. FOR 310	K-RL		LEP-97-019
1A2310010B	310 FAC. WASTE HANDLING/DISPOSAL			
1A2310010C	310 FAC. COGNIZANT ENGINEERING			
1A2310010D	310 FAC. SAMPLING ACTIVITIES			
1A2310010E	310 FAC. OPERATING PROCEDURES			
1A2310020A	310 FAC. PREV. MAINT./CORRECTIVE MAINT. ACTIVITY			
1A2310020B	310 FAC. EQUIPMENT/SUPPLIES/CONSUMABLES			
1A2310020C	310 FAC. MAINTENANCE PROCEDURES			
1A2310030A	310 FAC. REGULATORY COMPLIANCE			
1A2310040A	310 FACILITY TRAINING			
1A2310040B	SUPPORT ORGANIZATION ACTIVITIES - 310 FACILITY			
1A2310040C	310 FACILITY ADMINISTRATION			
1A2310040D	FACILITY EVALUATION BOARD AUDIT 310 FACILITY			
1A2317 - 310 FACILITY (ENHANCED)				
1A2317010A	ENHANCED OPERATIONS			
1A2317010C	310 FACILITY ENHANCED COGNIZANT ENGINEERING			
1A2317020A	FACILITY ENHANCEMENTS			
1A2317020B	PROJECT SUPPORT			
1A2317040A	CONDUCT OF OPERATIONS UPGRADES			
1A2317040B	SUPPLEMENTAL TRAINING			
1A2340 - 340 FACILITY PLANT OPERATIONS (SMECO)				
1A2340010A	PLANT OPERATIONS- 340			
1A2340010B	WASTE HANDLING/WASTE DISPOSAL- 340			
1A2340010B05	COMPLETE FY - 97 340 WASTE HANDLING SHIPMENTS	K-RL		LEP-97-018
1A2340010C	COGNIZANT ENGINEERING- 340			

5.3 COST BASELINE FOR EXECUTION YEAR BY PROGRAM BY FUND TYPE BY MONTH (\$000)

RL WBS	WBS	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1.2.2.1.1.0000	1A2111	Program Mgmt													
		Expense	93	98	98	93	93	122	98	98	118	88	122	109	1230
		CENRTC													0
		Line Item													0
		GPP													0
		Total BCWS/PMB (1)	93	98	98	93	93	122	98	98	118	88	122	109	1230
		Mgmt Reserve (2)													0
		LI Contingency (2)													0
		Expected C/O (3)													0
		Total	93	98	98	93	93	122	98	98	118	88	122	109	1230
1.2.2.1.1.0000	1A2112	Prog Fees/Misc Chgs													
		Expense												500	500
		CENRTC													0
		Line Item													0
		GPP													0
		Total BCWS/PMB (1)	0	0	0	0	0	0	0	0	0	0	0	500	500
		Mgmt Reserve (2)													0
		LI Contingency (2)													0
		Expected C/O (3)													0
		Total	0	0	0	0	0	0	0	0	0	0	0	500	500
1.2.2.1.2.0000	1A2211	200A TDF SMECO													
		Expense	236	248	248	251	309	352	265	251	298	223	310	261	3253
		CENRTC													0
		Line Item													0
		GPP													0
		Total BCWS/PMB (1)	236	248	248	251	309	352	265	251	298	223	310	261	3253
		Mgmt Reserve (2)													0
		LI Contingency (2)													0
		Expected C/O (3)													0
		Total	236	248	248	251	309	352	265	251	298	223	310	261	3253

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5.3 COST BASELINE FOR EXECUTION YEAR BY PROGRAM BY FUND TYPE BY MONTH (\$000)

RLWBS	WBS	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
WHC															
1.2.2.1.2.0000 1A2216 200A ETF Evap Proc															
		Expense	163	171	173	164	177	170	214	211	139	85	155	23	1845
		CENRTC													0
		Line Item													0
		GPP													0
		Total BCWS/PMB (1)	163	171	173	164	177	170	214	211	139	85	155	23	1845
		Mgmt Reserve (2)													0
		LI Contingency (2)													0
		Expected C/O (3)													0
		Total	163	171	173	164	177	170	214	211	139	85	155	23	1845
1.2.2.1.2.0000 1A2217 200A ETF Non-Evap Proc															
		Expense	24	38	40	40	40	109	213	231	396	389	153	20	1692
		CENRTC													0
		Line Item													0
		GPP													0
		Total BCWS/PMB (1)	24	38	40	40	40	109	213	231	396	389	153	20	1692
		Mgmt Reserve (2)													0
		LI Contingency (2)													0
		Expected C/O (3)													0
		Total	24	38	40	40	40	109	213	231	396	389	153	20	1692
1.2.2.1.3.0000 1A2310 300A TEDF SMECO															
		Expense	286	301	302	286	286	376	301	301	361	271	376	310	3755
		CENRTC												80	0
		Line Item												0	0
		GPP													0
		Total BCWS/PMB (1)	286	301	302	286	286	376	301	301	361	271	376	390	3835
		Mgmt Reserve (2)													0
		LI Contingency (2)													0
		Expected C/O (3)													150
		Total	286	301	302	286	286	376	301	301	361	271	376	390	3985.4
2A23--															

5.3 COST BASELINE FOR EXECUTION YEAR BY PROGRAM BY FUND TYPE BY MONTH (\$000)

RL WBS	WHC WBS	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1.2.2.1.2.0000	1A2212	200A ETF SMECO													
		Expense	569	598	599	569	597	760	598	599	719	538	749	628	7523
	2A22--	CENRTC												80	80
		Line Item													0
	5A2212	GPP	60	70											130
		Total BCWS/PMB (1)	629	668	599	569	597	760	598	599	719	538	749	708	7733
		Mgmt Reserve (2)													0
		LI Contingency (2)													0
		Expected C/O (3)	800												800
		Total	1429	668	599	569	597	760	598	599	719	538	749	708	8533
1.2.2.1.2.0000	1A2213	200A LERF SMECO													
		Expense	103	109	109	103	103	136	109	109	130	98	136	116	1359
		CENRTC													0
		Line Item													0
		GPP													0
		Total BCWS/PMB (1)	103	109	109	103	103	136	109	109	130	98	136	116	1359
		Mgmt Reserve (2)													0
		LI Contingency (2)													0
		Expected C/O (3)													0
		Total	103	109	109	103	103	136	109	109	130	98	136	116	1359
1.2.2.1.2.0000	1A2215	200A LEF Enhance													
		Expense	115	122	122	115	32								507
		CENRTC													0
		Line Item													0
		GPP													0
		Total BCWS/PMB (1)	115	122	122	115	32	0	0	0	0	0	0	0	507
		Mgmt Reserve (2)													0
		LI Contingency (2)													0
		Expected C/O (3)													0
		Total	115	122	122	115	32	0	0	0	0	0	0	0	507

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5.3 COST BASELINE FOR EXECUTION YEAR BY PROGRAM BY FUND TYPE BY MONTH (\$000)

RL WBS	WBS	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1.2.2.1.4.0000	1A2413	Misc Streams													
		Expense	37	39	34	29	29	38	30	33	39	29	39	33	410
		CENRTC													0
		Line Item													0
		GPP													0
		Total BCWS/PMB (1)	37	39	34	29	29	38	30	33	39	29	39	33	410
		Mgmt Reserve (2)													0
		LI Contingency (2)													0
		Expected C/O (3)			30										30
		Total	37	39	64	29	29	38	30	33	39	29	39	33	440
1.2.2.1.5.0000	1A2502	Ph II Str (W-252)													
		Expense	37	39	33	13	9	11	9	4	5	1	0	0	161
		CENRTC													0
	3A2500	Line Item	525	367	374	72	81	50	17					806	2292
		GPP													0
		Total BCWS/PMB (1)	563	406	407	85	90	61	25	4	5	1	0	806	2452
		Mgmt Reserve (2)													0
		LI Contingency (2)													0
		Expected C/O (3)			50										50
		Total	613	406	407	85	90	61	25	4	5	1	0	806	2502
1.2.2.1	1A2	LES Program													
		Expense	1950	2064	2060	1950	1962	2449	2138	2138	2565	1993	2415	2327	26010
		CENRTC	125	125	0	0	0	0	0	0	0	0	0	160	410
		Line Item	525	367	374	72	81	50	17	0	0	0	0	806	2292
		GPP	110	70	0	0	0	0	0	0	0	0	0	0	180
		Total BCWS/PMB (1)	2710	2625	2434	2022	2043	2499	2155	2138	2565	1993	2415	3293	28892
		Mgmt Reserve (2)	0	0	0	0	0	0	0	0	0	0	0	0	0
		LI Contingency (2)	0	0	0	0	0	0	0	0	0	0	0	0	0
		Expected C/O (3)	1351	0	30				0	0	0	0	0	0	1381
		Total	4061	2625	2464	2022	2043	2499	2155	2138	2565	1993	2415	3293	30273

(1) Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB).

(2) Management Reserve Held by RL and Line Item Contingency Held by RL

(3) Includes Expected Expense Carryover Requested by Formal Change Control in FY1997

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5.3 COST BASELINE FOR EXECUTION YEAR BY PROGRAM BY FUND TYPE BY MONTH (\$000)

RL WBS	WBS	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1.2.2.1.3.0000	1A2340	340 Facility SMECO													
		Expense	271	285	286	271	271	356	285	285	342	257	356	310	3576
		CENRTC													0
		Line Item													0
	5A2500	GPP	50												50
		Total BCWS/PMB (1)	321	285	286	271	271	356	285	285	342	257	356	310	3626
		Mgmt Reserve (2)													0
		LI Contingency (2)													0
		Expected C/O (3)	100												100
		Total	421	285	286	271	271	356	285	285	342	257	356	310	3726
1.2.2.1.3.0000	1A2317	300A TEDF Enhance	(Not Funded in FY1997)												
		Expense	0	0	0	0	0	0	0	0	0	0	0	0	0
		CENRTC													0
		Line Item													0
		GPP													0
		Total BCWS/PMB (1)	0	0	0	0	0	0	0	0	0	0	0	0	0
		Mgmt Reserve (2)													0
		LI Contingency (2)													0
		Expected C/O (3)													0
		Total	0	0	0	0	0	0	0	0	0	0	0	0	0
1.2.2.1.3.0000	1A234X	340 Fac Closeout													
		Expense	15	16	16	15	15	19	16	16	19	15	19	17	200
	2A23--	CENRTC	125	125											250
		Line Item													0
		GPP													0
		Total BCWS/PMB (1)	140	141	16	15	15	19	16	16	19	15	19	17	450
		Mgmt Reserve (2)													0
		LI Contingency (2)													0
		Expected C/O (3)	251												251
		Total	391	141	16	15	15	19	16	16	19	15	19	17	701

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5.4 COST BASELINE FOR EXECUTION YEAR BY PROGRAM BY COST ELEMENT BY MONTH (\$000)

RL WBS	WHC WBS	COST ELEMENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1.2.2.1.1.0000	1A2111	Program Management													
		0 Salaries/Cont of Serv	55	58	58	55	55	72	58	58	69	52	72	61	723
		1 Material	0	0	0	0	0	1	0	0	1	0	1	0	5
		2 Purchased Serv	10	10	10	10	10	13	10	10	12	9	13	11	127
		3 Other Contr													0
		4 Internal Services	1	1	1	1	1	1	1	1	1	1	1	1	8
		5 Internal Charges													0
		6 BCS Richland	0	0	0	0	0	0	0	0	0	0	0	0	2
		7 Overheads/Addrs	27	29	29	27	27	36	29	29	34	26	36	36	364
		8 Revenue													0
		Total BCWS/PMB (1)	93	98	98	93	93	122	98	98	118	88	122	109	1230
1.2.2.1.1.0000	1A2112	Program Fees/Miscellaneous Charges													
		0 Salaries/Cont of Serv													0
		1 Material													0
		2 Purchased Serv													0
		3 Other Contr													0
		4 Internal Services													0
		5 Internal Charges													0
		6 BCS Richland													0
		7 Overheads/Addrs												500	500
		8 Revenue													0
		Total BCWS/PMB (1)	0	0	0	0	0	0	0	0	0	0	0	500	500
1.2.2.1.2.0000	1A2211	200A TEDF SMECO													
		0 Salaries/Cont of Serv	134	141	141	134	134	176	141	141	169	127	176	148	1759
		1 Material	4	4	4	4	4	5	4	4	5	3	5	4	48
		2 Purchased Serv	10	10	10	22	72	48	24	12	12	9	13	11	251
		3 Other Contr													0
		4 Internal Services	9	9	9	9	9	12	9	9	11	8	11	9	113
		5 Internal Charges	13	14	14	13	13	17	14	14	17	13	17	15	174
		6 BCS Richland	1	1	1	1	1	1	1	1	1	1	1	1	7
		7 Overheads/Addrs	67	71	71	69	77	94	73	71	85	63	88	74	902
		8 Revenue													0
		Total BCWS/PMB (1)	236	248	248	251	309	352	265	251	298	223	310	261	3253

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5.4 COST BASELINE FOR EXECUTION YEAR BY PROGRAM BY COST ELEMENT BY MONTH (\$000)

RL WBS	WHC WBS	COST ELEMENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1.2.2.1.2.0000	1A2216	200A ETF Evaporator Processing													
		0 Salaries/Cont of Serv	110	115	116	110	115	106	105	101	45	21	94	15	1053
		1 Material	0	0	0	0	5	9	4	3	4	3	1		31
		2 Purchased Serv	0	0	0	0	0	0	0	0	0	0	0	0	2
		3 Other Contr													0
		4 Internal Services	1	2	2	1	2	3	2	2	2	2	2	1	23
		5 Internal Charges	0	0	0	0	0	1	44	47	56	42	10	0	202
		6 BCS Richland													0
		7 Overheads/Adders	51	54	54	51	54	51	59	58	31	17	48	7	534
		8 Revenue													0
		Total BCWS/PMB (1)	163	171	173	164	177	170	214	211	139	85	155	23	1845
1.2.2.1.2.0000	1A2217	200A ETF Non-Evaporator Processing													
		0 Salaries/Cont of Serv	18	22	23	22	22	82	90	89	181	148	33	0	729
		1 Material	5	5	5	5	5	13	14	14	30	25	6		127
		2 Purchased Serv	0	0	0	0	0	0	0	0	0	0			1
		3 Other Contr													0
		4 Internal Services	1	1	1	1	1	3	3	3	6	5	1		25
		5 Internal Charges							66	70	125	100	22		382
		6 BCS Richland													0
		7 Overheads/Adders		9	11	12	11	11	40	55	55	112	91	20	427
		8 Revenue													0
		Total BCWS/PMB (1)	24	38	40	40	40	109	213	231	396	389	153	20	1692
1.2.2.1.3.0000	1A2310	300A TEDF SMECO													
	2A23--	0 Salaries/Cont of Serv	128	134	135	128	128	168	134	134	161	121	168	141	1681
		1 Material	15	15	15	15	15	19	15	15	18	14	19	96	272
		2 Purchased Serv	9	9	9	9	9	12	9	9	11	8	12	10	116
		3 Other Contr	4	4	4	4	4	5	4	4	5	4	5	4	53
		4 Internal Services	20	21	21	20	20	26	21	21	25	19	26	22	263
		5 Internal Charges	37	39	39	37	37	49	39	39	47	35	49	41	487
		6 BCS Richland	2	2	2	2	2	2	2	2	2	2	2	2	24
		7 Overheads/Adders	72	76	76	72	72	94	76	76	91	68	94	74	940
		8 Revenue													0
		Total BCWS/PMB (1)	286	301	302	286	286	376	301	301	361	271	376	390	3835

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5.4 COST BASELINE FOR EXECUTION YEAR BY PROGRAM BY COST ELEMENT BY MONTH (\$000)

RL WBS	WHC WBS	COST ELEMENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1.2.2.1.2.0000	1A2212	200A ETF SMECO													
	2A22--	0 Salaries/Cont of Serv	285	300	300	285	285	376	300	300	361	270	376	315	3755
	5A2212	1 Material	20	21	21	20	20	26	21	21	25	19	26	102	338
		2 Purchased Serv	88	100	30	28	53	46	30	30	36	27	37	31	534
		3 Other Contr	3	3	3	3	3	4	3	3	4	3	4	3	40
		4 Internal Services	46	48	48	46	46	61	48	48	59	43	60	51	604
		5 Internal Charges	36	38	38	36	36	48	38	38	46	34	48	40	477
		6 BCS Richland	2	2	2	2	2	2	2	2	2	2	2	2	23
		7 Overheads/Adders	149	156	157	149	152	198	156	157	187	140	196	164	1961
		8 Revenue													0
		Total BCWS/PMB (1)	629	668	599	569	597	760	598	599	719	538	749	708	7733
1.2.2.1.2.0000	1A2213	200A LERF SMECO													
		0 Salaries/Cont of Serv	53	55	55	53	53	69	55	55	66	50	69	58	690
		1 Material	2	2	2	2	2	3	2	2	3	2	3	3	30
		2 Purchased Serv	0	0	0	0	0	0	0	0	0	0	0	0	3
		3 Other Contr													0
		4 Internal Services	3	3	3	3	3	3	3	3	3	2	3	3	33
		5 Internal Charges	18	19	19	18	18	24	19	19	23	17	24	20	238
		6 BCS Richland	0	0	0	0	0	0	0	0	0	0	0	0	3
		7 Overheads/Adders	27	29	29	27	27	36	29	29	35	26	36	32	362
		8 Revenue													0
		Total BCWS/PMB (1)	103	109	109	103	103	136	109	109	130	98	136	116	1359
1.2.2.1.2.0000	1A2215	200A LEF Enhancements													
		0 Salaries/Cont of Serv	11	12	12	11	3								49
		1 Material													0
		2 Purchased Serv	87	92	92	87	23								380
		3 Other Contr													0
		4 Internal Services	1	1	1	1	0								5
		5 Internal Charges													0
		6 BCS Richland													0
		7 Overheads/Adders	16	18	18	16	6								73
		8 Revenue													0
		Total BCWS/PMB (1)	115	122	122	115	32	0	0	0	0	0	0	0	507

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5.4 COST BASELINE FOR EXECUTION YEAR BY PROGRAM BY COST ELEMENT BY MONTH (\$000)

RL WBS	WHC WBS	COST ELEMENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1.2.2.1.4.0000	1A2413	Miscellaneous Streams													
		0 Salaries/Cont of Serv	10	10	10	9	9	12	10	11	14	10	13	11	130
		1 Material	0	0	0	0	0	0	0	0	0	0	0	0	0
		2 Purchased Serv	19	20	17	13	13	17	14	14	17	12	17	14	187
		3 Other Contr	0	0	0	0	0	0	0	0	0	0	0	0	0
		4 Internal Services	1	1	0	0	0	0	0	0	0	0	0	0	4
		5 Internal Charges	0	0	0	0	0	0	0	0	0	0	0	0	0
		6 BCS Richland	0	0	0	0	0	0	0	0	0	0	0	0	0
		7 Overheads/Addrs	8	8	7	6	6	8	7	7	8	6	9	7	89
		8 Revenue													0
		Total BCWS/PMB (1)	37	39	34	29	29	36	30	33	39	29	39	33	410
1.2.2.1.5.0000	1A2502	Phase II Streams (Project W-252)													
3A2500		0 Salaries/Cont of Serv	63	59	61	34	37	22	17	3	3	0	0	0	300
		1 Material													0
		2 Purchased Serv	469	319	316	41	41	28							0
		3 Other Contr													1213
		4 Internal Services													0
		5 Internal Charges												806	806
		6 BCS Richland													0
		7 Overheads/Addrs	31	28	30	11	12	11	8	1	2	0			134
		8 Revenue													0
		Total BCWS/PMB (1)	563	406	407	85	90	61	25	4	5	1	0	806	2452

5.4 COST BASELINE FOR EXECUTION YEAR BY PROGRAM BY COST ELEMENT BY MONTH (\$000)

RL WBS	WHC WBS	COST ELEMENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1.2.2.1.3.0000	1A2340	340 Facility SMECO													
	5A2500	0 Salaries/Cont of Serv	141	148	148	141	141	185	148	148	178	133	185	156	1850
		1 Material	9	9	9	9	9	12	9	9	11	9	12	10	118
		2 Purchased Serv	53	3	3	3	3	4	3	3	4	3	4	3	91
		3 Other Contr	4	5	5	4	4	6	5	5	5	4	6	5	56
		4 Internal Services	24	25	25	24	24	31	25	25	30	22	31	26	309
		5 Internal Charges	15	15	15	15	15	19	15	15	19	14	19	16	193
		6 BCS Richland	2	2	2	2	2	3	2	2	3	2	3	2	26
		7 Overheads/Adders	74	78	78	74	74	97	78	78	93	70	97	92	984
		8 Revenue													0
		Total BCWS/PMB (1)	321	285	286	271	271	356	285	285	342	257	356	310	3626
1.2.2.1.3.0000	1A2317	300A TEDF Enhancements	(Not funded in FY1997)												
		0 Salaries/Cont of Serv													0
		1 Material													0
		2 Purchased Serv													0
		3 Other Contr													0
		4 Internal Services													0
		5 Internal Charges													0
		6 BCS Richland													0
		7 Overheads/Adders													0
		8 Revenue													0
		Total BCWS/PMB (1)	0	0	0	0	0	0	0	0	0	0	0	0	0
1.2.2.1.3.0000	1A234X	340 Facility Closeout													
	2a23--	0 Salaries/Cont of Serv	9	9	9	9	9	12	9	9	11	8	12	10	117
		1 Material	127	127	2	2	2	3	2	2	3	2	3	3	280
		2 Purchased Serv													0
		3 Other Contr													0
		4 Internal Services	0	1	1	0	0	1	1	1	1	0	1	0	6
		5 Internal Charges													0
		6 BCS Richland													0
		7 Overheads/Adders	4	4	4	4	4	4	4	4	4	4	4	4	47
		8 Revenue													0
		Total BCWS/PMB (1)	140	141	16	15	15	19	16	16	19	15	19	17	450

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5.5 CAPITAL UNCOSTED AND EXPENSE CARRYOVER FROM FY 1996 (\$000)

SCOPE DESCRIPTION	CARRYOVER FUNDS	FUND TYPE
<u>340 Facility Closeout Engineering Study</u> : Preparation of an engineering study and review of needs and options related to continuing support to PNNL after 340 Facility closeout.	251	OE
<u>W-252 Probe Installation</u> : Installation of probes to measure pH and conductivity of Phase II Stream effluent at the 242-A Evaporator. Also includes updates of drawings.	50	OE
<u>200 Area ETF</u> : Plant modifications for processing groundwater from the UP-1 Operable unit. Scope includes piping modifications and addition of a demineralization module.	400	OE
<u>300 Area Procedure Evaluation</u> : Evaluate 300 Area procedures against DOE Orders and commercial standards.	150	OE
<u>Project XL</u> : Study to determine the feasibility of managing the waste transfer at the 340 Waste Handling Facility by volume rather than by the current 90-day requirement.	100	OE
<u>200 Area LEF Piping Flexibility</u> : Complete LERF header modifications that will allow limited simultaneous operation of the 242-A Evaporator, ETF, and the ETF truck load-in station. These modifications are required to accommodate schedules of the Evaporator and ETF which have previously been impacted.	100	OE
<u>200 Area ETF to TEDF Recycle Line</u> : Complete installation of an additional pipeline to connect the LERF to the 200 Area TEDF to allow streams without tritium content to be discharged to the 200 West Area State Approved Land Discharge Site.	300	OE
<u>Miscellaneous Streams Permit Fee</u> : Permit fee for the first categorical permit budgeted for FY 1996 will be applied in FY 1997	30	OE
TOTAL EXPENSE CARRYOVER	1381	OE

5.4 COST BASELINE FOR EXECUTION YEAR BY PROGRAM BY COST ELEMENT BY MONTH (\$000)

RL WBS	WHC WBS	COST ELEMENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1.2.2.1	1A2	LES Program													
		0 Salaries/Cont of Serv	1015	1063	1069	991	991	1279	1067	1050	1257	941	1198	914	12835
		1 Material	182	185	60	57	62	90	72	72	100	77	74	217	1249
		2 Purchased Serv	276	244	171	172	183	140	91	79	92	69	96	80	1691
		3 Other Contr	480	331	328	52	52	43	12	12	14	11	15	13	1362
		4 Internal Services	105	111	111	106	106	141	112	112	137	102	136	114	1392
		5 Internal Charges	120	126	126	120	120	157	236	242	331	255	189	938	2959
		6 BCS Richland	7	7	7	7	7	9	7	8	8	6	9	7	87
		7 Overheads/Addrs	525	558	563	518	524	641	558	564	625	533	699	1011	7317
		8 Revenue	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total BCWS/PMB (1)	2710	2625	2434	2022	2043	2499	2155	2138	2565	1993	2415	3293	28892
PROGRAM BCWS/PMB			2710	2625	2434	2022	2043	2499	2155	2138	2565	1993	2415	3293	28892

(1) Budgeted Cost Of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB) And Is Consistent With BCWS/PMB (Section 4.1.3).

Above Amounts Do NOT Include Management Reserve Held By RL, Line Item Contingency Held By RL, Or Expected Expense Carryover Requested
By Formal Change Control In FY1997.

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5.6 SUBCONTRACTOR EXHIBIT

Dollars in Thousands

Project Hanford Breakdown Structure:		<u>1.2.2</u>					
Project Hanford Title:		<u>Liquid Effluent</u>		<u>FY 1997</u>		<u>FY 1998</u>	
				<u>\$</u>	<u>FTEs</u>	<u>\$</u>	<u>FTEs</u>
Expense							
	Service Agreement			\$75	0	\$0	0
	Technical Service			\$1,207	0	\$747	0
	Clerical			\$0	0	\$0	0
Construction				\$900	0	\$0	0
Total				\$2,182	0	\$747	0

Definitions:

Subcontractor is any Hanford Site subcontractor to WHC, ICF KH, BCSR, PNNL, or BHI.

Dollars in Thousands: The base cost of the subcontract, excluding adders (procurement and G&A).

Service Agreement subcontracts obtain special knowledge or skills, typically not materials.

Technical Service subcontracts are primarily offsite and of a highly specialized nature.

Clerical subcontracts are for clerical support.

Construction subcontracts support capital efforts.

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SCOPE DESCRIPTION	PRIOR YEAR UNCOSTED	FUND TYPE
<u>307 Basin Treatment Skid:</u> Purchase treatment skid for 307 Basins to support preparations for closeout of 340 Facility.	250	CE
<u>Miscellaneous Capital Equipment:</u> Purchase of capital equipment to support 200 Area and 300 Area LEF operations.	80	CE
TOTAL CENRTC UNCOSTED FROM FY 1996	330	CE

SCOPE DESCRIPTION	PRIOR YEAR UNCOSTED	FUND TYPE
<u>W-252 Phase II Stream BAT/AKART Implementation:</u> Construction completion.	2291	LI
TOTAL LINE ITEM UNCOSTED FROM FY 1996	2291	LI

SCOPE DESCRIPTION	PRIOR YEAR UNCOSTED	FUND TYPE
<u>W497 200 Area Facilities Paving and Lighting:</u> Complete parking area paving and exterior lighting around 2025EA and 2025E Buildings to provide a safer working environment.	130	GPP
<u>W500 340 Fire Suppression Sprinkler System:</u> Complete installation of a fire suppression sprinkler system at 340B Building. This system is being installed per the recommendation of the Fire Hazards Analysis and at the direction of RL.	50	GPP
TOTAL GENERAL PLANT PROJECT UNCOSTED FROM FY 1996	180	GPP

5.7 FY 1997 MULTI-YEAR WORK PLAN TRANSITION CROSSWALK

The following crosswalk shows how the Budgeted Cost of Work Scheduled (BCWS) given in the FY 1996 Multi-Year Program Plan has changed to arrive at the BCWS identified in the FY 1996 MYWP.

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FY 1997 MYWP TRANSITION CROSSWALK
Schedule 2A Approved Change Requests
(\$ in Millions)

Program:		Liquid Effluent Services		FY 1996 Reported Savings						
C/R NUMBER	DESCRIPTION	SAVINGS TYPE	1996	1997	1998	1999	TOTAL			
LET-96-002 LET-96-009	LES FY96 Rebaseline	Deletion	(3.1)				(3.1)			
	LES Midyear Rebaseline	Deletion	(2.3)		(0.0)		(2.3)			
		Sub Total Deletions	(5.4)	0.0	(0.0)	0.0	(5.4)			
LET-96-002	LES FY96 Rebaseline	Deferral	(4.1)				(4.1)			
	340 Facility Shutdown	Deferral	(0.2)	0.2			0.0			
	UP-1 Piping Mods	Deferral	(0.5)	0.5			0.0			
		Sub Total Deferrals	(4.8)	0.7	0.0	0.0	(4.1)			
		Transfer	0.0				0.0			
		Sub Total Transfers	0.0	0.0	0.0	0.0	0.0			
		Addition-Accelerated					0.0			
		Sub Total Accelerated	0.0	0.0	0.0	0.0	0.0			
LET-96-009	LES Midyear Rebaseline	Addition-New	1.6				1.6			
		Sub Total New	1.6	0.0	0.0	0.0	1.6			
		Efficiency					0.0			
		Efficiency	(0.8)				(0.8)			
		Sub Total Efficiency	(0.8)	0.0	0.0	0.0	(0.8)			
	Savings Actions									
	ROF Activity									
	Discretionary Savings/Undemurs									

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FY 1997 MYWP TRANSITION CROSSWALK
Schedule 2B Pending Change Requests
(\$ in Millions)

Program: **Liquid Effluent Services**

FY 1996 Reported Savings

C/R NUMBER **DESCRIPTION**

Not applicable

SAVINGS TYPE

1996	1997	1998	1999	TOTAL
------	------	------	------	-------

Deletion					0.0
Deletion					0.0
Deletion					0.0
Sub Total Deletions	0.0	0.0	0.0	0.0	0.0

Deferral					0.0
Deferral					0.0
Sub Total Deferrals	0.0	0.0	0.0	0.0	0.0

Transfer					0.0
Transfer					0.0
Sub Total Transfers	0.0	0.0	0.0	0.0	0.0

Addition-Accelerated					0.0
Addition-Accelerated					0.0
Sub Total Accelerated	0.0	0.0	0.0	0.0	0.0

Addition-New					0.0
Addition-New					0.0
Sub Total New	0.0	0.0	0.0	0.0	0.0

Savings Actions

ROF Activity
Discretionary Savings/Underruns

Efficiency					0.0
Efficiency					0.0
Sub Total Efficiency	0.0	0.0	0.0	0.0	0.0

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FY 1997 MYWP TRANSITION CROSSWALK
Schedule 2A Approved Change Requests
(\$ in Millions)

C/R Number **Narrative of Major Savings by Change Request**

LET-96-002

Deferrals

- 3943K Indefinite deferral of GPPs for piping flexibility and filter modifications
- 156K Indefinitie deferral of miscellaneous 300A T EDF enhancements

Deletions

- 778K New feed evaluations, systems engineering support, pilot plant operation
- 59K Miscellaneous 200 A LEF items
- 1179K 340 Facility upgrades such as process control system mods, HEPA mods
- 1045K Evaluations/engineering to support cancelled project W-302

LET-96-009

Additions

- + 300K Preparation to receive groundwater from 200-UP-1
- + 800K Design/construct transfer system components to pump from 200-UP-1 to LERF
- + 500K Initiation of 340 Facility shutdown actions

Deletions

- 1000K Reversal of PBI fee accrued in FY95
- 1065K Reduction in planned fee based on final negotiations
- 45K Annual Tritium Treatment Report changed to biennial
- 190K 300A T EDF LLW disposed as fill requiring no special packaging

5.7.4

WHC-SP-1097, Rev. 2
LEP FY 1997 Work Plan (WBS 1.2.2)

6.0 REFERENCES

- Bendixsen, R. B., 1995, *340 Waste Handling Facility Interim Safety Basis (ISB)*, WHC-SD-WM-ISB-003, Westinghouse Hanford Company, Richland, Washington.
- Berneski, L. D., 1995, *Hanford 300 Area Retention Process Sewer Inventory at Risk Calculations and Safety Analysis*, WHC-SD-WM-SAD-027, Westinghouse Hanford Company, Richland, Washington.
- Berneski, L. D. and R. T. Stordeur, 1996, *340 Waste Handling Facility Deactivation Plan*, WHC-SD-LEF-SSP-001, Westinghouse Hanford Company, Richland, Washington.
- Birney, R. E., 1994, *200 Area Liquid Effluent Facilities Administrative Policies*, WHC-IP-0931, Westinghouse Hanford Company, Richland, Washington.
- Birney, R. E., 1994, *200 Area Liquid Effluent Facilities Conduct of Operations*, WHC-IP-0932, Westinghouse Hanford Company, Richland, Washington.
- Crane, A. F., 1995, *200 Area Effluent Treatment Facility Auditable Safety Analysis*, WHC-SD-ETF-ASA-001, Westinghouse Hanford Company, Richland, Washington.
- Crane, A. F., 1996, *200 Area TEDF Interface Control Document*, WHC-SD-W049H-ICD-001, Westinghouse Hanford Company, Richland, Washington.
- DE-RP06-96RL13200, *Project Hanford Management Contractor Request for Proposals*.
- DOE/EH-0173T, *Environmental Regulatory Guide for Radiological Effluent Monitoring and Environmental Surveillance (January 1991)*.
- DOE-RL, 1994, *Hanford Site Radiological Control Manual*, HSRCM-1, U.S. Department of Energy, Richland Operations Office, Richland, Washington.
- DOE-RL, 1996, *Hanford Mission Direction Document*, DOE/RL-96-14, U.S. Department of Energy, Richland Operations Office, Richland, Washington.
- Graves, C. E., 1996a, *Interface Control Document for Untreated Liquids Effluents*, WHC-SD-WM-ICD-038, Westinghouse Hanford Company, Richland, Washington.
- Graves, C. E., 1996b, *Interface Control Document for Treated Liquid Effluents*, WHC-SD-WM-ICD-039, Westinghouse Hanford Company, Richland, Washington.
- Greager, T. M., 1996, *Interface Control Document Between Liquid Effluent Services and Solid Waste Disposal Division*, WHC-SD-WM-PICD-001, Westinghouse Hanford Company, Richland, Washington.
- Grygiel, M. L., 1996, *Site Systems Engineering Systems Engineering Management Plan*, WHC-SD-WM-SEMP-004, Rev. 4, Westinghouse Hanford Company, Richland, Washington.

FY 1997 MYWP TRANSITION CROSSWALK
FY 1997 BASELINE PLANNING ACTIONS

Schedule 3
(\$ in Millions)

Program: Liquid Efflu

		1996	1997	1998	1999	TOTAL
FY 1997 Baseline Planning Actions						
(6.1)	Deleted Workscope					
(1)	CENRTC		0.0			0.0
(2)	200A ETF Enhancements		-0.5	-0.3	0.0	-0.8
(3)	300A TEDF Enhancements			-0.1		-0.1
(4)	RL Productivity Commitment			-2.5		-2.5
(5)	Planned efficiencies		-3.0	-3.8	-3.5	-10.3
	Total	0.0	-3.5	-6.7	-3.5	-13.7
(6.2) Workscope Deferred						
(1)	Not Applicable					0.0
(2)						0.0
	Total	0.0	0.0	0.0	0.0	0.0
(6.3) Workscope Additions - Accelerated						
(1)	Not Applicable					0.2
(2)						0.0
	Total	0.0	0.0	0.0	0.0	0.2
(6.4) Workscope Additions - New						
(1)	200A Non-Evap Processing		1.8	2.5	2.6	6.9
(2)	300A TEDF Enhancements				0.2	0.2
(3)	340 Facility Shutdown				1.0	1.0
(4)	Miscellaneous Streams				0.4	0.4
	Total	0.0	1.8	2.5	4.2	8.5
(6.5) Workscope Transfers						
(1)	Not Applicable					0.0
(2)						0.0
(3)						0.0
	Total	0.0	0.0	0.0	0.0	0.0

APPENDIX A
HANFORD SITE TECHNICAL BASELINE

- Koerner, J. C., 1995, *200 Area Effluent Treatment Facility Hazard Categorization Report*, WHC-SD-C018H-HC-002, Westinghouse Hanford Company, Richland, Washington.
- McDonald, F. N., 1994, *Acceptance of Feed Streams for Treatment at the LERF/ETF Complex*, WHC-SD-ETF-WAC-001, Westinghouse Hanford Company, Richland, Washington.
- Mercado, J. E., 1993, *Safety Analysis Report for Packaging On-site Railroad Liquid Waste Tank Cars*, WHC-SD-RE-SAP-013, Westinghouse Hanford Company, Richland, Washington.
- Mulkey, C. H. and J. M. Jones, 1995, *Double-Shell Tank System Waste Analysis Plan*, WHC-SD-WM-EV-053, Westinghouse Hanford Company, Richland, Washington.
- Olander, A. R., 1995, *Hanford 300 Area Treated Effluent Disposal Facility Inventory at Risk Calculations and Safety Analysis*, WHC-SD-WM-SAD-025, Westinghouse Hanford Company, Richland, Washington.
- Poole, M. E., 1994, *300 Area TEDF Administration*, WHC-IP-1000, Westinghouse Hanford Company, Richland, Washington.
- Theo, M. G., 1994, *Engineering Practice Guidelines*, WHC-IP-1026, Westinghouse Hanford Company, Richland, Washington.
- WHC, 1993, *Hanford Site Solid Waste Acceptance Criteria*, WHC-EP-0063-4, Westinghouse Hanford Company, Richland, Washington.
- WHC, 1988, *Best Available Technology (Economically Achievable) Guidance Document for the Hanford Site*, WHC-EP-0137, Westinghouse Hanford Company, Richland, Washington.
- WHC, 1992, *A Guide for Preparing Hanford Site Facility Effluent Monitoring Plans*, WHC-EP-0438-1 Westinghouse Hanford Company, Richland, Washington.
- WHC, 1996, *Westinghouse Occupational ALARA Program*, WHC-IP-1043, Westinghouse Hanford Company, Richland, Washington.
- WHC-CM-1-3, *Management Requirements and Procedures*, Westinghouse Hanford Company, Richland, Washington.
- WHC-CM-1-10, *Safety Manual*, Westinghouse Hanford Company, Richland, Washington.
- WHC-CM-6-1, *Standard Engineering Practices*, Westinghouse Hanford Company, Richland, Washington.
- Woeland, J. E., 1991, *LERF Safety Analysis Report*, WHC-SD-W105-SAR-001, Westinghouse Hanford Company, Richland, Washington.

1 TECHNICAL BASELINE

The technical baseline describes the work (functions) to be accomplished and the technical standards that govern the work. The following information is provided in this section of the Multi-Year Work Plan (MYWP): Project Mission; Project End Point Targets; Summary-Level Forecasting Data (waste type, nuclear material, facility, infrastructure needs); Drivers (key mission and regulatory); Functional Definitions; Project Life Cycle Requirements; Project Issues and Assumptions.

1.1 PROJECT MISSION

Responsibly manage current and future liquid effluent streams in a safe, cost-effective, and environmentally-compliant manner. This is achieved through planning and integration; public and stakeholder interaction; definition of requirements for generators; and provision of timely storage, treatment, and disposal capability.

1.2 PROJECT END POINT TARGETS

This section identifies the significant end point targets, technical objectives, and safety objectives to be achieved in accomplishing the project mission. This includes general and specific objectives, deliverables, or activities that are essential to the project mission. This information provides an overview of the activities and deliverables that are contained in the schedule section.

1.2.1 End Point Targets

This section contains the End Point Targets that are established in the Hanford Mission Direction Document (MDD). They provide the basis for the project mission and are implemented through technical requirements contained in the Hanford Site Technical Baseline.

1.2.2 Technical Objectives

Table 1.2.2-1 contains the Technical Objectives that achieve the end point targets. They are established in various Project specific documents and are implemented through technical requirements contained in the Hanford Site Technical Baseline.

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This section contains forecast information about the project inputs and outputs during the project life cycle. The forecast information is an integral part of the technical basis for the planning, scheduling, and budgeting process.

1.3.1 Waste Type Data (Solid Waste, Tank Waste, Liquid Effluents, Special Case Waste)

Table 1.3.1-1 contains the waste (Solid Waste, Tank Waste, Liquid Effluents, Special Case Waste) inventory and volume projection data. These data are used to track the waste through generation, transfer, receipt, storage, and disposition. The Project schedule and budget reflect the plans for disposition of waste.

1.3.2 Nuclear Materials (Special Nuclear Materials, Nuclear Fuel, Cesium capsules, Strontium capsules)

This section contains the nuclear materials (Special Nuclear Materials, Nuclear Fuel, Cesium capsules, Strontium capsules) inventory and projection data. These data are used to track the nuclear materials through transfer, receipt, storage, and disposition. The Project schedule and budget reflect the plans for disposition of nuclear materials.

1.3.3 Facilities (Excess, Deactivated)

Table 1.3.3-1 contains the facility forecasting data (facility deactivation, decontamination and decommissioning, and closure). The facility data are used to track the facility through acquisition, operations and maintenance, and disposal. The Project schedule and budget reflect the plans for disposition of excess and deactivated facilities.

Table 1.3.3-1 Facility Inventory

Complex	Facility	Facility Description	Acquisition Project	M&O Project	Deactivation Project	D&D Project	Closure Project
200-SWM	6653	SAMPLE AND MONITORING		Liquid Effluents Solid Waste	Real Estate and Property Management	Real Estate and Property Management	Real Estate and Property Management
200A-LEF	2025E	ETF		Liquid Effluents		Environmental Restoration	Environmental Restoration
200A-LEF	2025EA	ADMINISTRATION BUILDING		Liquid Effluents	Real Estate and Property Management	Real Estate and Property Management	Real Estate and Property Management
200A-LEF	216F-43-A /-B	200 Area TEDF		Liquid Effluents			
200A-LEF	225E			Liquid Effluents			
200A-LEF	225W			Liquid Effluents			
200A-LEF	242-AL-42 /-43 /-44	LERF		Liquid Effluents		Environmental Restoration	Environmental Restoration
200A-LEF	HS-010			Liquid Effluents			
200A-LEF	HS-011			Liquid Effluents			
200A-LEF	Laundry Shed (200 Area ETF)			Liquid Effluents			
200A-LEF	MO-269			Liquid Effluents			

Table 1.2.2-1 Technical Objectives

1	<p>Technical Objectives - Liquid Effluents</p> <p>WM2. Minimize the impact to the environment by ceasing unpermitted discharge to the soil column and by providing an infrastructure for treatment, storage and disposal of liquid effluents.</p> <p>WM2.1 Disposal of all liquid effluents on the Hanford Site considers the overall cost to the government of the method(s) of disposal balanced against the benefit(s) from an economic, health, safety, and environmental standpoint.</p> <p>WM2.1.1 Submit for DOE approval a sitewide integrated decision-making process and procedures for disposal of liquid effluents on the Hanford Site by February 28, 1997.</p> <p>WM2.2 Compliance with DOE Orders, and with federal, state, and local requirements in the operation of the liquid effluent facilities, projects and operations.</p> <p>WM2.2.1 Collect appropriate data and propose draft modifications to DOE for existing waste water discharge permits by March 31, 1997, based on above liquid effluent disposal process.</p> <p>WM2.2.2 Submit ETF/LERF Part B permit application to RL by January 29, 1997.</p> <p>WM2.2.3 Complete WAC-216 permit application for category 3 miscellaneous streams and submit to RL by August 30, 1997.</p> <p>WM2.2.4 Operate 200 Area TEDF, 300 Area TEDF, and ETF with no violations of waste discharge permit limits.</p> <p>WM2.3 Consolidate handling and treatment of liquid effluents in the 200 Area.</p> <p>WM2.3.1 Implement a coordinated management system to operate 242-A, LERF, and ETF by September 30, 1997.</p> <p>WM2.4 Complete the 200 Area Phase II Streams (Project W-252) modifications to the 200 Area facilities.</p> <p>WM2.4.1 Complete Phase II stream BAT/AKART implementation permit revision by January 30, 1997.</p> <p>WM2.4.2 Complete construction of Phase II stream BAT/AKASRT implementation by June 30, 1997.</p> <p>WM2.5 Implement 340 Waste Handling Facility Shutdown Plan.</p> <p>WM2.5.1 Implement Waste Handling Facility Shutdown Plan at the 340 Waste Handling Facility by January 30, 1997.</p> <p>WM2.6 Complete Biennial Evaluation of Tritium Treatment Technology and provide reports as directed by TPA.</p> <p>WM2.6.1 Submit tritium technology report to RL by July 31, 1997.</p>
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1.2.3 Safety Objectives

Table 1.2.3-1 contains the Safety Objectives that are established in the Hanford Mission Direction Document.

Table 1.2.3-1 Safety Objectives

1	<p>MDD, Central Core, Safety Objective S52</p> <p>Conduct effluent monitoring of airborne and liquid releases.</p>
2	<p>MDD, Central Plateau, Safety Objective S45</p> <p>Conduct safe operations and maintenance of the Liquid Effluent Retention Facility (LERF).</p>
3	<p>MDD, Central Plateau, Safety Objective S46</p> <p>Conduct safe operations and maintenance of the 200 Area Treated Effluent Disposal Facility (TEDF).</p>
4	<p>MDD, Central Plateau, Safety Objective S47</p> <p>Conduct safe operations and maintenance of the 200 Area Effluent Treatment Facility (ETF).</p>
5	<p>MDD, Central Plateau, Safety Objective S48</p> <p>Conduct effluent monitoring of airborne and liquid releases.</p>
6	<p>MDD, Reactors on the River, Safety Objective S64</p> <p>Conduct effluent monitoring of airborne and liquid releases.</p>
7	<p>MDD, South 600, Safety Objective S50</p> <p>Conduct safe operations and maintenance of the 340 Waste Handling Facility until FY98 or until a replacement capability is in place.</p>
8	<p>MDD, South 600, Safety Objective S51</p> <p>Conduct safe operations and maintenance of the 300 Area Treated Effluent Disposal Facility (TEDF).</p>
9	<p>MDD, South 600, Safety Objective S68</p> <p>Conduct effluent monitoring of airborne and liquid releases.</p>

1.3 SUMMARY-LEVEL FORECASTING DATA

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Table 1.3.4-1 Infrastructure Requirements - Average Demand (Continued)

Infrastructure Type	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006-2070	Units
Analytical Laboratory Services											
Bioassay and Dosimetry Services											
Biological Laboratory Services											
Building Maintenance											
Clean Laundry											
Custodial Services											
Data (HLAN) Transmission											
Development Laboratory Services											
Electricity											
Energy Management Services											
Environmental Molecular Science Lab Services											
Fab Shop Services											
Guaranteed Ride Home											
Hanford Road Sys. Heavy Traffic											
Heavy Equipment											
Heavy Trucks											
In-Field Laboratory Services											
Industrial Hygiene Services											
Lifting (Cranes)											
Non-rad Standards (Calibrations)											
Office Space (Leased)											
Office Space (Infrastructure Owned)											
Office Space (Program Owned)											
Pager Service											
Potable Water											
Radioactive Standards (Calibrations)											
Rail Transportation											
Raw Water											
Sedans/Light Trucks											
Steam											
Storage Space (Infrastructure Owned)											
Storage Space (Leased)											
Storage Space (Program Owned)											
Taxi Service											
Video Communication											
Voice (Telephone) Communication											

Table 1.3.4-2 Infrastructure Requirements - Peak Demand

Infrastructure Type	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006-2070	Units
Allocated Land											
Analytical Laboratory Services											
Bioassay and Dosimetry Services											
Biological Laboratory Services											
Building Maintenance											
Clean Laundry											
Custodial Services											
Data (HLAN) Transmission											
Development Laboratory Services											
Electricity											
Energy Management Services											
Environmental Molecular Science Lab Services											
Fab Shop Services											
Guaranteed Ride Home											
Hanford Road Sys. Heavy Traffic											
Heavy Equipment											
Heavy Trucks											
In-Field Laboratory Services											

Table 1.3.3-1 Facility Inventory (Continued)

Complex	Facility	Facility Description	Acquisition Project	M&O Project	Deactivation Project	D&D Project	Closure Project
200A-LEF	Oil Storage Shed (200 Area ETF)			Liquid Effluents			
300 Area	310	300 AREA TEDF		Liquid Effluents	Real Estate and Property Management	Real Estate and Property Management	Real Estate and Property Management
300 Area	340	WASTE NEUTRALIZATION FACILITY		Liquid Effluents		Environmental Restoration	
300 Area	340A	WASTE RETENTION BUILDING		Liquid Effluents		Environmental Restoration	
300 Area	340B	WASTE LOADOUT BUILDING		Liquid Effluents		Environmental Restoration	
300 Area	342	WASTE COLLECTION SUMP		Liquid Effluents	Real Estate and Property Management	Real Estate and Property Management	Real Estate and Property Management
300 Area	342A	WASTE COLL SUMP SHED		Liquid Effluents	Real Estate and Property Management	Real Estate and Property Management	Real Estate and Property Management
300 Area	3701D	BENTON CO. SHERIFF HEADQUARTERS		Liquid Effluents	Real Estate and Property Management	Real Estate and Property Management	Real Estate and Property Management
300 Area	3707F	RADIATION MONITORING BUILDING		Liquid Effluents	Real Estate and Property Management	Real Estate and Property Management	Real Estate and Property Management
300 Area	3718F	SODIUM STORAGE		Liquid Effluents	Real Estate and Property Management	Real Estate and Property Management	Real Estate and Property Management
300A-LEF	340 /340-A /340-B /307	340 Waste Handling Facility/307 Retention Basins		Liquid Effluents		Environmental Restoration	Environmental Restoration
300A-LEF	MO-036			Liquid Effluents			
300A-LEF	MO-433			Liquid Effluents			
300A-LEF	MO-741			Liquid Effluents			
300A-LEF	MO-744			Liquid Effluents			
300A-LEF	MO-745			Liquid Effluents			
Infrastructure	623	SEISMIC RELAY BUILDING, GABLE MOUNTAIN		Liquid Effluents Infrastructure Operations and Maintenance	Real Estate and Property Management	Real Estate and Property Management	Real Estate and Property Management

1.3.4 Infrastructure (Power, Steam, Water, Roads, Railroad, Sanitary Waste)

This section contains the forecasting data for infrastructure support. These data are used to ensure the required infrastructure is available when it is needed. Table 1.3.4-1 provides the nominal, best estimate of infrastructure needs. Table 1.3.4-2 provides an estimate of the maximum probable need. The Project schedule and budget reflect the services (infrastructure) that are necessary to achieve the project mission.

Table 1.3.4-1 Infrastructure Requirements - Average Demand

Infrastructure Type	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006-2070	Units
Allocated Land											

Table 1.4.1-1 Key Drivers (Continued)

Name	Title
ST-4500	State Waste Discharge Permit for the 200 Area ETF
ST-4502	State Waste Discharge Permit for the 200 Area TEDF
Tri-Party Agreement	Hanford Federal Facility Agreement and Consent Order: 89-10, Rev. 1
WA-002591-7	National Pollutant Discharge Elimination System Permit for the 300 Area TEDF

1.4.2 Other Drivers

Table 1.4.2-1 contains the source documents that must be followed as the project mission is accomplished.

Table 1.4.2-2 Other Drivers

Name	Title
10 CFR 1021	NEPA Implementing Procedures
10 CFR 20	Standards for Protection Against Radiation
10 CFR 830	Nuclear Safety Management, 4/5/94
10 CFR 835	Occupational Radiation Protection
29 CFR 1910	Occupational Safety and Health Standards
29 CFR 1926	Safety and Health Regulations During Construction
40 CFR 122	EPA Administered Permit Programs: The National Pollutant Discharge Elimination System Permits.
40 CFR 125	Criteria and Standards for the NPDES
40 CFR 260	Hazardous Waste Management System: General
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 263	Standards Applicable to Transporters of Hazardous Waste
40 CFR 264	Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 265	Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 266	Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities
40 CFR 268	Land Disposal Restrictions
40 CFR 270	EPA Administered permit Programs: The Hazardous Waste Permit Program
40 CFR 302	Designation, Reportable Quantities, and Notification
40 CFR 370	Hazardous Chemical Reporting: Community Right-to-Know
40 CFR 372	Toxic Chemical Release Reporting: Community Right-to-Know
40 CFR 52	Approval and Promulgation of Implementation Plans
40 CFR 60	Standards of Performance for New Stationary Sources
40 CFR 61	National Emissions Standards for Hazardous Air Pollutants
42 USC 4321 et seq.	The Public Health and Welfare; Congressional Declaration of Purpose
42 USC 6901, et seq.	Resource Conservation and Recovery Act of 1976 (RCRA)
49 CFR 100 to 179	DOT Hazardous Materials Transportation Regulations
49 USC 1801, et seq.	Hazardous Materials Transportation Act
95-LEP-015	LERF Treatment Exemption
DOE Order 232.1	Occurrence Reporting and Processing of Operations Information
DOE Order 4330.4B	Maintenance Management Program
DOE Order 4700.1	Project Management System
DOE Order 5400.1	General Environmental Protection Program
DOE Order 5400.5	Radiation Protection of the Public and the Environment
DOE Order 5480.10	Contractor Industrial Hygiene Program

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Table 1.3.4-2 Infrastructure Requirements - Peak Demand (Continued)

Infrastructure Type	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006-2070	Units
Industrial Hygiene Services											
Lifting (Cranes)											
Non-rad Standards (Calibrations)											
Office Space (Leased)											
Office Space (Infrastructure Owned)											
Office Space (Program Owned)											
Pager Service											
Potable Water											
Radioactive Standards (Calibrations)											
Rail Transportation											
Raw Water											
Sedans/Light Trucks											
Steam											
Storage Space (Infrastructure Owned)											
Storage Space (Leased)											
Storage Space (Program Owned)											
Taxi Service											
Video Communication											
Voice (Telephone) Communication											

1.4 DRIVERS

This section identifies the documents that are sources of project requirements, including Key and Regulatory Drivers.

1.4.1 Key Drivers

Table 1.4.1-1 lists the source documents that tend to drive the project mission (e.g. Mission Direction Document, Tri-Party Agreement).

Table 1.4.1-1 Key Drivers

Name	Title
60 FR 31115	Federal Register Notice of U. S. EPA Approval of the 200 Area Effluent Treatment Facility Deisting Petition, DOE/RL-92-72
DE-91NM-177	Consent Order: In the Matter of the Compliance by USDOE with Chapter 70.105 and 90.48 RCW and the Rules and Regulations of the Department of Ecology
DE-RP06-96RL13200	Project Hanford Management Contractor Request for Proposals
DOE/RL-90-43, Revision 0	Liquid Effluent Retention Facility Dangerous Waste Permit Application
DOE/RL-93-03, Revision 0	Hanford Facility Dangerous Waste Permit Application, 200 Area Effluent Treatment Facility
DOE/RL-93-93	Plan and Schedule for Disposition and Regulatory Compliance for Miscellaneous Streams
DOE/RL-96-14	Updated Draft Mission Direction Document, June 1996
LEMOU1	Memorandum of Understanding--Storage and Treatment of Water from N Reactor Fuel Storage Basin and 1300-N Emergency Dump Basin
LEMOU2	Memorandum of Understanding--Treatment of Groundwater from 200-UP-1 Operable Unit at the 200 Area Effluent Treatment Facility
LEMOU3	Memorandum of Understanding for Use of the Radioactive Liquid Waste Sewer System
LEMOU4	Liquid Effluent Retention Facility Interim Memorandum of Understanding
LEMOU5	Memorandum of Understanding--Disposition and Transport of Excess Water from 100-K Basins to the 200 Area Effluent Treatment Facility.

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Table 1.4.2-2 Other Drivers (Continued)

Name	Title
WHC-CM-1-5	Standard Operating Practices
WHC-CM-1-8	Work Management
WHC-CM-2-1	Procurement Manual and Procedures
WHC-CM-2-14	Hazardous Material Packaging and Shipping
WHC-CM-2-15	Training Administration Manual
WHC-CM-2-17	Budget Formulation
WHC-CM-2-2	Materials Management Manual
WHC-CM-2-3	Property Management Manual
WHC-CM-2-4	Management Control System
WHC-CM-3-5	Document Control and Records Management Manual
WHC-CM-4-2	Quality Assurance Manual
WHC-CM-4-29	Nuclear Criticality Safety Manual
WHC-CM-4-33	Security Manual
WHC-CM-4-40	Industrial Hygiene Manual
WHC-CM-4-41	Fire Protection Program Manual
WHC-CM-4-46	Nonreactor Facility Safety Analysis Manual
WHC-CM-6-1	Standard Engineering Practices
WHC-CM-6-2	Project Management
WHC-CM-7-5	Environmental Compliance
WHC-EP-0063-4	Hanford Site Solid Waste Acceptance Criteria
WHC-EP-0137	Best Available Technology (Economically Achievable) Guidance Document for the Hanford Site
WHC-EP-0438-1	A Guide for Preparing Hanford Site Facility Effluent Monitoring Plans
WHC-IP-0931	200 Area Liquid Effluent Facilities Administrative Policies
WHC-IP-0932	200 Area Liquid Effluent Facilities Conduct of Operations
WHC-IP-1000	300 Area TEDF Administration
WHC-IP-1026	Engineering Practice Guidelines
WHC-IP-1043	WHC Occupational ALARA Program
WHC-SD-C018H-HC-002	200 Area Effluent Treatment Facility Hazard Categorization Report
WHC-SD-ETF-ASA-001	200 Area Effluent Treatment Facility Auditable Safety Analysis
WHC-SD-ETF-WAC-001	Acceptance of Feed Streams for Treatment at the LERF/ETF Complex
WHC-SD-RE-RAP-013	Safety Analysis for Packaging (SARP) Railroad Waste Tank Cars
WHC-SD-W049H-ICD-001	200 Area TEDF Interface Control Document
WHC-SD-W105-SAR-001	LERF Safety Analysis Report
WHC-SD-WM-EV-053	Double-Shell Tank System Waste Analysis Plan
WHC-SD-WM-ICD-038	Interface Control Document for Untreated Liquid Effluents (TWRS Project Phase I privatization contractor liquid effluents to ETF)
WHC-SD-WM-ICD-039	Interface Control Document for Treated Liquid Effluents (TWRS Project Phase I privatization contractor liquid effluents to 200 Area TEDF)
WHC-SD-WM-ISB-003	340 Waste Handling Facility Interim Safety Basis (ISB)
WHC-SD-WM-PICD-001	Interface Control Document Between Liquid Effluent Services and Solid Waste Disposal Division
WHC-SD-WM-SAD-025	Hanford 300 Area Treated Effluent Disposal Facility Inventory at Risk Calculations and Safety Analysis
WHC-SD-WM-SAD-027	Hanford 300 Area Retention Process Sewer Inventory at Risk Calculations and Safety Analysis
WHC-SE-RE-SAP-013	Safety Analysis Report for Packaging On-Site Railroad Liquid Waste Tank Cars (Mercado 1993)

1.5 FUNCTIONAL DEFINITIONS

This section contains the Hanford Site Technical Baseline functions that are assigned to the project. It describes the project work in terms consistent with the Hanford Site Technical Baseline. The 'number' column in this section refers to the unique function number for the listed function as contained in the site technical baseline database maintained

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Table 1.4.2-2 Other Drivers (Continued)

Name	Title
DOE Order 5480.19	Conduct of Operations Requirements for DOE Facilities
DOE Order 5480.20A	Personnel Selection, Qualification, Training, and Staffing at DOE Reactor and Non-Reactor Nuclear Facilities
DOE Order 5480.21	Unreviewed Safety Questions
DOE Order 5480.22	Technical Safety Requirements
DOE Order 5480.23	Nuclear Safety Analysis Report
DOE Order 5480.24	Nuclear Criticality Safety
DOE Order 5480.3	Safety Requirements for the Packaging and Transportation of Hazardous Materials, Hazardous Substances, and Hazardous Waste, 1985
DOE Order 5480.4	Environmental Protection, Safety and Health Protection
DOE Order 5484.1	Environmental Protection, Safety, and Health Protection Information Reporting Requirements
DOE Order 5700.6C	Quality Assurance, 8/21/91
DOE Order 5820.2A	Radioactive Waste Management
DOE/EH-0173T	Environmental Regulatory Guide for Radiological Effluent Monitoring and Environmental Surveillance
HSRCM-1	Hanford Site Radiological Control Manual
MRP 6.15	Facility Shutdown, Stand By, and Transfer (from WHC-CM-1-3, Management Requirements and Procedures)
RCW 43.21C	State Environmental Policy Act of 1971
RCW 70.105	Washington Hazardous Waste Management Act
RCW 70.105D	Model Toxics Control Act
RCW 70.94	Washington Clean Air Act
RCW 90.48	Water Pollution Control Act
RCW 90.58	Shoreline Management Act
RLID 430.1	Systems Engineering Criteria Document & Implementing Directive
RLID 5480.31	Startup and Restart of Nuclear Facilities Operational Readiness Review and Readiness Assessments
RLIP 5484.1A	Environmental Protection, Safety, and Health Protection Information Reporting Requirements
RLP 5000.11	Schedule Validation
RLP 5700.9	Cost Estimating Validation
RLPD 430.1	Hanford Site Systems Engineering Policy
WAC 173-14 TO 20	Permits for Development on Shorelines of the State, Shoreline Management Act
WAC 173-200	Water Quality Standards for Ground Waters of the State of Washington
WAC 173-201A	Water Quality Standards for Surface Waters of the State of Washington
WAC 173-216	State Waste Discharge Permit Program
WAC 173-218	Underground Injection Control Program
WAC 173-230	Certification of Operators of Wastewater Treatment Facilities
WAC 173-240	Submission of Plans and Reports for Construction of Wastewater Facilities
WAC 173-303	Dangerous Waste Regulations
WAC 173-304	Minimum Functional Standards for Solid Waste Handling
WAC 173-400	General Regulations for Air Pollution Sources
WAC 173-401	Operating Permit Regulations
WAC 173-460	Control for New Sources of Toxic Air Pollutants
WAC 173-480	Ambient Air Quality Standards and Emission Limits for Radionuclides
WAC 197-11	SEPA Rules
WAC 246-247	Radiation Protection - Air Emissions
WAC 246-272	On-Site Sewage System
WHC-CM-1-10	Safety Manual
WHC-CM-1-11	Industrial Hygiene Manual
WHC-CM-1-3	Management Requirements and Procedures
WHC-CM-1-4	Corrective Action Management Manual

Table 1.6.1.1-1 Liquid Effluents Program Management / Administrative Support Requirements

1	Liquid Effluents/Solid Waste Interface The interface between the Liquid Effluents Program and Solid Waste Disposal is defined in Interface Control Document Between Liquid Effluent Services and Solid Waste Disposal Division (Graeger 1996).
2	Liquid Effluents/TWRS Phase I Privatization Interface The interface between the Liquid Effluents Program and the TWRS Phase I privatization contractor for waste water transferred to the ETF is defined in Interface Control Document for Untreated Liquid Effluents (Graves 1996a).
3	100-K Basin Excess Water Disposition (LE) Agreement to treat K Basins level control water is documented in "Memorandum of Understanding--Disposition and Transport of Excess Water from 100-K Basins to the 200 Area Effluent Treatment Facility."
4	200 Area TEDF Interface The interface between the Liquid Effluents Program and generators which discharge to the 200 Area TEDF is defined in 200 Area TEDF Interface Control Document (Crane 1996).
5	300 Area Liquid Waste Sewer System Agreement on use of the radioactive liquid waste system in the 300 Area for waste transfers to the 340 Facility is documented in "Memorandum of Understanding for Use of the Radioactive Liquid Waste Sewer System."
6	Liquid Effluents/TWRS Phase I Privatization 200 Area TEDF The interface between the Liquid Effluents Program and the TWRS Phase I privatization contractor for waste water transferred to the 200 Area TEDF is defined in Interface Control Document for Treated Liquid Effluents (Graves 1996b).
7	Treatment of groundwater from the 200-UP-1 operable unit. Agreement to treat groundwater from the 200-UP-1 operable unit in the ETF is documented in "Memorandum of Understanding--Treatment of Groundwater from 200-UP-1 Operable Unit at the 200 Area Effluent Treatment Facility."
8	Liquid Effluents Processing & Disposal Manage current and future Hanford Site liquid effluents, including collecting, treating, and disposing of liquid effluent wastes. The program uses an integrated liquid effluent treatment system with a combination of local and central treatment systems to achieve cost-effective liquid effluent disposal. Current liquid effluent facilities include the 200 Area LERF, 200 Area TEDF, 200 Area ETF, 300 Area TEDF, and the 340 Facility. (Project Hanford Management Contract Request for Proposals, Section C, "Statement of Work," Paragraph 3.B(1)(k)).
9	LERF Operational Responsibility Agreement on responsibility for operating the LERF is documented in "Liquid Effluent Retention Facility Interim Memorandum of Understanding."
10	N Basin Water Treatment Agreement to treat N Basin water in the ETF is documented in "Memorandum of Understanding--Storage and Treatment of Water from N Reactor Fuel Storage Basin and 1300-N Emergency Dump Basin."

1.6.2 Acquire Liquid Effluent Remediation System

1.6.3 Operate & Maintain Liquid Effluent Remediation System

Table 1.6.3-1 Operate & Maintain Liquid Effluent Remediation System Requirements

1	MDD, Central Corc, Safety Objective S52 Conduct effluent monitoring of airborne and liquid releases.
2	MDD, Central Plateau, Safety Objective S45 Conduct safe operations and maintenance of the Liquid Effluent Retention Facility (LERF).
3	MDD, Central Plateau, Safety Objective S46 Conduct safe operations and maintenance of the 200 Area Treated Effluent Disposal Facility (TEDF).
4	MDD, Central Plateau, Safety Objective S47 Conduct safe operations and maintenance of the 200 Area Effluent Treatment Facility (ETF).
5	MDD, Central Plateau, Safety Objective S48 Conduct effluent monitoring of airborne and liquid releases.
6	MDD, Reactors on the River, Safety Objective S64 Conduct effluent monitoring of airborne and liquid releases.
7	MDD, South 600, Safety Objective S50 Conduct safe operations and maintenance of the 340 Waste Handling Facility until FY98 or until a replacement capability is in place.
8	MDD, South 600, Safety Objective S51 Conduct safe operations and maintenance of the 300 Area Treated Effluent Disposal Facility (TEDF).

by Site Systems Engineering.

1.5.1 Manage Liquid Effluent Remediation System

Table 1.5.1-1 Manage Liquid Effluent Remediation System Functions

Number	Name / Description
4.5.1	Liquid Effluents Program Management / Administrative Support Coordination, direction, and customer interface is provided for the Liquid Effluents program. Administrative support is provided for program documentation, funds management, scheduling, and reporting.

1.5.2 Acquire Liquid Effluent Remediation System

1.5.3 Operate & Maintain Liquid Effluent Remediation System

Table 1.5.3-1 Operate & Maintain Liquid Effluent Remediation System Functions

Number	Name / Description
4.5.2	Store Liquid Effluents Liquid effluents which meet acceptance criteria are temporarily stored while awaiting treatment or transfer to double-shell tanks.
4.5.3	Treat Liquid Effluents Liquid effluents are treated by physical and/or chemical processes to reduce the concentration of contaminants to below discharge limits.
4.5.4	Dispose of Treated Liquid Effluents Treated effluents are disposed of to the soil column or the Columbia River in accordance with established permits.

1.5.4 Dispose of Liquid Effluent Remediation System

Table 1.5.4-1 Dispose of Liquid Effluent Remediation System Functions

Number	Name / Description
4.5.5	Shutdown/Transfer Excess Liquid Effluent Facilities Liquid effluent facilities are shutdown after completing their mission and transferred to the Transition Projects or Landlord programs in accordance with established turnover criteria.

1.6 PROJECT LIFE-CYCLE REQUIREMENTS

This section contains the requirements for each project life cycle phase including the project management requirements.

1.6.1 Manage Liquid Effluent Remediation System

1.6.1.1 Liquid Effluents Program Management / Administrative Support

Table 1.6.3.2-1 Treat Liquid Effluents Requirements (Continued)

7	Safe Operation of 200 Area TEDF Safe Operation of 200 Area TEDF - The 200 Area TEDF is a general use facility and safety documentation is not required per DOE Order 5481.1B. Operation and maintenance of the 200 Area TEDF shall be in accordance with the general safety requirements in WHC-CM-1-10, Safety Manual.
---	---

1.6.3.3 Dispose of Treated Liquid Effluents

Table 1.6.3.3-1 Dispose of Treated Liquid Effluents Requirements

1	300 Area TEDF Discharge Limits Discharge limits for the 300 Area TEDF are specified in the National Pollutant Discharge Elimination System (NPDES) Permit No. WA-002591-7. Constituents not identified in permits are subject to limits in WAC 173-201A, Water Quality Standards for Surface Waters of the State of Washington, and 4 percent of the derived concentration guide values in DOE Order 5400.5, Radiation Protection of the Public and the Environment, as applicable.
2	Operate Liquid Effluent Treatment Facilities Support to Others - Operate treatment facilities and systems for liquid effluents. (Project Hanford Management Contract Request for Proposals, Section C, "Statement of Work," Paragraph 3.B(1)(i))
3	ETF Discharge Limits Discharge limits for the ETF are specified in the WAC 173-216 State Waste Discharge Permit No. ST-4500, and the U.S. Environmental Protection Agency (EPA) approval of the 200 Area Effluent Treatment Facility Delisting Petition, DOE/RL-92-72 (documented in 60 FR 31115 and codified in 40 CFR 261, Appendix IX, Table 2). Constituents not identified in permits are subject to limits in WAC 173-200, Water Quality Standards for Ground Waters of the State of Washington, and 4 percent of the derived concentration guide values in DOE Order 5400.5, Radiation Protection of the Public and the Environment, as applicable.
4	200 Area TEDF Discharge Limits Discharge limits for the 200 Area TEDF are specified in the WAC 173-216 State Waste Discharge Permit No. ST-4502. Constituents not identified in permits are subject to limits in WAC 173-200, Water Quality Standards for Ground Waters of the State of Washington, and 4 percent of the derived concentration guide values in DOE Order 5400.5, Radiation Protection of the Public and the Environment, as applicable.

1.6.4 Dispose of Liquid Effluent Remediation System

1.6.4.1 Shutdown/Transfer Excess Liquid Effluent Facilities

Table 1.6.4.1-1 Shutdown/Transfer Excess Liquid Effluent Facilities Requirements

1	Shutdown/Transfer of Excess Facilities Facilities which reach the end of their mission and are removed from operational status shall meet the acceptance criteria for turnover of surplus facilities for deactivation and decommissioning as specified in WHC-CM-1-3, Management Requirements and Procedures, MRP 6.15, "Facility Shutdown, Standby, and Transfer."
---	---

1.7 PROJECT ISSUES AND ASSUMPTIONS

Table 1.7-1 contains the issues that affect the project. These include project specific issues, as well as the site-level issues that have been assigned to the project for resolution. It also contains the assumptions that are used as a basis for the development of project plans until the issues are formally resolved with records of decision. The "Champion" column determines if the Project has lead responsibility or is an affected participant. If the champion belongs to the Project, the Project has the lead. If not, the Project is an affected participant. Project plans include appropriate activities and resources for resolving these issues.

Table 1.6.3-1 Operate & Maintain Liquid Effluent Remediation System Requirements (Continued)

9	MDD, South 600, Safety Objective 568 Conduct effluent monitoring of airborne and liquid releases.
---	---

1.6.3.1 Store Liquid Effluents

Table 1.6.3.1-1 Store Liquid Effluents Requirements

1	Time Limit for Storage in LERF Waste will be stored in LERF for up to one year prior to treatment in the ETF. (LERF Treatment Exemption (95-LEP-015), 40 CFR 268.4)
2	ETF Waste Acceptance An assessment shall be made for new wastes as to whether treatment in the ETF constitutes BAT. Waste acceptance guidelines for the ETP are provided in Acceptance of Feed Streams for Treatment at the LERF/ETF Complex (McDonald 1994).
3	Acceptability of Waste for Storage in LERF Before new wastes can be accepted for storage in LERF, their compatibility with the LERF liner materials shall be evaluated.
4	Operate Liquid Effluent Treatment Facilities Support to Others - Operate treatment facilities and systems for liquid effluents. [Project Hanford Management Contract Request for Proposals, Section C, "Statement of Work," Paragraph 3.B(1)(i)]
5	Safe Operation of 307 Basins Operation and maintenance of the 307 Basins shall be in accordance with Hanford 300 Area Retention Process Sewer Inventory at Risk Calculations and Safety Analysis (Berneski 1995).
6	Solids in LERF Solids shall not be allowed to accumulate in the LERF basins which may require special cleanout actions. (LERF Treatment Exemption (95-LEP-015), 40 CFR 268.4.)
7	Safe Operation of 340 Facility Operation and maintenance of the 340 Facility shall be in accordance with 340 Waste Handling Facility Interim Safety Basis (ISB) (Bendixsen 1995).
8	Safe Operation of LERF Safe Operation of LERF - Operation and maintenance of the LERF shall be in accordance with LERF Safety Analysis Report (Woeland 1991)
9	340 Facility Waste Acceptance Limits on the volume and composition of solid and liquid waste that can be stored in the 340 Facility are specified in 340 Waste Handling Facility Interim Safety Basis (ISB) (Bendixsen 1995).

1.6.3.2 Treat Liquid Effluents

Table 1.6.3.2-1 Treat Liquid Effluents Requirements

1	200 Area TEDF Waste Acceptance Facilities discharging to the 200 Area TEDF must meet the discharge limits specified in the WAC 173-215 State Waste Discharge Permit No. ST-4502. Implementation of best available technology (BAT)/All Known, Available, and Reasonable Treatment (AKART) is the responsibility of the generators.
2	Solid Waste Transfers to the Central Waste Complex Solid low-level waste (LLW) and low-level mixed waste (LLMW) transferred to the Central Waste Complex from Liquid Effluents facilities shall meet the acceptance criteria for onsite storage and disposal specified in Hanford Site Solid Waste Acceptance Criteria (WHC 1993)
3	Safe Operation of ETF Safe Operation of ETF - Operation and maintenance of the ETF shall be in accordance with 200 Area Effluent Treatment Facility Auditable Safety Analysis (Crane 1995).
4	Safe Operation of the 300 Area TEDF Safe Operation of 300 Area TEDF - Operation and maintenance of the 300 Area TEDF shall be in accordance with Hanford 300 Area Treated Effluent Disposal Facility Inventory at Risk Calculations and Safety Analysis (Olander 1995)
5	300 Area TEDF Waste Acceptance Waste acceptance criteria for the 300 Area TEDF are specified in 300 Area TEDF Administration (Poole 1994)
6	Operate Liquid Effluent Treatment Facilities Support to Others - Operate treatment facilities and systems for liquid effluents. [Project Hanford Management Contract Request for Proposals, Section C, "Statement of Work," Paragraph 3.B(1)(i)]

APPENDIX B
PROJECT WORKSCOPE MAPPING

WHC-SP-1097, Rev. 2
LEP FY 1997 Work Plan (WBS 1.2.2)

Table 1.7-1 Issues That Affect The Project

ISSUE		INTERIM DECISION	CHAMPION
1	Liquid Effluents Cost of Work Estimate The estimated cost of work planned by the Liquid Effluents Program for FY98 exceeds available budget by \$2.5 million.	A cost savings of \$2.5 million in FY 1998 is assumed based on re-engineering and consolidation of operations between the ETF and the 242-A Evaporator. An implementation strategy is being developed.	
2	Liquid Effluents Waste Volume Projection Changes Cleanup of the Hanford Site is being accelerated and made more efficient under Project Hanford. Some programs will undergo major changes. Waste volume projections will vary from current estimates. Plans for treating and disposing of liquid effluents will be effected.	The Liquid Effluents facilities will be fully utilized in cleaning up the Hanford Site. Operating costs will remain level (with escalation) in the future. Allowance is included for uncertainties in feed volume and composition.	
3	325 & 204-AR Upgrades Liquid waste collection and loading facility (340 facility) is scheduled for shutdown after FY 1998. Initially nothing will be done to preclude accepting waste at the 340 facility after this date. Transfer systems from Bldg. 325 to the tank farms via 204-AR facility will not be available per the current schedule.	340 facility shutdown will remain on schedule. Bldg. 325 and 204-AR upgrades will be completed to support 340 shutdown	Beard Briggs

PROJECT WORKSCOPE MAPPING

- FY 1996 to FY 1997 -

Work Scope Title	(1) Identifiers		(2) Comment
	FY 1996	FY 1997	
Liquid Effluents Program Management	1A2111	1A2111	No change
Program Fees and Miscellaneous Charges	1A2112	1A2112	No change
200 A TEDF SMECO	1A2211	1A2211	No change
200 A ETF SMECO	1A2212	1A2212	No change
200 A LERF SMECO	1A2213	1A2213	No change
200 A ETF Process Operations	1A2214	1A2216 1A2217	Process operations has been separated into processing of 242A Evaporator condensate and processing of N Basin feeds and groundwater
200 A Enhancements	1A2215	1A2215	No change
300 A TEDF SMECO	1A2310	1A2310	No change
340 Facility SMECO	1A2340	1A2340	No change
300 A TEDF Enhancements	1A2317	1A2317	No change
340 Facility Enhancements	1A2347	-----	Deleted
Project W-302 Expense Support	1A2302	-----	Project W-302 cancelled
Miscellaneous Streams	1A2413	1A2413	No change
Phase II Streams Project W-252	1A2502	1A2502	No change
W-302, 340 Facility Upgrade	1A2611	-----	Project W-302 cancelled

B-3

WHC-SP-1097, Rev. 2
LEP FY 1997 Work Plan (WBS 1.2.2)

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APPENDIX C
DEPARTMENT OVERHEAD

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**FY 1997 Program Plan
Work Breakdown Structure Dictionary
Part I – Summary**

Revision # 0

31-Jul-96

Cost Account Number	Cost Account Title	Funding Source:	
1J8060	LIQUID EFFLUENT SERVICES & HANFORD TECHNICAL SERVICES OVERHEAD	G&A/SWS	
SMS WBS Number	SMS Title	Service Center	
6.0.12.3	OVHD – LES/HTS	DOH/Proration X	

Budget Analyst CM Allender	FY 1997 CAP																										
Cost Account Manager FT Green	COST ELEMENTS	\$000'S																									
Financial Manager LL Powers	0 Labor	376.9																									
SMS Program Manager TK Teynor	1 Materials	17.9																									
RL SMS Program Manager	2 Purchased Services	239.0																									
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="5" style="text-align: center;">Full Time Equivalents (FTEs)</th> </tr> <tr> <th></th> <th style="text-align: center;">Exempt</th> <th style="text-align: center;">Nonexempt</th> <th style="text-align: center;">Bargaining</th> <th style="text-align: center;">Total</th> </tr> <tr> <td>Organizational</td> <td style="text-align: center;">3.1</td> <td style="text-align: center;">2.0</td> <td style="text-align: center;">0.0</td> <td style="text-align: center;">5.1</td> </tr> <tr> <td>Support</td> <td style="text-align: center;">0.2</td> <td style="text-align: center;">0.0</td> <td style="text-align: center;">0.6</td> <td style="text-align: center;">0.8</td> </tr> <tr> <td style="text-align: right;">Total</td> <td style="text-align: center;">3.3</td> <td style="text-align: center;">2.0</td> <td style="text-align: center;">0.6</td> <td style="text-align: center;">5.9</td> </tr> </table>			Full Time Equivalents (FTEs)						Exempt	Nonexempt	Bargaining	Total	Organizational	3.1	2.0	0.0	5.1	Support	0.2	0.0	0.6	0.8	Total	3.3	2.0	0.6	5.9
Full Time Equivalents (FTEs)																											
	Exempt	Nonexempt	Bargaining	Total																							
Organizational	3.1	2.0	0.0	5.1																							
Support	0.2	0.0	0.6	0.8																							
Total	3.3	2.0	0.6	5.9																							
	3 Other Hanford Contractors	5.0																									
	7x Fee/Non DOH	0.0																									
	8 Revenue	0.0																									
	Subtotal Net Budget	638.8																									
	4 Site Services	537.9																									
	5 Internal Charges	579.0																									
	6 BCSR Support	972.6																									
	7C DOH	0.0																									
	Total Baseline	2728.3																									

APPENDIX C

SIGNATURES CAM: _____ SMS Program Manager: _____ RL SMS Program Manager: _____		BASELINE APPROVAL: _____ DATE _____ WHC Indirect Program Administration (FAC)
Date: _____ Date: _____ Date: _____		

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**FY 1997 Program Plan
Work Breakdown Structure Dictionary
Part IV – Full Time Equivalent (FTE) Calculation Worksheet**

CAP # 1J8060

FY 1997 only ----- Two-Digit Organization Code

COS#	Title	86	8H	5-	NA	TOTAL
C010	Carpenters					0.0
C020	Electricians					0.0
C030	Heating Air- Conditioning and Refrig Mechanics (HVAC)					0.0
C040	Machinists					0.0
C050	Masons					0.0
C060	Millwrights					0.0
C070	Painters					0.0
C080	Plumbers and Pipefitters					0.0
C090	Structural and Metal Workers					0.0
C100	Vehicle and Mobile Equipment Mechanics					0.0
C110	Welders					0.0
C120	Other Crafts					0.0
C000	Total Crafts	0.0	0.0	0.0	0.0	0.0
E010	Chemical Engineers					0.0
E020	Civil Engineers					0.0
E040	Electrical Engineers					0.0
E050	Environmental Engineers					0.0
E060	Industrial Engineers					0.0
E070	Mechanical Engineers					0.0
E080	Nuclear Engineers					0.0
E090	Petroleum/Mining Engineers					0.0
E100	Plant Engineers					0.0
E110	Quality Assurance/Control Engineers	0.2	0.1			0.3
E120	Safety Engineers	0.2	0.1			0.3
E130	Other Engineers	0.5		0.2		0.7
E140	Construction Engineers					0.0
E000	Total Engineers	0.9	0.2	0.2	0.0	1.3
G010	Administrative Assistants					0.0
G020	Office Clerks (General)					0.0
G030	Office Clerks (Specialized)					0.0
G040	Secretaries	1.0	1.0			2.0
G050	Typist and Word Processors					0.0
G060	Other General Admin, Secretarial and Clerical Support Staff					0.0
G000	Total Admin, Secretarial and Clerical Support Staff	1.0	1.0	0.0	0.0	2.0

APPENDIX C

FY 1997 Program Plan

Work Breakdown Structure Dictionary

Part II – Activity Detail

CAP # 1J8060

COST ACCOUNT WORKSCOPE SUMMARY

Activities support general management and administration of organization and include assessment, services, etc. Training and business travel funds are identified here for use by indirect funded staff only.

APPROVED BASELINE:		FY 1997	
		FTEs	Dollars
<u>Activity Description</u> – LES PROGRAM SUPPORT			
Provides funding for indirect management and staff; includes office supplies, training, educational reimbursement, graphics support etc., for Director office		1.4	226.1
Provides funds for assessments for LES Program Management organization as well as required training, management proration and multi-media services			346.8
Subtotal Net		1.4	226.1
Total Activity		1.4	572.9
<u>Activity Description</u> – LES – HTS FACILITY MAINTENANCE			
Provides funding LES and HTS portion of facility maintenance for 2440 Stevens Center		0.2	24.9
Subtotal Net		0.2	24.9
Total Activity		0.2	24.9
<u>Activity Description</u> – 200 Area LEF			
Provides for supplies to support Program office requests and educational reimbursement		0.0	20.7
Provides assessment funding for 200 Area LEF organizations, e.g., dosimetry, desktop support			542.8
Subtotal Net		0.0	20.7
Total Activity		0.0	563.5
<u>Activity Description</u> – 300 Area LEF			
Provides for educational reimbursement for 300A LEF staff		0.0	8.0
Provides assessment funding for 300 Area LEF organizations, e.g., dosimetry, desktop support			208.3
Subtotal Net		0.0	8.0
Total Activity		0.0	216.3
<u>Activity Description</u> – HTS Program Support			
Provides funding for indirect management and administrative staff; for maintenance for MO–292 leased facility; for lease payment for MO–292; and for reimbursement for loaned office space at FMEF		2.2	359.1
Provides funding for assessment for HTS organizations, e.g., dosimetry, desktop support, occupancy		0.0	991.6
Subtotal Net		3.3	359.1
Total Activity		2.2	1,350.7
Approved Net		4.7	638.8
Approved Total		3.6	2,728.3

APPENDIX C

**FY 1997 Program Plan
Work Breakdown Structure Dictionary
Part IV – Full Time Equivalent (FTE) Calculation Worksheet**

CAP #

0

FY 1997 only ----- Two-Digit Organization Code

Title	86	8H	5--	NA	TOTAL
R010 Chemical System Operators					0.0
R020 Drillers					0.0
R030 Material Moving Equipment Operators					0.0
R040 Nuclear Plant Operators					0.0
R050 Nuclear Waste Process Operators					0.0
R060 Production Systems Operators					0.0
R070 Utilities Operators					0.0
R080 Other Operators					0.0
R000 Operators	0.0	0.0	0.0	0.0	0.0
S010 Chemists					0.0
S020 Environmental Scientists					0.0
S030 Geologists					0.0
S040 Life Scientists					0.0
S050 Materials Scientists					0.0
S060 Mathematicians					0.0
S070 Physicists					0.0
S080 Social Scientists					0.0
S090 Other Scientists					0.0
S100 Computer Scientists					0.0
S000 Scientists	0.0	0.0	0.0	0.0	0.0
T010 Computer Operator/Coders					0.0
T020 Drafters					0.0
T030 Engineering Technicians					0.0
T040 Environmental Sciences Technicians					0.0
T050 Health Physics Technicians					0.0
T060 Industrial Safety and Health Technicians					0.0
T070 Instrument and Control Technicians					0.0
T080 Laboratory Technicians					0.0
T090 Media Technicians					0.0
T100 Survey and Mapping					0.0
T110 Other Technicians					0.0
T000 Technicians	0.0	0.0	0.0	0.0	0.0
TOTAL	2.9	2.2	0.8	0.0	5.9

APPENDIX C

**FY 1997 Program Plan
Work Breakdown Structure Dictionary
Part IV – Full Time Equivalent (FTE) Calculation Worksheet**

CAP # 1J8060

FY 1997 only ---- Two-Digit Organization Code

Title	86	8H	5-	NA	TOTAL
L010 Firefighters					0.0
L020 Food Service Workers					0.0
L030 Janitors and Cleaners					0.0
L040 Laundry Workers					0.0
L050 Handlers, Helpers and Laborers (General)					0.0
L060 Handlers, Helpers and Laborers (Specialized)					0.0
L070 Light Vehicle Drivers					0.0
L080 Security Guards					0.0
L090 Other Laborers and General Services Workers			0.6		0.6
L000 Laborers and General Service Workers	0.0	0.0	0.6	0.0	0.6
M010 First Line Supervisors					0.0
M020 General Managers and Executives	1.0	1.0			2.0
M030 Project and Program Managers					0.0
M040 Other Managers					0.0
M000 Gen Mgrs, Exec, First Line Supervisors and Prog/Proj Mgrs	1.0	1.0	0.0	0.0	2.0
P010 Accountants and Auditors					0.0
P020 Architects					0.0
P030 Buyers, Procurement and Contracting Specialists					0.0
P040 Communications Specialists					0.0
P050 Compliance Inspectors					0.0
P060 Computer Systems Analysts					0.0
P070 Cost Estimators and Planners and Schedulers					0.0
P080 Health Physicists					0.0
P090 Industrial Hygienists					0.0
P100 Lawyers					0.0
P110 Personnel and Labor Relations Specialists					0.0
P120 Physicians					0.0
P130 Physician Assist, Nurses and Other Medical Supt Occupations					0.0
P140 Safeguards and Other Security Specialists					0.0
P150 Trainers					0.0
P160 Technical Writers, and Editors					0.0
P170 Other Administrative and Professional Other Occupations					0.0
P000 Professional Administrative and Related Occupations	0.0	0.0	0.0	0.0	0.0

APPENDIX C

APPENDIX D

RESERVED FOR 242-A EVAPORATOR PLANNING

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