



Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

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OCT 31 1997

97-EAP-740

Mr. Moses N. Jaraysi
200 Area Unit Supervisor
Nuclear Waste Program
State of Washington
Department of Ecology
1315 West Fourth Avenue
Kennewick, Washington 99336-6018



Dear Mr. Jaraysi:

PROJECTIONS OF ANTICIPATED COSTS FOR CLOSURE AND/OR POSTCLOSURE FOR HANFORD FACILITY TREATMENT, STORAGE, AND/OR DISPOSAL (TSD) UNITS

Conditions II.H.1. and II.H.2. of the "Hanford Facility Resource Conservation and Recovery Act Permit (HF RCRA Permit)." Dangerous Waste Portion (DW Portion), require the annual reporting of projections of anticipated costs for closure and/or postclosure, including postclosure monitoring and maintenance, for TSD units incorporated into Part III, Part V, or Part VI of the DW Portion. The Annual Projections of Anticipated Closure and/or Postclosure Costs submitted with this letter addresses an additional five TSD units that were incorporated into the HF RCRA Permit, DW Portion, over Fiscal Year (FY) 1997 (October 1, 1996 through September 30, 1997). The total number of TSD units incorporated into the HF RCRA Permit is now 18.

The organization of the Annual Report is consistent with the approach that you approved at the October 3, 1995, Hanford Facility RCRA Permit Steering Committee Meeting, and confirmed by a State of Washington Department of Ecology (Ecology) memo dated January 12, 1996. This approach reports the projections of anticipated closure costs for the TSD units incorporated into the HF RCRA Permit, DW Portion.

The owner/operator and co-operator certification appears as the last page in the Annual Report enclosed with this letter. This certification approach is in accordance with a telephone discussion held with you on October 7, 1996.

S&P 400

Mr. Moses N. Jaraysi
97-EAP-740

OCT 31 1997

Should you have any questions, please contact Ellen M. Mattlin,
U.S. Department of Energy, Richland Operations Office, on (509) 376-2385;
Fred A. Ruck, III, Fluor Daniel Hanford, Inc., on (509) 376-9876;
Harold T. Tilden II, Pacific Northwest National Laboratory, on (509) 376-0499;
or Roger J. Landon, BHI, on (509) 372-9209.

Sincerely,



James E. Rasmussen
James E. Rasmussen, Director
Environmental Assurance, Permits,
and Policy Division
DOE Richland Operations Office

EAP:EMM

William D. Adair
William D. Adair, Director
Environmental Protection
Responsible Party for
Fluor Daniel Hanford, Inc.

Kenneth C. Brog For
Kenneth C. Brog, Director
Environment, Safety, and Health
Pacific Northwest National Laboratory

M. C. Hughes
M. C. Hughes, Vice President
Operations
Bechtel Hanford, Inc.

Enclosure:
Projections of Anticipated Costs
for Closure and Postclosure

- cc w/encl:
- D. L. Duncan, EPA
- S. J. Ingle, CHI
- D. D. Jensen, WMH
- R. Jim, YIN
- R. J. Landon, BHI
- D. Powaukee, NPT
- S. M. Price, FDH
- D. R. Sherwood, EPA
- H. T. Tilden II, PNNL
- J. R. Wilkinson, CTUIR

- cc w/o encl:
- W. D. Adair, FDH
- R. H. Engelmann, WMH
- M. C. Hughes, BHI
- L. M. Johnson, BHI
- S. P. Luttrell, PNNL
- P. J. Mackey, BHI
- G. W. McNair, PNNL
- F. A. Ruck III, FDH
- M. T. Yasdick, WMH
- J. A. Winterhalder, WMH

ENCLOSURES

**Table 1, Status of Treatment, Storage, and/or Disposal Units
in the Hanford Facility Resource Conservation and Recovery Act Permit,
Dangerous Waste Portion, Revision 3A**

and

**Projections of Anticipated Costs for Closure and/or Postclosure
for Treatment, Storage, and/or Disposal Units included in the
Hanford Facility Resource Conservation and Recovery Act Permit,
Dangerous Waste Portion**

**Table 1: Status of Treatment, Storage, and/or Disposal Units (TSD)
in the Hanford Facility Resource Conservation and Recovery Act
(HF RCRA) Permit, Dangerous Waste Portion, Rev. 3A**

TSD Unit Name (Managing Subcontractor and/or Co-operator Name)	Previously Provided; Escalation Factor Only	New Estimate Provided (Combined Category)	Administrative or Other Costs Remaining	Clean-Closed (FY); No Estimate Needed	Projections of Anticipated Closure and/or Postclosure Costs Based on FY 1997 dollars
616 Nonradioactive Dangerous Waste Storage Facility (WMH for FDH)	X				\$1,748,343.00
305-B Storage Facility (Pacific Northwest)	X				\$1,770,197.00
PUREX Storage Tunnels (B&W for FDH) ¹			x ¹		¹ \$0.00
183-H Solar Evaporation Basins (BHI)		X			\$2,402,221.00
300 Area Solvent Evaporator (FDH) ²				X (1995)	\$0.00
2727-S Storage Facility (FDH) ²				X (1995)	\$0.00
Simulated High-Level Waste Slurry Treatment/Storage (Pacific Northwest)				X (1995)	\$0.00
218-E-8 Bogrow Pit Demolition Site (FDH) ²				X (1996)	\$0.00
200 West Area Ash Pit Demolition Site (FDH) ²				X (1996)	\$0.00
2101-M Pond (FDH) ²				X (1996)	\$0.00
216-B-3 Expansion Ponds (FDH) ²				X (1995)	\$0.00
Hanford Patrol Academy Demolition Sites (FDH) ²				X (1996)	\$0.00
105-DR Large Sodium Fire Facility (B&W for FDH) ³			x ³		³ \$0.00
304 Concretion Facility (FDH) ²				X (1996)	\$0.00
4843 Alkali Metal Storage Facility (B&W for FDH)				X (1997)	\$0.00
3718-F Alkali Metal Treatment and Storage Area (B&W for FDH)			X		\$600.00
303-K Storage Facility (B&W for FDH)		X			\$240,771.00
300 Area Process Trenches (BHI)		X			\$3,977,704.00
TOTAL					\$10,139,836.00

¹For the Plutonium Uranium Extraction (PUREX) Storage Tunnels (Chapter 3, Part III, DW Portion), managed by B&W Hanford Co. (B&W) for co-operator Fluor Daniel Hanford, Inc. (FDH), essentially all of the closure costs remain. As agreed with Ecology, the PUREX Storage Tunnels estimate is deferred until a future date when a definitive closure strategy is devised. The estimate will be presented in a future annual report when it is available.

²These TSD units were clean closed by WHC.

³For the 105-DR Large Sodium Fire Facility (Chapter 10, Part V, DW Portion), managed by B&W for co-operator FDH during FY 1997, a portion of the TSD unit is clean closed. For the rest of the unit, essentially all of the closure costs remain. As agreed with Ecology, the remaining portion will be closed during the decommissioning and decontamination of the 105-DR Reactor. When costs for decommissioning and decontamination of this unit becomes available, they will be included in a future annual report.

PROJECTIONS OF ANTICIPATED COSTS FOR CLOSURE AND/OR POSTCLOSURE FOR TREATMENT, STORAGE, AND/OR DISPOSAL UNITS INCLUDED IN THE HANFORD FACILITY RESOURCE CONSERVATION AND RECOVERY ACT PERMIT, DANGEROUS WASTE PORTION

Development Description:

Conditions II.H.1. and II.H.2. of the *Hanford Facility Resource Conservation and Recovery Act Permit* (HF RCRA Permit), Dangerous Waste Portion (DW Portion), require the annual reporting of projections of anticipated costs for closure and/or postclosure, including postclosure monitoring and maintenance, for treatment, storage, and/or disposal (TSD) units incorporated into Part III (Unit-Specific Conditions for Operating Units), Part V (Unit-Specific Conditions for Units Undergoing Closure), or Part VI (Unit-Specific Conditions for Units in Postclosure) of the HF RCRA Permit, DW Portion.

Certification of the Projections of Anticipated Closure and/or Postclosure Costs for the TSD Units, in accordance with Condition I.F. of the HF RCRA Permit, DW Portion, is provided.

A generic interpretative description also is provided with this Projection of Anticipated Closure and/or Postclosure Costs. A description of the general basis for the projected costs is presented in the "Closure and/or Postclosure Activities" section.

For the following discussion, refer to Table 1 of this report.

For ease of reference, the Permittees co-operating a TSD unit with the U.S. Department of Energy, Richland Operations Office as owner/operator appear in brackets following the name of the TSD unit for which they had responsibilities during FY 1997: Bechtel Hanford, Inc. (BHI), Fluor Daniel Hanford, Inc. (FDH), or Pacific Northwest National Laboratory (Pacific Northwest). Any major subcontractor company managing a TSD unit for co-operator FDH also appears in brackets following the name of the TSD unit for which they had responsibilities during FY 1997: B&W Hanford Co. (B&W), or Waste Management Federal Services of Hanford, Inc. (WMH). Actions performed by former co-operator and Permittee Westinghouse Hanford Company (WHC) are also indicated where appropriate. Information on each TSD unit can be found in this report in order of appearance below.

Two "escalation only" projections are included in this report for the TSD units that have been incorporated into the HF RCRA Permit, DW Portion, for which the original strategy of pursuing closure has not been changed:

- 616 Nonradioactive Dangerous Waste Storage Facility (616)
[WMH for FDH]
- 305-B Storage Facility (305-B) [Pacific Northwest].

Complete cost estimates were submitted for these TSD units in the Projection of Anticipated Costs submitted on October 31, 1994, and October 27, 1995. These two units currently have no closing date identified, and the current update uses an escalation factor only.

Three new projections of anticipated costs are included in this report:

- 183-H Solar Evaporation Basins (183-H) [BHI]
- 303-K Storage Facility (303-K) [B&W for FDH]
- 300 Area Process Trenches (300 APT) [BHI].

Postclosure costs have been included for one TSD unit (183-H) which previously was incorporated into the HF RCRA Permit, DW Portion. The other two TSD units (303-K and 300 APT) were incorporated into the HF RCRA Permit, DW Portion, during Fiscal Year (FY) 1997.

Three projections are included for TSD units that have been incorporated into the HF RCRA Permit, DW Portion, and which have administrative or other costs left to accomplish closure:

- Plutonium Uranium Extraction (PUREX) Storage Tunnels (PUREX Tunnels) [B&W for FDH]
- 105-DR Large Sodium Fire Facility (105-DR) [B&W for FDH]
- 3718-F Alkali Metal Treatment and Storage Area (3718-F) [B&W for FDH].

One of these three TSD units (PUREX Tunnels) has its entire estimate deferred until a future date when a definitive closure strategy will be devised. The second of these three TSD units (105-DR) has a portion clean closed in a previous year, with the rest of its portions tied to the decommissioning and decontamination of the nearby 105-DR nuclear reactor. The third of these three TSD units (3718-F) has a small amount of administrative costs remaining.

When costs for the first two of these three TSD units become available, they will be included in a future annual report.

In addition to the Projection of Anticipated Costs discussed in the previous paragraphs, the following ten TSD units currently are incorporated into the HF RCRA Permit and have been accepted in previous years by the Washington State Department of Ecology (Ecology) as clean closed:

- 300 Area Solvent Evaporator [WHC]
- 2727-S Storage Facility [WHC]
- Simulated High-Level Waste Slurry Treatment and Storage [Pacific Northwest]
- 218-E-8 Borrow Pit Demolition Site [WHC]
- 200 West Area Ash Pit Demolition Site [WHC]
- 2101-M Pond [WHC]
- 216-B-3 Expansion Ponds [WHC]
- Hanford Patrol Academy Demolition Sites [WHC]
- 304 Concretion Facility [WHC]
- 4843 Alkali Metal Storage Facility [B&W for FDH].

No further costs are anticipated; therefore, none are presented in this report. Additionally, if the TSD unit was presented in a previous annual report with no further costs pending, the page on that individual TSD unit will no longer be provided in this annual report.

Closure and/or Postclosure Activities:

The Projections of Anticipated Closure and/or Postclosure Costs are developed using both Hanford Facility and offsite subcontractor expertise and costs. Where Hanford Facility costs were used it was assumed that similar costs would be incurred if the work was conducted by subcontractors. Projections of the Anticipated Closure and/or Postclosure Costs take into consideration, where appropriate, labor and equipment, contractors for excavation, treatment, and disposal of dangerous waste, TSD unit and equipment decontamination, equipment removal, sampling and analysis of concrete and soil, inspections and maintenance, groundwater monitoring, and oversight of all closure and/or postclosure activities by an independent registered professional engineer. These projections do not include costs that already have been incurred prior to September 30, 1997.

Projections of Anticipated Closure and/or Postclosure Costs assume that workers have received appropriate training in dangerous waste cleanup in compliance with Occupational Safety and Health Administration Standards (29 Code of Federal Regulations [CFR] Part 1910.120[e]) and/or job-specific training for a particular task. Further, it is assumed that outside consultants (i.e., professional engineers) will possess the demonstrated experience in closure of TSD units and cleanup of dangerous waste sites.

Cost Basis:

Projections of Anticipated Closure and/or Postclosure Costs were developed, wherever possible, using actual operations, closure, and experience on the Hanford Site. These costs were obtained from personal interviews, memoranda, and financial planning records. Other sources used include the "R.S. Means Estimating Guide 1995" and the "Kaiser Financial Information of Craft Labor Rates." No costs for salvage value of equipment nor nondangerous or dangerous waste have been incorporated into these projections.

Inventory Elimination Costs:

Projections of Anticipated Closure and/or Postclosure Costs for removing, treating, transporting, and onsite or offsite disposal of remaining inventory, after waste is no longer accepted at the TSD unit, are based on the maximum waste inventory for that specific TSD unit.

Updating of Projections of Anticipated Closure and/or Postclosure Costs:

Projections of Anticipated Closure and/or Postclosure Costs are based on previously submitted cost estimates and the latest revision of the closure and/or postclosure plans, adjusted for inflation for FY 1997. Projections of Anticipated Closure and/or Postclosure Costs also will be updated if a change to the closure and/or postclosure plan increases the cost of closing the unit. These projections will be updated annually to reflect the current status of the TSD unit in terms of closure and/or postclosure plan documentation or actual closure and/or postclosure activities.

616 NONRADIOACTIVE DANGEROUS WASTE STORAGE FACILITY

The closure strategy/approach has not changed for this TSD unit. The costs for this TSD unit have been further adjusted by an inflation factor of 2.8 percent for FY 1997 over the inflation factor of 2.8 percent for FY 1996 from the estimate submitted in FY 1995. This factor would not take into account changes in specific cost elements included in the October 31, 1994, estimate. The total estimated costs for closure are now \$1,748,343.00.

This TSD unit is not scheduled for closure within the next five years. Complete updated estimates will be included in future reports if the closure strategy/approach should significantly change, or if a closure date is established.

305-B STORAGE FACILITY

The closure strategy/approach has not changed for this TSD unit. The costs for this TSD unit have been further adjusted by an inflation factor of 2.8 percent for FY 1997 over the inflation factor of 2.8 percent for FY 1996 from the estimate submitted in FY 1995. This factor would not take into account changes in specific cost elements included in the October 31, 1994, estimate. The total estimated costs for closure are now \$1,770,197.00.

This TSD unit is not scheduled for closure within the next five years. Complete updated estimates will be included in future reports if the closure strategy/approach should change significantly or if a closure date is established.

PUREX STORAGE TUNNELS

Closure of this TSD unit is expected to occur during decommissioning and decontamination of the PUREX Plant. The closure strategy for the TSD unit has not been finalized. When these costs become available, they will be included in a future annual report.

183-H SOLAR EVAPORATION BASINS

183-H Solar Evaporation Basins (183-H) postclosure and groundwater monitoring plans were approved and incorporated into the HF RCRA Permit in FY 1997. The plans call for a 30-year controlled period during which postclosure activities will be performed. Beginning in FY 1998, postclosure activities will include inspections, groundwater monitoring, and well maintenance, as well as administrative permit compliance activities such as cost estimating and reporting. Postclosure activities are scheduled to be completed in fiscal year 2027 and will culminate in postclosure certification. Estimates incorporate necessary materials, subcontracts, and equipment. Based on information from site investigations and project expertise, the total cost of postclosure activities is estimated at \$2.4 million (1997 dollars). A schedule and cost estimate package on the following pages includes a time line for costs and hours as well as a single year detail of equipment and labor.

The estimate consists of costs for groundwater monitoring, well maintenance and inspections, and permit compliance activities. Groundwater monitoring includes quarterly reviews, annual reports, data management, sample and well measurement collection and analysis, and potential revision of the groundwater monitoring plan. The well maintenance component includes estimates for well and surface inspections. Well maintenance is based on a rate of two maintenance tasks per year and routine maintenance on a rolling five year cycle. It should be noted that, during the first five years of well maintenance, a modified groundwater monitoring program has been accepted because groundwater beneath 183-H is within the hydraulic influence of a pump-and-treat operation. For the remainder of the estimating period, it is assumed that the monitoring network originally proposed for the unit will be re-established. Estimates for permit compliance include preparation, review, and issuance of applicable reports and plans, and maintenance of the operating record.

**183-H
POST CLOSURE
TIME LINE COSTS
(in 1997 Dollars)**

BECHTEL HANFORD Inc.																		
Title: Summary																		
Job Number / Charge # R183HB Y120																		
File: E:\ReadWrite\ESTIMATE\303 Closure\303 CLOSURE RI.xls\TIME LINE COSTS																		
ITEM	Description	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
1	INSPECTION OF SURFACE WELL CONDITIONS (4 WELLS PER YR FY 98-FY02 AND 8 WELLS PER YR FY03-FY27)	\$ 2,981	\$ 2,981	\$ 2,981	\$ 2,981	\$ 2,981	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842
2	GROUNDWATER WELL SUBSURFACE MAINTENANCE (2 WELLS PER YR FOR FY01, 06, 11, 16, 21, 26 AND 3 WELLS PER YR FOR FY00, 02, 05, 07, 10, 12, 15, 17, 20, 22, 25, 27)			\$ 18,785	\$ 12,525	\$ 18,785			\$ 18,785	\$ 12,525	\$ 18,785			\$ 18,785	\$ 12,525	\$ 18,785		
3	COST ESTIMATE FOR POST-CLOSURE MONITORING & MAINTENANCE	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536
4	PERMIT COMPLIANCE (ADDITIONAL COST IN FY03 FOR CLASS 3 MODIFICATION TO THE PERMIT TO ADDRESS A FINAL ROD AND REVISED GROUNDWATER MONITORING PLAN (AT PUMP & TREAT COMPLETION))	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 27,454	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727
5	GROUNDWATER MONITORING (4 WELLS PER YEAR FOR FY98-FY02, 4 WELLS PER YR PLUS GROUNDWATER MONITORING PLAN REVISIONS FOR FY03 AND 8 WELLS PER YEAR FOR FY04-FY27)	\$ 24,445	\$ 24,445	\$ 24,445	\$ 24,445	\$ 24,445	\$ 51,166	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294
6	POST CLOSURE CERTIFICATION																	
TOTAL (in 1997 Dollars)		\$ 42,689	\$ 42,689	\$ 61,474	\$ 55,214	\$ 61,474	\$ 83,998	\$ 73,399	\$ 92,184	\$ 85,924	\$ 92,184	\$ 73,399	\$ 73,399	\$ 92,184	\$ 85,924	\$ 92,184	\$ 73,399	\$ 73,399

**183-H
POST CLOSURE
TIME LINE COSTS
(in 1997 Dollars)**

BECHTEL HANFORD Inc.																Date:	8/14/97
Title: Summary																By:	JA LAPIERRE
Job Number / Charge # R183HB Y120																Chk'd	D. LEONHARDT
File E:\ReadWrite\ESTIMATE\303 Closure\303 CLOSURE R1.xls\TIME LINE COST																Rev.:	0
																Lead Estimator Appvl.: JA LAPIERRE FOR J. CHAPMAN	
ITEM	Description	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	TOTAL
1	INSPECTION OF SURFACE WELL CONDITIONS (4 WELLS PER YR FY 98-FY02 AND 8 WELLS PER YR FY03-FY27)	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 3,842	\$ 110,955
2	GROUNDWATER WELL SUBSURFACE MAINTENANCE (2 WELLS PER YR FOR FY01, 06, 11, 16, 21, 26 AND 3 WELLS PER YR FOR FY00, 02, 05, 07, 10, 12, 15, 17, 20, 22, 25, 27)	\$ 18,785	\$ 12,525	\$ 18,785			\$ 18,785	\$ 12,525	\$ 18,785			\$ 18,785	\$ 12,525	\$ 18,785			\$ 300,570
3	COST ESTIMATE FOR POST-CLOSURE MONITORING & MAINTENANCE	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 1,536	\$ 46,080
4	PERMIT COMPLIANCE (ADDITIONAL COST IN FY03 FOR CLASS 3 MODIFICATION TO THE PERMIT TO ADDRESS A FINAL ROD AND REVISED GROUNDWATER MONITORING PLAN (AT PUMP & TREAT COMPLETION))	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 425,537
5	GROUNDWATER MONITORING (4 WELLS PER YEAR FOR FY98-FY02, 4 WELLS PER YR PLUS GROUNDWATER MONITORING PLAN REVISIONS FOR FY03 AND 8 WELLS PER YEAR FOR FY04-FY27)	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294	\$ 54,294	\$ 1,476,447
6	POST CLOSURE CERTIFICATION														\$ 42,632		\$ 42,632
TOTAL (in 1997 Dollars)		\$ 92,184	\$ 85,924	\$ 92,184	\$ 73,399	\$ 73,399	\$ 92,184	\$ 85,924	\$ 92,184	\$ 73,399	\$ 73,399	\$ 92,184	\$ 85,924	\$ 134,816	\$ -	\$ -	\$ 2,402,221

CHECK \$ 2,402,221

**183-H
POST CLOSURE
TIME LINE COSTS
(in 1997 Dollars)**

BECHTEL HANFORD Inc.

Title: Summary

Job Number / Charge # R183HB Y120

File: E:\ReadWrite\ESTIMATE\303 Closure\303 CLOSURE R1.xls\TIME LINE COSTS

ITEM	Description	FY																
		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014

GENERAL QUALIFICATIONS AND ASSUMPTIONS:

(SEE ATTACHED FOR DETAIL CALCULATIONS)

- 1 ERC TEAM WAGE RATES PER, "ERC & HAMTC DIRECT LABOR WAGE RATES FY 1997", DATED 8/20/98 (BASED ON, "FY97 ALL IN WAGE RATES FOR BHI, CH2MHILL, IT, THI, HAMTC, BUILDING TRADES BY RESOURCE CODE", TRACKING NO. 040990)
- 2 DD AND G&A (BURDEN) IS PER, "FY 97 ALL IN WAGE RATES FOR BHI, CH2MHILL, IT, THI, HAMTC, BUILDING TRADES BY RESOURCE CODE", TRACKING NO. 040990). BURDEN IS EXCLUDED FROM DOE-RL DIRECTLY FUNDED WORK ACTIVITIES.
- 3 ALL WAGE RATES INCLUDE 4% OVERTIME.
- 4 MATERIAL SALES TAX, CURRENT RATE 8%. SALES TAX NOT APPLIED TO EQUIPMENT (OWNER OPERATOR). SALES TAX WOULD APPLY IF IT IS RENTAL EQUIPMENT.
- 5 ALL COSTS ARE AT 1997 DOLLARS.
- 6 PRIME SUBCONTRACTOR WAGE RATES, PAYROLL ADDS AND FRINGES, PER "BUILDING TRADES FY 1997 PRIME SUBCONTRACTOR DIRECT LABOR WAGE RATES" REV. DATE 4/11/97 (BASED ON HSSA).
- 7 PRIME CONTRACTOR MARKUP, PER "PRIME CONTRACTOR (SUBCONTRACTOR TO ERC TEAM) MARKUP TABLE FOR BUILDING TRADES", REV. DATE 11/21/95.
- 8 PNNL COST USED THE LATEST DOE-RL APPROVED RATES.
- 9 SOURCES OF INFORMATION ARE LISTED AS FOLLOWS:
 - ITEMS 1 & 2, HOURS AND COSTS PROVIDED BY FIELD BHI SITE INVESTIGATIONS DEPT..
 - ITEM 3 IS BASED UPON ESTIMATOR EXPERIENCE.
 - ITEM 4, HOURS SUPPLIED BY CHI REGULATORY SUPPORT DEPARTMENT.
 - ITEM 5, HOURS AND COST PROVIDED BY PNNL FIELD HYDROLOGY CHEMISTRY DEPT..
 - ITEM 6 IS BASED UPON PROJECT GUIDANCE (ASSUMED SIMILAR TO 300 AREA PROCESS TRENCH POST CLOSURE).
- 10 SEE THE ESTIMATE PRESENTATION FOR ADDITIONAL INFORMATION ON SCOPE, QUALIFICATIONS & ASSUMPTIONS.

**183-H
POST CLOSURE
TIME LINE HOURS
(excludes subcontractor hours)**

BECHTEL HANFORD Inc.

Title: Summary

Job Number / Charge # R183HB Y120

File: E:\ReadWrite\ESTIMATE\103 Closure\103 CLOSURE RI.xls\TIME LINE HOURS

ITEM	Description	FY																
		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
1	INSPECTION OF SURFACE WELL CONDITIONS (4 WELLS PER YR FY 98-FY02 AND 8 WELLS PER YR FY03-FY27)	9.0	9.0	9.0	9.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
2	GROUNDWATER WELL SUBSURFACE MAINTENANCE (2 WELLS PER YR FOR FY01, 06, 11, 16, 21, 26 AND 3 WELLS PER YR FOR FY00, 02, 05, 07, 10, 12, 15, 17, 20, 22, 25, 27)			21.0	14.0	21.0			21.0	14.0	21.0			21.0	14.0	21.0		
3	COST ESTIMATE FOR POST-CLOSURE MONITORING & MAINTENANCE	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
4	PERMIT COMPLIANCE (ADDITIONAL COST IN FY03 FOR CLASS 3 MODIFICATION TO THE PERMIT TO ADDRESS A FINAL ROD AND REVISED GROUNDWATER MONITORING PLAN (AT PUMP & TREAT COMPLETION))	208.0	208.0	208.0	208.0	208.0	416.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0
5	GROUNDWATER MONITORING (4 WELLS PER YEAR FOR FY98-FY02, 4 WELLS PER YR PLUS GROUNDWATER MONITORING PLAN REVISIONS FOR FY03 AND 8 WELLS PER YEAR FOR FY04-FY27)	172.0	172.0	172.0	172.0	172.0	372.0	274.0	274.0	274.0	274.0	274.0	274.0	274.0	274.0	274.0	274.0	274.0
6	POST CLOSURE CERTIFICATION																	
TOTAL		413.0	413.0	434.0	427.0	434.0	822.0	516.0	537.0	530.0	537.0	516.0	516.0	537.0	530.0	537.0	516.0	516.0

**183-H
POST CLOSURE
TIME LINE HOURS
(excludes subcontractor hours)**

BECHTEL HANFORD Inc.															Date:	8/14/97	
Title: Summary															By:	JA LAPIERRE	
Job Number / Charge # R183HB Y120															Chk'd	D. LEONHARDT	
File: E:\ReadWrite\ESTIMATE\303 Closure\303 CLOSURE R1.xls\TIME LINE HOURS															Rev.:	0	
															Lead Estimator Appvl.: JA LAPIERRE FOR J. CHAPMAN		
ITEM	Description	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	TOTAL
1	INSPECTION OF SURFACE WELL CONDITIONS (4 WELLS PER YR FY 98-FY02 AND 8 WELLS PER YR FY03-FY27)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0			295.0
2	GROUNDWATER WELL SUBSURFACE MAINTENANCE (2 WELLS PER YR FOR FY01, 06, 11, 16, 21, 26 AND 3 WELLS PER YR FOR FY00 02, 05, 07, 10, 12, 15, 17, 20, 22, 25, 27)	21.0	14.0	21.0			21.0	14.0	21.0			21.0	14.0	21.0			336.0
3	COST ESTIMATE FOR POST-CLOSURE MONITORING & MAINTENANCE	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0			720.0
4	PERMIT COMPLIANCE (ADDITIONAL COST IN FY03 FOR CLASS 3 MODIFICATION TO THE PERMIT TO ADDRESS A FINAL ROD AND REVISED GROUNDWATER MONITORING PLAN (AT PUMP & TREAT COMPLETION))	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0	208.0			6,448.0
5	GROUNDWATER MONITORING (4 WELLS PER YEAR FOR FY98-FY02, 4 WELLS PER YR PLUS GROUNDWATER MONITORING PLAN REVISIONS FOR FY03 AND 8 WELLS PER YEAR FOR FY04-FY27)	274.0	274.0	274.0	274.0	274.0	274.0	274.0	274.0	274.0	274.0	274.0	274.0	274.0			7,808.0
6	POST CLOSURE CERTIFICATION																-
TOTAL		537.0	530.0	537.0	516.0	516.0	537.0	530.0	537.0	516.0	516.0	537.0	530.0	537.0	-	-	15,807.0

CHECK 15,807.0

POST CLOSURE - ONE YEAR \$

BECHTEL HANFORD Inc.
 ERC & PRIME CONTR (S/C, DIRECT WORK)
 Job Number / Charge #

ONE YEAR COST FOR
 183-H POST CLOSURE
 JOB NO. 22192-103 / R183HB Y120

Date: 8/3/97
 By: JA LAPIERRE
 Chk'd: D. LEONHARDT
 Rev.: 0

File: F:\RealWork\ESTIMATE\901\Closure\183H\POST CLOSURE - ONE YEAR \$

Lead Estimator Appvl.: JA LAPIERRE FOR J. CHAPMAN

ITEM	Description	QTY	UN	Unit Costs			Labor Hours		Wage	Subtotals				SUBTOTAL	ADDITIONAL COSTS					TOTAL
				Equip	Mtl	S/C	Unit Hr	Total Hr	\$/HR	Equip.	Material	Labor	S/C		MATL SALES TAX	S/C OH&P	DIRECT DISTRIBS	G&A	CONTINGENCY	
1A	INSPECTION OF SURFACE WELL CONDITIONS, 4 WELLS	4	WELLS			\$386.50							\$1,546	1,546		\$387	\$350	\$92		\$2,375
	PLANNING & CONTROLS BHI	1	HRS				1.00	1	52.08			\$52		52			\$9	\$2		\$63
	DESIGN ENGINEER BHI	1	HRS				1.00	1	85.27			\$65		65			\$12	\$3		\$80
	ENVIRONMENT COMPLIANCE BHI	2	HRS				1.00	2	61.36			\$123		123			\$22	\$6		\$151
	FIELD SUPPORT BHI	2	HRS				1.00	2	47.88			\$95		95			\$17	\$5		\$117
	SAFETY & HEALTH BHI	1	HRS				1.00	1	54.51			\$55		55			\$10	\$3		\$68
	HEAVY DRIVERS HAMTC	2	HRS	\$15.52			1.00	2	36.01	\$31		\$72		103			\$19	\$5		\$127
	SUBTOTAL							9		\$31		\$462	\$1,546	\$2,039		\$387	\$439	\$116		\$2,981
1B	INSPECTION OF SURFACE WELL CONDITIONS, 8 WELLS	8	WELLS			\$258.63							\$2,069	2,069		\$517	\$468	\$123		\$3,177
	PLANNING & CONTROLS BHI	1	HRS				1.00	1	52.08			\$52		52			\$9	\$2		\$63
	DESIGN ENGINEER BHI	1	HRS				1.00	1	85.27			\$65		65			\$12	\$3		\$80
	ENVIRONMENT COMPLIANCE BHI	2	HRS				1.00	2	61.36			\$123		123			\$22	\$6		\$151
	FIELD SUPPORT BHI	3	HRS				1.00	3	47.88			\$143		143			\$26	\$7		\$176
	SAFETY & HEALTH BHI	1	HRS				1.00	1	54.51			\$55		55			\$10	\$3		\$68
	HEAVY DRIVERS HAMTC	2	HRS	\$15.52			1.00	2	36.01	\$31		\$72		103			\$19	\$5		\$127
	SUBTOTAL							10		\$31		\$510	\$2,069	\$2,610		\$517	\$566	\$149		\$3,842
2A	2 WELLS, SUBSURFACE MAINTENANCE	2	WELLS			\$3,773.00							\$7,546	7,546		\$1,887	\$1,706	\$450		\$11,589
	(FY01, 06, 11, 16, 21, 26)																			
	PLANNING & CONTROLS BHI	2	HRS				1.00	2	52.08			\$104		104			\$19	\$5		\$128
	DESIGN ENGINEER BHI	2	HRS				1.00	2	85.27			\$131		131			\$24	\$6		\$161
	ENVIRONMENT COMPLIANCE BHI	2	HRS				1.00	2	61.36			\$123		123			\$22	\$6		\$151
	FIELD SUPPORT BHI	4	HRS				1.00	4	47.88			\$191		191			\$35	\$9		\$235
	SAFETY & HEALTH BHI	2	HRS				1.00	2	54.51			\$109		109			\$20	\$5		\$134
	HEAVY DRIVERS HAMTC	2	HRS	\$15.52			1.00	2	36.01	\$31		\$72		103			\$19	\$5		\$127
	SUBTOTAL							14		\$31		\$730	\$7,546	\$8,307		\$1,887	\$1,845	\$486		\$12,525
2B	3 WELLS, SUBSURFACE MAINTENANCE	3	WELLS			\$3,773.00							\$11,319	11,319		\$2,830	\$2,560	\$675		\$17,384
	(FY00, 02, 05, 07, 10, 12, 15, 17, 20, 22, 25, 27)																			
	PLANNING & CONTROLS BHI	3	HRS				1.00	3	52.08			\$156		156			\$28	\$7		\$191
	DESIGN ENGINEER BHI	3	HRS				1.00	3	85.27			\$196		196			\$35	\$9		\$240
	ENVIRONMENT COMPLIANCE BHI	3	HRS				1.00	3	61.36			\$184		184			\$33	\$9		\$226
	FIELD SUPPORT BHI	6	HRS				1.00	6	47.88			\$286		286			\$52	\$14		\$352
	SAFETY & HEALTH BHI	3	HRS				1.00	3	54.51			\$164		164			\$30	\$8		\$202
	HEAVY DRIVERS HAMTC	3	HRS	\$15.52			1.00	3	36.01	\$47		\$108		155			\$26	\$7		\$190
	SUBTOTAL							21		\$47		\$1,094	\$11,319	\$12,460		\$2,830	\$2,766	\$729		\$16,785
3	COST ESTIMATE FOR POST-CLOSURE																			
	MONITORING & MAINTENANCE																			
	PLANNING & CONTROLS BHI	24	HRS				1.00	24	52.08			\$1,250		1,250			\$226	\$60		\$1,536
	SUBTOTAL							24				\$1,250		\$1,250			\$226	\$60		\$1,536
4A	PERMIT COMPLIANCE, ALL YEARS																			
	REGULATORY SUPPORT CHI	200	HRS				1.00	200	53.69			\$10,737		10,737			\$1,942	\$512		\$13,191
	ENVIRONMENTAL ENGR BHI	8	HRS				1.00	8	54.45			\$436		436			\$79	\$21		\$536
	SUBTOTAL							208				\$11,173		\$11,173			\$2,021	\$533		\$13,727

218-E-8 BORROW PIT DEMOLITION SITE

This TSD unit was clean closed during FY 1996. There are no anticipated costs remaining for closure.

PROJECTIONS OF ANTICIPATED COSTS FOR CLOSURE AND POSTCLOSURE (CONT'D)

200 WEST AREA ASH PIT DEMOLITION SITE

This TSD unit was clean closed during FY 1996. There are no anticipated costs remaining for closure.

2101-M POND

This TSD unit was clean closed during FY 1996. There are no anticipated costs remaining for closure.

HANFORD PATROL ACADEMY DEMOLITION SITES

This TSD unit was clean closed during FY 1996. There are no anticipated costs remaining for closure.

105-DR LARGE SODIUM FIRE FACILITY

In 1996, Ecology (Letter, M. W. Wilson, Ecology to J. E. Rasmussen, U.S. Department of Energy, Richland Operations Office, and E. F. Loika, Westinghouse Hanford Company, dated July 16, 1996) accepted clean closure of Areas 1, 3, and 7 and released these areas from the requirements of Washington Administrative Code (WAC) 173-303. Also, the letter identified that Area 6, as defined by Part V, Chapter 10 of the Hanford Facility RCRA Permit, DW Portion, is believed not to have received dangerous waste and is considered closed for the purposes of WAC 173-303. Areas 2, 4, and 5, as defined by Part V, Chapter 10 of the HF RCRA Permit, DW Portion, remain regulated. Closure of these areas is expected to occur during decommissioning and decontamination of the 105-DR Reactor. Decommissioning and decontamination costs for these areas have not been formulated. When these costs become available, the costs will be included in a future annual report.

304 CONCRETION FACILITY

This TSD unit was clean closed during FY 1996. There are no anticipated costs remaining for closure.

4843 ALKALI METAL STORAGE FACILITY

This TSD unit was clean closed during FY 1997. There are no anticipated costs remaining for closure.

3718-F ALKALI METAL TREATMENT AND STORAGE AREA

The only remaining costs associated with closure for this TSD unit are administrative costs, supporting the submittal of the closure certifications and the revised Part A, Form 3 for the unit. The estimated remaining closure cost is approximately \$600.00.

303-K STORAGE FACILITY

This projection of anticipated closure cost was developed using DOE/RL-90-04, REV, 2A, "303-K Storage Facility Closure Plan," and the results of the Data Quality Objectives Process that was conducted in 1997 for this unit.

The cost and schedule information provided is based on input to HNF-SP-1234, Rev. 0, *Facility Stabilization Project Fiscal 1998 Multi-Year Work Plan (MYWP) for WBS 1.4*. This cost and schedule covers the following:

- Building preparation for sampling,
- Obtaining 18 soil samples from the exterior of the building,
- Obtaining three concrete samples from the interior of the building,
- Analytical testing of the samples,
- Data validation of the analytical testing,
- Evaluation of the sample results,
- Preparation of a Final Report.

Most of the above work is anticipated to be completed in FY 1998, with only some administrative costs remaining in FY 1999.

303-K STORAGE FACILITY CLOSURE COSTS FOR FY'98

ACTIVITY	COST	ESTIMATED WORK ACTIVITY
BUILDING PREP AND WASTE DISPOSAL	\$34,866	10-01-97 TO 4-26-98
SAMPLING (18 SOIL SAMPLES AND 3 CONCRETE SAMPLES)	24,046	10-20-97 TO 11-30-97
ANALYTICAL TESTING	75,520	11-01-97 TO 01-15-98
DATA VALIDATION	28,320	01-15-98 TO 04-30-98
PROJECT CO-ORDINATION (INCLUDING SAMPLE EVALUATION AND FINAL REPORT PREPARATION)	46,454	10-01-97 TO 09-30-98
PROFESSIONAL ENGINEER	31,565	10-01-97 TO 09-30-98
TOTAL COST	\$240,771	

PROJECTIONS OF ANTICIPATED COSTS FOR CLOSURE AND POSTCLOSURE (CONT'D)

Labor and Non-Labor Usage Report

by Fiscal Year 97-98-99-2000-2001

Run Date 29Sep97 09:00

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Activity	Cost Function	Resource	Unit	01Oct96 30Sep97	01Oct97 30Sep98	01Oct98 30Sep99	01Oct99 30Sep00	01Oct00 30Sep01	Total
1K3A020B010A Prepare/Conduct DQO process									
Labor_use_5yrs									
E040-19120	- ELECTRICAL ENGINEERS	Wh		60	0	0	0	0	60
E050-31210	- ENVIRONMENTAL ENGINEERS	Wh		176	0	0	0	0	176
E100-33220	- PLANT ENGINEERS	Wh		150	0	0	0	0	150
S090-31100	- OTHER SCIENTISTS - EXEMPT	Wh		33	0	0	0	0	33
Labor_use_5yrs Total				Wh	419	0	0	0	419
Non_labor_u_5yrs									
9300-03E00	- RUST NW LABOR	It		1,472	0	0	0	0	1,472
Non_labor_u_5yrs Total				It	1,472	0	0	0	1,472
Total_costs_5yrs									
9300-03E00	- RUST NW LABOR	\$		1,713	0	0	0	0	1,713
E040-19120	- ELECTRICAL ENGINEERS	\$		3,415	0	0	0	0	3,415
E050-31210	- ENVIRONMENTAL ENGINEERS	\$		10,734	0	0	0	0	10,734
E100-33220	- PLANT ENGINEERS	\$		8,878	0	0	0	0	8,878
S090-31100	- OTHER SCIENTISTS - EXEMPT	\$		1,965	0	0	0	0	1,965
Total_costs_5yrs Total				\$	26,705	0	0	0	26,705
1K3A020B010E Prepare/Issue 303K Sampling plan (SD)									
Labor_use_5yrs									
E040-19120	- ELECTRICAL ENGINEERS	Wh		56	0	0	0	0	56
E050-31210	- ENVIRONMENTAL ENGINEERS	Wh		284	0	0	0	0	284
G040-31210	- SECRETARIES	Wh		20	0	0	0	0	20
Labor_use_5yrs Total				Wh	360	0	0	0	360
Non_labor_u_5yrs									
6P00-19120	- MULTIMEDIA SERVICES	It		7,000	0	0	0	0	7,000
Non_labor_u_5yrs Total				It	7,000	0	0	0	7,000
Total_costs_5yrs									
6P00-19120	- MULTIMEDIA SERVICES	\$		8,169	0	0	0	0	8,169
E040-19120	- ELECTRICAL ENGINEERS	\$		3,229	0	0	0	0	3,229
E050-31210	- ENVIRONMENTAL ENGINEERS	\$		17,211	0	0	0	0	17,211
G040-31210	- SECRETARIES	\$		569	0	0	0	0	569
Total_costs_5yrs Total				\$	29,178	0	0	0	29,178
1K3A020B010M M/S-O, SAMPLE PLAN SUBMITTED TO ECOLOGY									
Labor_use_5yrs									
Labor_use_5yrs Total									
Non_labor_u_5yrs									
Non_labor_u_5yrs Total									
Total_costs_5yrs									
Total_costs_5yrs Total									
1K3A020B020A Initiate JCS WP, perform RAD survey									
Labor_use_5yrs									
E100-19120	- PLANT ENGINEERS	Wh		0	42	0	0	0	42
T050-4T3A0	- HEALTH PHYSICS TECHNICIAN	Wh		0	42	0	0	0	42
Labor_use_5yrs Total				Wh	0	42	0	0	42
Non_labor_u_5yrs									
Non_labor_u_5yrs Total									

Labor and Non-Labor Usage Report

by Fiscal Year 97-98-99-2000-2001

Run Date 29Sep97 09:00

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Activity	Cost Function	Resource	Unit	01Oct96 30Sep97	01Oct97 30Sep98	01Oct98 30Sep99	01Oct99 30Sep00	01Oct00 30Sep01	Total

Total_costs_5yrs									
	E100-19120 -	PLANT ENGINEERS	\$	0	119	0	0	0	119
	T050-4T3A0 -	HEALTH PHYSICS TECHNICIAN	\$	0	2,679	0	0	0	2,679

Total_costs_5yrs Total				\$	0	2,799	0	0	2,799

1K3A020B020B WP planning, USQ overview, RWP, ECN approval

Labor use 5yrs									
	E100-19120 -	PLANT ENGINEERS	Wh	0	65	0	0	0	65
	E120-19100 -	SAFETY ENGINEER	Wh	0	56	0	0	0	56

Labor_use_5yrs Total				Wh	0	121	0	0	121

Non_labor_u_5yrs

Non_labor_u_5yrs Total

Total_costs_5yrs									
	E100-19120 -	PLANT ENGINEERS	\$	0	3,876	0	0	0	3,876
	E120-19100 -	SAFETY ENGINEER	\$	0	3,339	0	0	0	3,339

Total_costs_5yrs Total				\$	0	7,215	0	0	7,215

1K3A020B020C Pre-Job - WP aprvl, order mat'l, sched res

Labor use 5yrs									
	C070-4T360 -	PAINTERS	Wh	0	1	0	0	0	1
	C120-4T360 -	OTHER CRAFTS	Wh	0	3	0	0	0	3
	E100-19120 -	PLANT ENGINEERS	Wh	0	10	0	0	0	10
	M010-52920 -	FIRST LINE SUPERVISORS	Wh	0	2	0	0	0	2
	P070-19120 -	PLANNER/SCHEDULER/ESTIMATOR	Wh	0	8	0	0	0	8
	R050-4T200 -	NUCLEAR WASTE PROCESS OPER	Wh	0	4	0	0	0	4
	T050-4T3A0 -	HEALTH PHYSICS TECHNICIAN	Wh	0	2	0	0	0	2

Labor_use_5yrs Total				Wh	0	30	0	0	30

Non_labor_u_5yrs

	1000-19120 -	MATERIAL & EQUIPMENT	It	0	2,000	0	0	0	2,000
	4C00-19120 -	MPR	It	0	140	0	0	0	140

Non_labor_u_5yrs Total				It	0	2,140	0	0	2,140

Total_costs_5yrs									
	1000-19120 -	MATERIAL & EQUIPMENT	\$	0	2,360	0	0	0	2,360
	4C00-19120 -	MPR	\$	0	165	0	0	0	165
	C070-4T360 -	PAINTERS	\$	0	69	0	0	0	69
	C120-4T360 -	OTHER CRAFTS	\$	0	207	0	0	0	207
	E100-19120 -	PLANT ENGINEERS	\$	0	596	0	0	0	596
	M010-52920 -	FIRST LINE SUPERVISORS	\$	0	163	0	0	0	163
	P070-19120 -	PLANNER/SCHEDULER/ESTIMATOR	\$	0	477	0	0	0	477
	R050-4T200 -	NUCLEAR WASTE PROCESS OPER	\$	0	197	0	0	0	197
	T050-4T3A0 -	HEALTH PHYSICS TECHNICIAN	\$	0	134	0	0	0	134

Total_costs_5yrs Total				\$	0	4,368	0	0	4,368

1K3A020B020D Decon North end bldg, storage pad

Labor use 5yrs									
	E100-19120 -	PLANT ENGINEERS	Wh	0	22	0	0	0	22
	R050-4T200 -	NUCLEAR WASTE PROCESS OPER	Wh	0	60	0	0	0	60
	T050-4T3A0 -	HEALTH PHYSICS TECHNICIAN	Wh	0	40	0	0	0	40

Labor_use_5yrs Total				Wh	0	122	0	0	122

Non_labor_u_5yrs

Non_labor_u_5yrs Total

Total_costs_5yrs									
	E100-19120 -	PLANT ENGINEERS	\$	0	1,312	0	0	0	1,312
	R050-4T200 -	NUCLEAR WASTE PROCESS OPER	\$	0	2,950	0	0	0	2,950
	T050-4T3A0 -	HEALTH PHYSICS TECHNICIAN	\$	0	2,679	0	0	0	2,679

Labor and Non-Labor Usage Report

by Fiscal Year 97-98-99-2000-2001

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Activity	Unit	01Oct96 30Sep97	01Oct97 30Sep98	01Oct98 30Sep99	01Oct99 30Sep00	01Oct00 30Sep01	Total
Total_costs_5yrs Total	\$	0	6,941	0	0	0	6,941

1K3A020B020F Post wrk survey, rev/close WP, Field Log

Labor_use_5yrs

E100-19120 - PLANT ENGINEERS	Wh	0	55	0	0	0	55
R050-4T200 - NUCLEAR WASTE PROCESS OPER	Wh	0	10	0	0	0	10
T050-4T3A0 - HEALTH PHYSICS TECHNICIAN	Wh	0	20	0	0	0	20

Labor_use_5yrs Total	Wh	0	85	0	0	0	85
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Non_labor_u_5yrs

Non_labor_u_5yrs Total

Total_costs_5yrs

E100-19120 - PLANT ENGINEERS	\$	0	3,279	0	0	0	3,279
R050-4T200 - NUCLEAR WASTE PROCESS OPER	\$	0	492	0	0	0	492
T050-4T3A0 - HEALTH PHYSICS TECHNICIAN	\$	0	1,340	0	0	0	1,340

Total_costs_5yrs Total	\$	0	5,111	0	0	0	5,111
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1K3A020B030A 3 concrete core,16 soil - NO asphlt sampl

Labor_use_5yrs

G040-31100 - SECRETARIES	Wh	0	4	0	0	0	4
R040-4T200 - NUCLEAR PLANT OPERATORS	Wh	0	104	0	0	0	104
S090-31100 - OTHER SCIENTISTS - EXEMPT	Wh	0	104	0	0	0	104
T030-31100 - ENGINEERING TECHNICIAN - NWh	Wh	0	104	0	0	0	104
T050-4T3A0 - HEALTH PHYSICS TECHNICIAN	Wh	0	104	0	0	0	104

Labor_use_5yrs Total	Wh	0	420	0	0	0	420
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Non_labor_u_5yrs

1000-19120 - MATERIAL & EQUIPMENT	It	0	500	0	0	0	500
4C00-19120 - MPR	It	0	35	0	0	0	35
5L00-19120 - ANALYTICAL SERVICES	It	0	1,950	0	0	0	1,950

Non_labor_u_5yrs Total	It	0	2,485	0	0	0	2,485
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Total_costs_5yrs

1000-19120 - MATERIAL & EQUIPMENT	\$	0	590	0	0	0	590
4C00-19120 - MPR	\$	0	41	0	0	0	41
5L00-19120 - ANALYTICAL SERVICES	\$	0	2,301	0	0	0	2,301
G040-31100 - SECRETARIES	\$	0	108	0	0	0	108
R040-4T200 - NUCLEAR PLANT OPERATORS	\$	0	5,113	0	0	0	5,113
S090-31100 - OTHER SCIENTISTS - EXEMPT	\$	0	6,109	0	0	0	6,109
T030-31100 - ENGINEERING TECHNICIAN - NWh	\$	0	2,816	0	0	0	2,816
T050-4T3A0 - HEALTH PHYSICS TECHNICIAN	\$	0	6,967	0	0	0	6,967

Total_costs_5yrs Total	\$	0	24,046	0	0	0	24,046
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1K3A020B030B Package & ship to lab

Labor_use_5yrs

Labor_use_5yrs Total

Non_labor_u_5yrs

Non_labor_u_5yrs Total

Total_costs_5yrs

Total_costs_5yrs Total

1K3A020B030C M/S-O, COMPLETION OF 303K SAMPLING

Labor_use_5yrs

Labor_use_5yrs Total

Labor and Non-Labor Usage Report

by Fiscal Year 97-98-99-2000-2001

Run Date 29Sep97 09:01

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Activity Cost Function Resource	Unit	01Oct96 30Sep97	01Oct97 30Sep98	01Oct98 30Sep99	01Oct99 30Sep00	01Oct00 30Sep01	Total
---------------------------------------	------	--------------------	--------------------	--------------------	--------------------	--------------------	-------

Non_labor_u_5yrs

Non_labor_u_5yrs Total

Total_costs_5yrs

Total_costs_5yrs Total

1K3A020B040A Perform onsite radiological analysis

Labor_use_5yrs

Labor_use_5yrs Total

Non_labor_u_5yrs

5L00-19120 - ANALYTICAL SERVICES

It	0	4,000	0	0	0	0	4,000
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Non_labor_u_5yrs Total

It	0	4,000	0	0	0	0	4,000
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Total_costs_5yrs

5L00-19120 - ANALYTICAL SERVICES

\$	0	4,720	0	0	0	0	4,720
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Total_costs_5yrs Total

\$	0	4,720	0	0	0	0	4,720
----	---	-------	---	---	---	---	-------

1K3A020B040B Perform offsite chemical analysis

Labor_use_5yrs

Labor_use_5yrs Total

Non_labor_u_5yrs

5G00-19120 - SAMPLE ANALYSIS

It	0	60,000	0	0	0	0	60,000
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Non_labor_u_5yrs Total

It	0	60,000	0	0	0	0	60,000
----	---	--------	---	---	---	---	--------

Total_costs_5yrs

5G00-19120 - SAMPLE ANALYSIS

\$	0	70,800	0	0	0	0	70,800
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Total_costs_5yrs Total

\$	0	70,800	0	0	0	0	70,800
----	---	--------	---	---	---	---	--------

1K3A020B040C M/S-O, WHC RECEIPT OF LAB ANALYSIS

Labor_use_5yrs

Labor_use_5yrs Total

Non_labor_u_5yrs

Non_labor_u_5yrs Total

Total_costs_5yrs

Total_costs_5yrs Total

1K3A020B050A Validate 303K sample analysis

Labor_use_5yrs

Labor_use_5yrs Total

Non_labor_u_5yrs

5G00-19120 - SAMPLE ANALYSIS

It	0	24,000	0	0	0	0	24,000
----	---	--------	---	---	---	---	--------

Non_labor_u_5yrs Total

It	0	24,000	0	0	0	0	24,000
----	---	--------	---	---	---	---	--------

Total_costs_5yrs

5G00-19120 - SAMPLE ANALYSIS

\$	0	28,320	0	0	0	0	28,320
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Total_costs_5yrs Total

\$	0	28,320	0	0	0	0	28,320
----	---	--------	---	---	---	---	--------

1K3A020B050B M/S-O, WHC RECEIPT OF SAMPLE VALIDAT RPTORT

Labor and Non-Labor Usage Report

by Fiscal Year 97-98-99-2000-2001

Run Date 29Sep97 09:01

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Activity Cost Function Resource	Unit	01Oct96 30Sep97	01Oct97 30Sep98	01Oct98 30Sep99	01Oct99 30Sep00	01Oct00 30Sep01	Total
<hr/>							
Labor_use_5yrs							
<hr/>							
Labor_use_5yrs Total							
Non_labor_u_5yrs							
<hr/>							
Non_labor_u_5yrs Total							
Total_costs_5yrs							
<hr/>							
Total_costs_5yrs Total							
<hr/>							
1K3A020B060A Package waste							
Labor_use_5yrs							
E100-19120 - PLANT ENGINEERS	Wh	0	12	0	0	0	12
R050-4T200 - NUCLEAR WASTE PROCESS OPER	Wh	0	32	0	0	0	32
<hr/>							
Labor_use_5yrs Total	Wh	0	44	0	0	0	44
<hr/>							
Non_labor_u_5yrs							
<hr/>							
Non_labor_u_5yrs Total							
<hr/>							
Total_costs_5yrs							
E100-19120 - PLANT ENGINEERS	\$	0	716	0	0	0	716
R050-4T200 - NUCLEAR WASTE PROCESS OPERS	\$	0	1,573	0	0	0	1,573
<hr/>							
Total_costs_5yrs Total	\$	0	2,289	0	0	0	2,289
<hr/>							
1K3A020B060B Ship 303K RCRA closure generated waste							
Labor_use_5yrs							
C120-4T360 - OTHER CRAFTS	Wh	0	32	0	0	0	32
E100-19120 - PLANT ENGINEERS	Wh	0	36	0	0	0	36
E100-33220 - PLANT ENGINEERS	Wh	0	4	0	0	0	4
L070-4T330 - LIGHT VEHICLE DRIVERS	Wh	0	8	0	0	0	8
<hr/>							
Labor_use_5yrs Total	Wh	0	80	0	0	0	80
<hr/>							
Non_labor_u_5yrs							
5400-19120 - RADIOACTIVE WASTE DISPOSAL	It	0	986	0	0	0	986
<hr/>							
Non_labor_u_5yrs Total	It	0	986	0	0	0	986
<hr/>							
Total_costs_5yrs							
5400-19120 - RADIOACTIVE WASTE DISPOSALS	\$	0	1,163	0	0	0	1,163
C120-4T360 - OTHER CRAFTS	\$	0	2,213	0	0	0	2,213
E100-19120 - PLANT ENGINEERS	\$	0	2,147	0	0	0	2,147
E100-33220 - PLANT ENGINEERS	\$	0	235	0	0	0	235
L070-4T330 - LIGHT VEHICLE DRIVERS	\$	0	385	0	0	0	385
<hr/>							
Total_costs_5yrs Total	\$	0	6,143	0	0	0	6,143
<hr/>							
1K3A020B060M M/S-O, 303K RCRA GEN WASTE SHIPPED							
Labor_use_5yrs							
<hr/>							
Labor_use_5yrs Total							
Non_labor_u_5yrs							
<hr/>							
Non_labor_u_5yrs Total							
<hr/>							
Total_costs_5yrs							
<hr/>							
Total_costs_5yrs Total							
<hr/>							
1K3A020B070A Prepare 303K Final report							

Labor and Non-Labor Usage Report

by Fiscal Year 97-98-99-2000-2001

Run Date 29Sep97 09:01

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Activity Cost Function Resource	Unit	01Oct96 30Sep97	01Oct97 30Sep98	01Oct98 30Sep99	01Oct99 30Sep00	01Oct00 30Sep01	Total
Labor_use_5yrs							
E040-19120 - ELECTRICAL ENGINEERS	Wh	0	40	0	0	0	40
E050-31210 - ENVIRONMENTAL ENGINEERS	Wh	0	320	0	0	0	320
G040-31210 - SECRETARIES	Wh	0	16	0	0	0	16
Labor_use_5yrs Total	Wh	0	376	0	0	0	376
Non_labor_u_5yrs							
6P00-19120 - MULTIMEDIA SERVICES	It	0	5,000	0	0	0	5,000
Non_labor_u_5yrs Total	It	0	5,000	0	0	0	5,000
Total_costs_5yrs							
6P00-19120 - MULTIMEDIA SERVICES	\$	0	5,900	0	0	0	5,900
E040-19120 - ELECTRICAL ENGINEERS	\$	0	2,385	0	0	0	2,385
E050-31210 - ENVIRONMENTAL ENGINEERS	\$	0	18,797	0	0	0	18,797
G040-31210 - SECRETARIES	\$	0	433	0	0	0	433
Total_costs_5yrs Total	\$	0	27,515	0	0	0	27,515

1K3A020B070M M/S-O, FINAL 303K REPORT SUBM TO DOE-RL

Labor_use_5yrs	-----
Labor_use_5yrs Total	-----
Non_labor_u_5yrs	-----
Non_labor_u_5yrs Total	-----
Total_costs_5yrs	-----
Total_costs_5yrs Total	-----

1K3A020B0801 M/S-O, WHC & DOE-RL CLOSURE CERTIFICATION

Labor_use_5yrs	-----
Labor_use_5yrs Total	-----
Non_labor_u_5yrs	-----
Non_labor_u_5yrs Total	-----
Total_costs_5yrs	-----
Total_costs_5yrs Total	-----

1K3A020B0802 M/S-O, PROFESSIONAL ENGINEER CERTIFICATION

Labor_use_5yrs	-----
Labor_use_5yrs Total	-----
Non_labor_u_5yrs	-----
Non_labor_u_5yrs Total	-----
Total_costs_5yrs	-----
Total_costs_5yrs Total	-----

1K3A020B080A 303K RCRA Project Coordination (FY97)

Labor_use_5yrs							
E040-19120 - ELECTRICAL ENGINEERS	Wh	350	0	0	0	0	350
E050-31210 - ENVIRONMENTAL ENGINEERS	Wh	587	0	0	0	0	587
Labor_use_5yrs Total	Wh	937	0	0	0	0	937
Non_labor_u_5yrs							

Labor and Non-Labor Usage Report

by Fiscal Year 97-98-99-2000-2001

Run Date 29Sep97 09:01

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Activity Cost Function Resource	Unit	01Oct96 30Sep97	01Oct97 30Sep98	01Oct98 30Sep99	01Oct99 30Sep00	01Oct00 30Sep01	Total
2100-19120 - PO CONTRACTS	It	3,200	0	0	0	0	3,200
4C00-19120 - MPR	It	240	0	0	0	0	240
<hr/>							
Non_labor_u_5yrs Total	It	3,440	0	0	0	0	3,440
<hr/>							
Total costs_5yrs							
2100-19120 - PO CONTRACTS	\$	3,729	0	0	0	0	3,729
4C00-19120 - MPR	\$	280	0	0	0	0	280
E040-19120 - ELECTRICAL ENGINEERS	\$	20,049	0	0	0	0	20,049
E050-31210 - ENVIRONMENTAL ENGINEERS	\$	35,688	0	0	0	0	35,688
<hr/>							
Total_costs_5yrs Total	\$	59,745	0	0	0	0	59,745

1K3A020B080B 303K RCRA Project Coordination (FY98)

Labor use_5yrs							
E040-19120 - ELECTRICAL ENGINEERS	Wh	0	160	0	0	0	160
E050-31210 - ENVIRONMENTAL ENGINEERS	Wh	0	160	0	0	0	160
<hr/>							
Labor_use_5yrs Total	Wh	0	320	0	0	0	320
<hr/>							
Non_labor_u_5yrs							
2100-19120 - PO CONTRACTS	It	0	25,000	0	0	0	25,000
4C00-19120 - MPR	It	0	1,750	0	0	0	1,750
<hr/>							
Non_labor_u_5yrs Total	It	0	26,750	0	0	0	26,750
<hr/>							
Total costs_5yrs							
2100-19120 - PO CONTRACTS	\$	0	29,500	0	0	0	29,500
4C00-19120 - MPR	\$	0	2,065	0	0	0	2,065
E040-19120 - ELECTRICAL ENGINEERS	\$	0	9,540	0	0	0	9,540
E050-31210 - ENVIRONMENTAL ENGINEERS	\$	0	9,399	0	0	0	9,399
<hr/>							
Total_costs_5yrs Total	\$	0	50,504	0	0	0	50,504

1K3A020B080C 303K RCRA Project Coordination (FY 1999)

Labor use_5yrs							
E040-19120 - ELECTRICAL ENGINEERS	Wh	0	0	48	0	0	48
E050-31210 - ENVIRONMENTAL ENGINEERS	Wh	0	0	48	0	0	48
<hr/>							
Labor_use_5yrs Total	Wh	0	0	96	0	0	96
<hr/>							
Non_labor_u_5yrs							
<hr/>							
Non_labor_u_5yrs Total							
<hr/>							
Total costs_5yrs							
E040-19120 - ELECTRICAL ENGINEERS	\$	0	0	2,897	0	0	2,897
E050-31210 - ENVIRONMENTAL ENGINEERS	\$	0	0	2,854	0	0	2,854
<hr/>							
Total_costs_5yrs Total	\$	0	0	5,751	0	0	5,751

FY 99 MYWP
 300 AREA FUEL SUPPLY SHUTDOWN - 1.4.4.1
 September 29, 1997

MANAGER: Ivan Metcalf

Activity	Description	Milestone Type	Start	Finish	Dur	FY97	FY98	FY99	FY00	FY01
1K3A020B010A	Prepare/Conduct DQO process		10/01/96	04/03/97	126 D					
1K3A020B010E	Prepare/Issue 303K Sampling plan (SD)		04/04/97	08/01/97	83 D					
1K3A020B010M	M/S-0, SAMPLE PLAN SUBMITTED TO ECOLOGY	0-Other	08/01/97	08/01/97	0 D					
1K3A020B020A	Initiate JCS WP, perform RAD survey		10/01/97	10/02/97	2 D					
1K3A020B020B	WP planning, USQ overview, RWP, ECN approval		10/03/97	10/09/97	5 D					
1K3A020B020C	Pre-Job - WP aprvl, order mat'l, sched res		10/10/97	10/14/97	3 D					
1K3A020B020D	Decon North end bldg, storage pad		10/15/97	10/28/97	10 D					
1K3A020B020F	Post wrk survey, rev/close WP, Field Log		11/17/97	03/31/98	90 D					
1K3A020B030A	3 concrete core, 10 soil - NO asphit sampl		10/29/97	11/07/97	8 D					
1K3A020B030B	Package & ship to lab		11/10/97	11/14/97	5 D					
1K3A020B030C	M/S-0, COMPLETION OF 303K SAMPLING	0-Other	11/14/97	11/14/97	0 D					
1K3A020B040A	Perform onsite radiological analysis		11/17/97	12/02/97	10 D					
1K3A020B040B	Perform offsite chemical analysis		11/17/97	12/30/97	27 D					
1K3A020B040C	M/S-0, WHC RECEIPT OF LAB ANALYSIS	0-Other	12/30/97	12/30/97	0 D					
1K3A020B050A	Validate 303K sample analysis		12/31/97	03/19/98	55 D					
1K3A020B050B	M/S-0, WHC RECEIPT OF SAMPLE VALIDAT RPTORT	0-Other	03/19/98	03/19/98	0 D					
1K3A020B060A	Package waste		12/31/97	01/28/98	20 D					
1K3A020B060B	Ship 303K RCRA closure generated waste		01/29/98	02/11/98	10 D					
1K3A020B060M	M/S-0, 303K RCRA GEN WASTE SHIPPED	0-Other	02/11/98	02/11/98	0 D					
1K3A020B070A	Prepare 303K Final report		04/01/98	07/31/98	84 D					
1K3A020B070M	M/S-0, FINAL 303K REPORT SUBM TO DOE-RL	0-Other	07/31/98	07/31/98	0 D					
1K3A020B0801	M/S-0, WHC & DOE-RL CLOSURE CERTIFICATION	0-Other	07/31/98	07/31/98	0 D					

FY 99 MYWP
300 AREA FUEL SUPPLY SHUTDOWN - 1.4.4.1
September 29, 1997

MANAGER: Ivan Metcalf

Activity	Description	Milestone Type	Start	Finish	Dur	FY97	FY98	FY99	FY00	FY01
IK3A020B0802	M/S-0. PROFESSIONAL ENGINEER CERTIFICATION	0-Other	07/31/98	07/31/98	0 D					
IK3A020B080A	303K RCRA Project Coordination (FY97)		10/01/96	09/30/97	250 D					
IK3A020B080B	303K RCRA Project Coordination (FY98)		10/01/97	09/30/98	249 D					
IK3A020B080C	303K RCRA Project Coordination (FY 1999)		10/01/98	01/15/99	72 D					

300 AREA PROCESS TRENCHES

The 300 Area Process Trenches (300 APT) modified closure/postclosure plan was approved and incorporated into the HF RCRA Permit in FY 1997. The plan calls for completion of closure activities in early FY 1998, followed by a 30-year postclosure period culminating in postclosure certification in FY 2029. Closure activities include completion of the site remediation work, groundwater monitoring, well maintenance, and permit compliance. Postclosure activities consist of site restoration, subsurface well inspections and maintenance, groundwater monitoring, and permit compliance. Estimates incorporate necessary subcontracts, materials, and equipment. Based on information from site investigations and project expertise, the total cost of closure and/or postclosure activities is estimated at \$4.0 million (1997 dollars). A schedule and cost estimate package on the following pages includes a time line for costs and hours as well as a single year detail of equipment and labor.

The estimate consists of costs for remediation, groundwater monitoring, well maintenance and inspections, and permit compliance activities. Remediation to complete closure includes excavation, backfilling, verification sampling, and transportation and disposal of waste. The postclosure estimate includes costs for revegetating the site. Groundwater monitoring includes quarterly reviews, annual reports, data management, and sample and well measurement collection and analysis. The well maintenance component consists of estimates for well and surface inspections of eight wells. It also includes well maintenance based on a rate of three maintenance tasks per year and routine maintenance on a rolling five year cycle. Some of the well inspections will require purgewater containment. Estimates for permit compliance include preparation, review, and issuance of applicable reports and plans, and maintenance of the operating record.

**300 AREA PROCESS TRENCHES CLOSURE / POST CLOSURE
TIME LINE COSTS
(in 1997 Dollars)**

BECHTEL HANFORD Inc.

Title: Summary

Job Number / Charge # R31FX2 YNAO

File: E:\ReadWrite\ESTIMATE\297 Closure\297 CLOSURE R4.xls\TIME LINE COSTS

ITEM	Description	FY	FY	FY	FY	FY	FY	FY										
		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
CLOSURE																		
1	OFF-SITE LAB ANALYSIS FOR VERIFICATION	\$ 27,759																
2	PERMIT COMPLIANCE 25% OF A FULL YEAR	\$ 3,432																
3	DATA EVALUATION	\$ 7,166																
4	FIELD MONITORING, SCREENING AND SAMPLING	\$ 9,961																
5	EXCAVATION & MATERIAL HANDLING	\$ 308,027																
6	BACKFILL & REGRADING (EXCLUDES REVEGETATION)	\$ 24,572																
7	INDEPENDENT VERIFICATION OF CLOSURE	\$ 36,858																
8	GROUNDWATER MONITORING 25% OF EIGHT WELLS SAMPLED SEMIANNUALLY, URANIUM; PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS OF TCE, 1,2-CIS- DICHLOROETHYLENE, AND VINYL CHLORIDE; IRON, MANGANESE, THALLIUM, PCBC, CHRYSENE, BENSO (A)PYRENE, AND FIELD PARAMETERS (PH, SPECIFIC CONDUCTANCE, TURBIDITY, AND TEMPERATURE).	\$ 21,291																
9	INSPECTION OF SUBSURFACE WELL CONDITIONS 25% OF A FULL YEAR	\$ 1,040																
10	QUARTERLY SITE INSPECTIONS 25% OF A FULL YEAR	\$ 866																
POST CLOSURE																		
11	SITE RESTORATION (REVEGETATION)		\$ 23,816															
12	INSPECTION OF SUBSURFACE WELL CONDITIONS FY98 75%, FY99-27 100%, FY28 25%	\$ 3,115	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152
13	GROUNDWATER WELL MAINTENANCE 5 YEAR CYCLE STARTS IN FY02					\$ 55,401					\$ 55,401					\$ 55,401		
14	COST ESTIMATE FOR POST-CLOSURE MONITORING & MAINTENANCE	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049
15	QUARTERLY SITE INSPECTIONS FY98 75%, FY99-27 100%, FY28 25%	\$ 2,596	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464
16	PERMIT COMPLIANCE FY98 75%, FY99-27 100% WITH ADDER IN FY03, 08, 13, 18, 23 FOR RE-ASSESS MODIFIED CLOSURE OPTION, FY28 25%	\$ 10,296	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 22,859	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 22,859	\$ 13,727	\$ 13,727	\$ 13,727	\$ 22,859	\$ 13,727
17	GROUNDWATER MONITORING FY98 75% OF EIGHT WELLS SAMPLED SEMIANNUALLY, URANIUM; PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS OF TCE, 1,2-CIS- DICHLOROETHYLENE, AND VINYL CHLORIDE; IRON, MANGANESE, THALLIUM, PCBC, CHRYSENE, BENSO (A)PYRENE, AND FIELD PARAMETERS (PH, SPECIFIC CONDUCTANCE, TURBIDITY, AND TEMPERATURE). FY99-06 TWO WELLS SAMPLED QUARTERLY & SIX WELLS SEMIANNUALLY. FY02 TWO WELLS SAMPLED QUARTERLY & SIX WELLS SEMIANNUALLY PLUS ONE MOD TO SITEWIDE PERMIT CIRCA. FY08-27 EIGHT WELLS SAMPLED SEMIANNUALLY URANIUM, PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS, AND FIELD PARAMETERS. FY28 25% OF EIGHT WELLS SAMPLED SEMIANNUALLY URANIUM, PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS, AND FIELD PARAMETERS.	\$ 63,870	\$ 84,013	\$ 84,013	\$ 84,013	\$ 84,013	\$ 84,013	\$ 84,013	\$ 84,013	\$ 84,013	\$ 84,013	\$ 121,321	\$ 75,761	\$ 75,761	\$ 75,761	\$ 75,761	\$ 75,761	\$ 75,761
18	POST-CLOSURE CARE CERTIFICATION																	
TOTAL (in 1997 Dollars)		\$ 522,898	\$ 131,221	\$ 107,405	\$ 107,405	\$ 162,806	\$ 116,337	\$ 107,405	\$ 107,405	\$ 107,405	\$ 200,114	\$ 108,085	\$ 99,153	\$ 99,153	\$ 99,153	\$ 154,554	\$ 108,085	\$ 99,153

**300 AREA PROCESS TRENCHES CLOSURE / POST CLOSURE
TIME LINE COSTS
(in 1997 Dollars)**

BECHTEL HANFORD Inc.
Title: Summary
Job Number / Charge # R31FX2 YNAO
File: E:\ReadWrite\ESTIMATE\297 Closure\297 CLOSURE R4.xls\TIME LINE COSTS

Date: 9/22/97
By: JA LAPIERRE
Chk'd: D LEONHARDT
Rev.: 4

Lead Estimator Appvl.: JA LAPIERRE FOR J. CHAPMAN

ITEM	Description	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	TOTAL	
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029		
CLOSURE																		
1	OFF-SITE LAB ANALYSIS FOR VERIFICATION																\$ 27,759	
2	PERMIT COMPLIANCE 25% OF A FULL YEAR																\$ 3,432	
3	DATA EVALUATION																\$ 7,166	
4	FIELD MONITORING, SCREENING AND SAMPLING																\$ 9,961	
5	EXCAVATION & MATERIAL HANDLING																\$ 308,027	
6	BACKFILL & REGRADING (EXCLUDES REVEGETATION)																\$ 24,572	
7	INDEPENDENT VERIFICATION OF CLOSURE																\$ 36,858	
8	GROUNDWATER MONITORING 25% OF EIGHT WELLS SAMPLED SEMIANNUALLY, URANIUM, PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS OF TCE, 1,2-DICHLOROETHYLENE, AND VINYL CHLORIDE, IRON, MANGANESE, THALLIUM, PCB/C, CHRYSENE, BENZO (A)PYRENE, AND FIELD PARAMETERS (PH, SPECIFIC CONDUCTANCE, TURBIDITY, AND TEMPERATURE)																\$ 21,281	
9	INSPECTION OF SUBSURFACE WELL CONDITIONS 25% OF A FULL YEAR																\$ 1,040	
10	QUARTERLY SITE INSPECTIONS 25% OF A FULL YEAR																\$ 866	
POST CLOSURE																		
11	SITE RESTORATION (REVEGETATION)																\$ 23,816	
12	INSPECTION OF SUBSURFACE WELL CONDITIONS FY98 75%, FY99-27 100%, FY28 25%	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 4,152	\$ 1,040		\$ 124,563	
13	GROUNDWATER WELL MAINTENANCE 5 YEAR CYCLE STARTS IN FY02			\$ 55,401					\$ 55,401					\$ 55,401			\$ 332,406	
14	COST ESTIMATE FOR POST-CLOSURE MONITORING & MAINTENANCE	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049	\$ 2,049		\$ 61,470	
15	QUARTERLY SITE INSPECTIONS FY98 75%, FY99-27 100%, FY28 25%	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 866		\$ 103,918	
16	PERMIT COMPLIANCE FY98 75%, FY99-27 100% WITH ADDER IN FY03 08 13, 18 23 FOR RE-ASSESS MODIFIED CLOSURE OPTION, FY28 25%	\$ 13,727	\$ 13,727	\$ 13,727	\$ 22,659	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 22,659	\$ 13,727	\$ 13,727	\$ 13,727	\$ 13,727	\$ 3,432		\$ 456,471
17	GROUNDWATER MONITORING FY98 75% OF EIGHT WELLS SAMPLED SEMIANNUALLY, URANIUM, PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS OF TCE, 1,2-DICHLOROETHYLENE, AND VINYL CHLORIDE, IRON, MANGANESE, THALLIUM, PCB/C, CHRYSENE, BENZO (A)PYRENE, AND FIELD PARAMETERS (PH, SPECIFIC CONDUCTANCE, TURBIDITY, AND TEMPERATURE) FY99-06 TWO WELLS SAMPLED QUARTERLY & SIX WELLS SEMIANNUALLY FY07 TWO WELLS SAMPLED QUARTERLY & SIX WELLS SEMIANNUALLY PLUS ONE MOD TO SITEWIDE PERMIT CIRCA FY08-27 EIGHT WELLS SAMPLED SEMIANNUALLY URANIUM, PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS AND FIELD PARAMETERS. FY28 25% OF EIGHT WELLS SAMPLED SEMIANNUALLY URANIUM, PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS, AND FIELD PARAMETERS	\$ 75,761	\$ 75,761	\$ 75,761	\$ 75,761	\$ 75,761	\$ 75,761	\$ 75,761	\$ 75,761	\$ 75,761	\$ 75,761	\$ 75,761	\$ 75,761	\$ 75,761	\$ 75,761	\$ 18,941		\$ 2,391,456
18	POST-CLOSURE CARE CERTIFICATION															\$ 42,632		\$ 42,632
TOTAL (in 1997 Dollars)		\$ 99,153	\$ 99,153	\$ 154,554	\$ 108,085	\$ 99,153	\$ 99,153	\$ 99,153	\$ 154,554	\$ 108,085	\$ 99,153	\$ 99,153	\$ 154,554	\$ 66,911	\$ -		\$ 3,977,704	

CHECK \$ 3,977,704

**300 AREA PROCESS TRENCHES CLOSURE / POST CLOSURE
TIME LINE COSTS
(In 1997 Dollars)**

BECHTEL HANFORD Inc.																	
Title: Summary																	
Job Number / Charge # R31FX2 YNA0																	
File: E:\ReadWrite\ESTIMATE\297 Closure\297 CLOSURE R4.xls\TIME LINE COSTS																	
	Description																
ITEM	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014

- 1 ERC TEAM WAGE RATES PER, "ERC & HAMTC DIRECT LABOR WAGE RATES FY 1997", DATED 8/20/96 (BASED ON, "FY97 ALL IN WAGE RATES FOR BHI, CH2MHILL, IT, THI, HAMTC, BUILDING TRADES BY RESOURCE CODE", TRACKING NO. 040990)
- 2 DD AND G&A (BURDEN) IS PER, "FY 97 ALL IN WAGE RATES FOR BHI, CH2MHILL, IT, THI, HAMTC, BUILDING TRADES BY RESOURCE CODE", TRACKING NO. 040990). BURDEN IS EXCLUDED FROM DOE-RL DIRECTLY FUNDED WORK ACTIVITIES.
- 3 ALL WAGE RATES INCLUDE 4% OVERTIME.
- 4 MATERIAL SALES TAX, CURRENT RATE 8%. SALES TAX NOT APPLIED TO EQUIPMENT (OWNER OPERATOR). SALES TAX WOULD APPLY IF IT IS RENTAL EQUIPMENT.
- 5 ALL COSTS ARE AT 1997 DOLLARS.
- 6 PRIME SUBCONTRACTOR WAGE RATES, PAYROLL ADDS AND FRINGES, PER "BUILDING TRADES FY 1997 PRIME SUBCONTRACTOR DIRECT LABOR WAGE RATES" REV. DATE 4/11/97 (BASED ON HSSA).
- 7 PRIME CONTRACTOR MARKUP, PER "PRIME CONTRACTOR (SUBCONTRACTOR TO ERC TEAM) MARKUP TABLE FOR BUILDING TRADES", REV. DATE 11/21/95.
- 8 PNNL COST USED THE LATEST DOE-RL APPROVED RATES.
- 9 SOURCES OF HOURS AND COST INFORMATION ARE LISTED AS FOLLOWS:
UNLESS OTHERWISE NOTED BELOW ALL INPUT PROVIDED BY THE PROJECT OR ESTIMATING.
GROUNDWATER WELL INSPECTIONS AND MAINTENANCE PROVIDED BY FIELD BHI SITE INVESTIGATIONS DEPT..
PERMIT COMPLIANCE PROVIDED BY CHI REGULATORY SUPPORT DEPARTMENT AND THE PROJECT.
GROUNDWATER MONITORING PROVIDED BY PNNL FIELD HYDROLOGY CHEMISTRY DEPT. AND THE PROJECT.
- 10 SEE THE ESTIMATE PRESENTATION FOR ADDITIONAL INFORMATION ON SCOPE, QUALIFICATIONS & ASSUMPTIONS.

**300 AREA PROCESS TRENCHES CLOSURE / POST CLOSURE
TIME LINE HOURS
(excludes subcontractor hours)**

BECHTEL HANFORD Inc.																		
Title: Summary																		
Job Number / Charge # R31FX2 YNA0																		
File: E:\ReadWrite\ESTIMATE\297 Closure\297 CLOSURE R4.xls\TIME LINE HOURS																		
ITEM	Description	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
CLOSURE																		
1	OFF-SITE LAB ANALYSIS FOR VERIFICATION	-																
2	PERMIT COMPLIANCE 25% OF A FULL YEAR	52																
3	DATA EVALUATION	100																
4	FIELD MONITORING, SCREENING AND SAMPLING	110																
5	EXCAVATION & MATERIAL HANDLING	878																
6	BACKFILL & REGRADING (EXCLUDES REVEGETATION)	-																
7	INDEPENDENT VERIFICATION OF CLOSURE	-																
8	GROUNDWATER MONITORING 25% OF EIGHT WELLS SAMPLED SEMIANNUALLY, URANIUM, PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS OF TCE, 1,2-CIS- DICHLOROETHYLENE, AND VINYL CHLORIDE; IRON, MANGANESE, THALLIUM, PCBC, CHRYSENE, BENZO (A)PYRENE, AND FIELD PARAMETERS (PH, SPECIFIC CONDUCTANCE, TURBIDITY, AND TEMPERATURE)	134																
9	INSPECTION OF SUBSURFACE WELL CONDITIONS 25% OF A FULL YEAR	4																
10	POST QUARTERLY SITE INSPECTIONS 25% OF A FULL YEAR	12																
POST CLOSURE																		
11	SITE RESTORATION (REVEGETATION)																	
12	INSPECTION OF SUBSURFACE WELL CONDITIONS FY98 75%, FY99-27 100%, FY28 25%	11	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
13	GROUNDWATER WELL MAINTENANCE 5 YEAR CYCLE STARTS IN FY02					34					34					34		
14	COST ESTIMATE FOR POST-CLOSURE MONITORING & MAINTENANCE	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
15	POST QUARTERLY SITE INSPECTIONS FY98 75%, FY99-27 100%, FY28 25%	36	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
16	PERMIT COMPLIANCE FY98 75%, FY99-27 100% WITH ADDER IN FY03, 08, 13, 18, 23 FOR RE-ASSESS MODIFIED CLOSURE OPTION, FY28 25%	156	208	208	208	208	344	208	208	208	208	344	208	208	208	208	344	208
17	GROUNDWATER MONITORING FY98 75% OF EIGHT WELLS SAMPLED SEMIANNUALLY, URANIUM, PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS OF TCE, 1,2-CIS- DICHLOROETHYLENE, AND VINYL CHLORIDE; IRON, MANGANESE, THALLIUM, PCBC, CHRYSENE, BENZO (A)PYRENE, AND FIELD PARAMETERS (PH, SPECIFIC CONDUCTANCE, TURBIDITY, AND TEMPERATURE) FY99 06 TWO WELLS SAMPLED QUARTERLY & SIX WELLS SEMIANNUALLY, FY07 TWO WELLS SAMPLED QUARTERLY & SIX WELLS SEMIANNUALLY PLUS ONE MOD TO SITEWIDE PERMIT CIRCA FY08-27 EIGHT WELLS SAMPLED SEMIANNUALLY URANIUM, PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS, AND FIELD PARAMETERS FY28 25% OF EIGHT WELLS SAMPLED SEMIANNUALLY URANIUM, PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS, AND FIELD PARAMETERS	402	570	570	570	570	570	570	570	570	702	538	538	538	538	538	538	538
18	POST-CLOSURE CARE CERTIFICATION																	
TOTAL HOURS		1,926	872	872	872	906	1,008	872	872	872	1,038	974	838	838	838	872	974	838

**300 AREA PROCESS TRENCHES CLOSURE / POST CLOSURE
TIME LINE HOURS
(excludes subcontractor hours)**

BECHTEL HANFORD Inc.															Date:	9/22/97	
Title: Summary															By:	JA LAPIERRE	
Job Number / Charge # R31FX2 YNA0															Chk'd	D LEONHARDT	
File E:\ReadWrite\ESTIMATE\297 Closure\297 CLOSURE R4.xls\TIME LINE HOURS															Rev.:	4	
															Lead Estimator Appvl.: JA LAPIERRE FOR J. CHAPMAN		
ITEM	Description	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	TOTAL
CLOSURE																	
1	OFF-SITE LAB ANALYSIS FOR VERIFICATION																-
2	PERMIT COMPLIANCE 25% OF A FULL YEAR																52
3	DATA EVALUATION																100
4	FIELD MONITORING, SCREENING AND SAMPLING																110
5	EXCAVATION & MATERIAL HANDLING																878
6	BACKFILL & REGRADING (EXCLUDES REVEGETATION)																-
7	INDEPENDENT VERIFICATION OF CLOSURE																-
8	GROUNDWATER MONITORING 25% OF EIGHT WELLS SAMPLED SEMIANNUALLY, URANIUM; PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS OF TCE, 1,2-CIS- DICHLOROETHYLENE, AND VINYL CHLORIDE; IRON, MANGANESE, THALLIUM, PCBC, CHRYSENE, BENSO (A)PYRENE, AND FIELD PARAMETERS (PH, SPECIFIC CONDUCTANCE, TURBIDITY, AND TEMPERATURE)																134
9	INSPECTION OF SUBSURFACE WELL CONDITIONS 25% OF A FULL YEAR																4
10	POST QUARTERLY SITE INSPECTIONS 25% OF A FULL YEAR																12
POST CLOSURE																	
11	SITE RESTORATION (REVEGETATION)																-
12	INSPECTION OF SUBSURFACE WELL CONDITIONS FY98 75%, FY99-27 100%, FY28 25%	14	14	14	14	14	14	14	14	14	14	14	14	14	4		420
13	GROUNDWATER WELL MAINTENANCE 5 YEAR CYCLE STARTS IN FY02			34					34					34			204
14	COST ESTIMATE FOR POST-CLOSURE MONITORING & MAINTENANCE	32	32	32	32	32	32	32	32	32	32	32	32	32			960
15	POST QUARTERLY SITE INSPECTIONS FY98 75%, FY99-27 100%, FY28 25%	48	48	48	48	48	48	48	48	48	48	48	48	48	12		1,440
16	PERMIT COMPLIANCE FY98 75%, FY99-27 100% WITH ADDER IN FY03, 08, 13, 18, 23 FOR RE-ASSESS MODIFIED CLOSURE OPTION, FY28 25%	208	208	208	344	208	208	208	208	344	208	208	208	208	52		6,920
17	GROUNDWATER MONITORING FY98 75% OF EIGHT WELLS SAMPLED SEMIANNUALLY, URANIUM; PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS OF TCE, 1,2-CIS- DICHLOROETHYLENE, AND VINYL CHLORIDE; IRON, MANGANESE, THALLIUM, PCBC, CHRYSENE, BENSO (A)PYRENE, AND FIELD PARAMETERS (PH, SPECIFIC CONDUCTANCE, TURBIDITY, AND TEMPERATURE). FY99-06 TWO WELLS SAMPLED QUARTERLY & SIX WELLS SEMIANNUALLY. FY07 TWO WELLS SAMPLED QUARTERLY & SIX WELLS SEMIANNUALLY PLUS ONE MOD TO SITEWIDE PERMIT CIRCA FY08-27 EIGHT WELLS SAMPLED SEMIANNUALLY URANIUM, PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS, AND FIELD PARAMETERS. FY28 25% OF EIGHT WELLS SAMPLED SEMIANNUALLY URANIUM, PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS, AND FIELD PARAMETERS.	536	536	536	536	536	536	536	536	536	536	536	536	536	134		16,518
18	POST-CLOSURE CARE CERTIFICATION																-
TOTAL HOURS		838	838	872	974	838	838	838	872	974	838	838	838	872	202	-	27,752

CHECK 27,752

BECHTEL HANFORD Inc.
 ERC & PRIME CONTR (S/C, DIRECT WORK)
 Job Number / Charge #

ONE YEAR COST FOR
 300 AREA PROCESS TRENCHES CLOSURE / POST CLOSURE
 JOB NO. 22192-103 / R31FX2 YNA0

Date: 9/22/97
 By: JA LAPIERRE
 Chk'd: D LEONHARDT
 Rev.: 4

File: I: RealWin\ESTIMATE\1997\Closure\297\CLOSURE R4.sta\CLOSURE - ONE YEAR.S

Lead Estimator Appvl.: JA LAPIERRE FOR J. CHAPMAN

ITEM	Description	QTY	UN	Unit Costs			Labor Hours		Wage	Subtotals				SUBTOTAL	ADDITIONAL COSTS					TOTAL	
				Equip	MU	S/C	Unit Hr	Total Hr	\$/HR	Equip.	Material	Labor	S/C		MATL SALES TAX 8.00%	S/C OH&P 25%	DIRECT DISTRIBS 18.09%	G&A 4.04%	CONTINGENCY N/A		
CLOSURE ACTIVITIES:																					
1	OFF-SITE LAB ANALYSIS FOR VERIFICATION	6	EA			\$3,012.56								\$18,075	\$18,075		\$4,519	\$4,087	\$1,078		\$27,759
	SUBTOTAL													\$18,075	\$18,075	\$0	\$4,519	\$4,087	\$1,078		\$27,759
3	DATA EVALUATION																				
	DESIGN ENGINEER	BH	40	HRS			1	40	\$65.27					\$2,611	\$2,611			\$472	\$125		\$3,208
	EE/ES/MGT CHI (ALL CHI 31%)	CHI	60	HRS			1	60	\$53.69					\$3,221	\$3,221			\$583	\$154		\$3,958
	SUBTOTAL							100						\$5,832	\$5,832			\$1,055	\$279		\$7,166
4	FIELD MONITORING, SCREENING AND SAMPLING	1	LOT	\$999.69	\$925.64						\$1,000	\$926		\$1,926	\$1,926	\$74		\$362	\$95		\$2,457
	EE/ES/MGT CHI (ALL CHI 31%)	CHI	100	HRS			1	100	\$53.69					\$5,369	\$5,369			\$971	\$256		\$6,596
	SAFETY & HEALTH	ITH	10	HRS			1	10	\$73.86					\$739	\$739			\$134	\$35		\$908
	SUBTOTAL							110			\$1,000	\$926		\$6,108	\$6,108	\$74		\$1,467	\$386		\$9,961
5	EXCAVATION & MATERIAL HANDLING	3,187	LCY			\$12.55								\$40,000	\$40,000		\$10,000	\$9,045	\$2,385		\$61,430
	HEALTH PHYSICS TECH	HAMTC	600	HRS			1	600	\$48.67					\$29,202	\$29,202			\$5,283	\$1,393		\$35,878
	SAFETY & HEALTH	ITH	40	HRS			1	40	\$73.86					\$2,955	\$2,955			\$535	\$141		\$3,631
	ERDF TRANSPORT & DISPOSAL		3,187	LCY		\$48.99								\$156,145	\$156,145	INCLUDED		\$28,247	\$7,449		\$191,841
	ERDF TRANSPORT & DISPOSAL PROJ SUPT		238	HRS			1	238	\$52.08					\$12,410	\$12,410			\$2,245	\$592		\$15,247
	SUBTOTAL							878	\$174.61					\$44,567	\$196,145	\$240,712	\$10,000	\$45,355	\$11,960		\$308,027
6	BACKFILL & REGRADING	22,907	LCY			\$0.70								\$16,000	\$16,000		\$4,000	\$3,618	\$954		\$24,572
	SUBTOTAL													\$16,000	\$16,000		\$4,000	\$3,618	\$954		\$24,572
7	INDEPENDENT VERIFICATION OF CLOSURE	1	LOT			\$24,000.00								\$24,000	\$24,000		\$6,000	\$5,427	\$1,431		\$36,858
	SUBTOTAL													\$24,000	\$24,000		\$6,000	\$5,427	\$1,431		\$36,858

BECHTEL HANFORD Inc.		ONE YEAR COST FOR											Date: 9/22/97									
ERC & PRIME CONTR (S/C, DIRECT WORK)		300 AREA PROCESS TRENCHES CLOSURE / POST CLOSURE											By: JA LAPIERRE									
Job Number / Charge #		JOB NO. 22192-103 / R31FX2 YNA0											Chk'd: D LEONHARDT									
File: 1 Read/Writ ESTIMATE 297 Closure [297 CLOSURE R4 OBJECT HISTORY] - 25% YEAR \$		Lead Estimator Appvl.: JA LAPIERRE FOR J. CHAPMAN											Rev.: 4									
ITEM	Description	QTY	UN	Unit Costs			Labor Hours		Wage	Subtotals				SUBTOTAL	ADDITIONAL COSTS					TOTAL		
				Equip	Mtl	S/C	Unit Hr	Total Hr	\$/HR	Equip.	Material	Labor	S/C		MATL SALES TAX 8.00%	S/C OH&P 25%	DIRECT DISTRIBS 18.00%	G&A 4.04%	CONTINGENCY N/A			
CLOSURE ACTIVITIES:																						
2	PERMIT COMPLIANCE																					
	REGULATORY SUPPORT	CHI	50	HRS			1.00	50.00	\$53.69					2,884					\$406	\$128		\$3,298
	ENVIRONMENTAL ENGR	BHI	2	HRS			1.00	2.00	\$54.45					100					\$20	\$5		\$134
	SUBTOTAL							52.00						\$2,793					\$506	\$133		\$3,432
8	GROUNDWATER MONITORING	PNHL	134	HRS		\$2.34	\$59.81	1.00	134.00	\$96.73		\$314	\$12,962	\$8,015	\$21,291	INCLUDED	INCLUDED	N/A	N/A			\$21,291
	EIGHT WELLS SAMPLED SEMIANNUALLY, URANIUM, PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS O, 1,2-CIS-DICHLOROETHYLENE, AND VINYL CHLORIDE, IRON, MANGANESE, THALLIUM, PCB'S, CHRYSENE, BENSO (A)PYREN AND FIELD PARAMETERS (PH, SPECIFIC CONDUCTANCE, TURBIDITY, AND TEMPERATURE)																					
	SUBTOTAL							134.00				\$314	\$12,962	\$8,015	\$21,291							\$21,291
9	INSPECTION OF SUBSURFACE WELL CONDITIONS																					
	(MAINTENANCE WAS PERFORMED IN FY97, THEN ON \$ YR CYCLE. INSPECTION OF SUBSURFACE WELL CONDITIONS BEGINS IN FY98)																					
			2	WELL		\$258.63								\$517	\$517		\$129	\$117	\$31			\$794
	PLANNING & CONTROLS	BHI	0.25	HRS			1.00	0.25	\$52.08				\$13	\$13				\$2	\$1			\$16
	DESIGN ENGINEER	BHI	0.75	HRS			1.00	0.75	\$65.27				\$49	\$49				\$9	\$2			\$60
	ENVIRONMENT COMPLIANCE	BHI	1.00	HRS			1.00	1.00	\$61.36				\$61	\$61				\$11	\$3			\$78
	FIELD SUPPORT	BHI	0.75	HRS			1.00	0.75	\$47.66				\$36	\$36				\$7	\$2			\$45
	SAFETY & HEALTH	BHI	0.25	HRS			1.00	0.25	\$54.51				\$14	\$14				\$3	\$1			\$18
	HEAVY DRIVERS	HAMTC	0.50	HRS	\$15.52		1.00	0.50	\$36.01	\$8		\$8	\$18	\$26				\$5	\$1			\$32
	SUBTOTAL							3.50		\$8		\$8	\$191	\$517	\$716		\$129	\$154	\$41			\$1,040
10	QUARTERLY SITE INSPECTIONS (FY98)																					
	ENVIRONMENTAL ENGR	BHI	8	HRS			1.00	8	\$54.45				\$436	\$436				\$70	\$21			\$534
	ENVIRONMENT COMPLIANCE	BHI	4	HRS			1.00	4	\$61.36				\$245	\$245				\$44	\$12			\$301
	LIGHT TRUCK (AT 50% ENV. ENG TIME)		4	HRS		\$4.74							\$19	\$19			\$5	\$4	\$1			\$29
	SUBTOTAL							12				\$881	\$19	\$706		\$5	\$127	\$34				\$866

POST CLOSURE - ONE YEAR \$

BECHTEL HANFORD Inc.

ERC & PRIME CONTR (S/C, DIRECT WORK)

Job Number / Charge #

File: F:\Road\Write\ESTIMATE\297 Closure\297 CLOSURE R4.sls\POST CLOSURE - ONE YEAR \$

ONE YEAR COST FOR
300 AREA PROCESS TRENCHES CLOSURE / POST CLOSURE
JOB NO. 22192-103 / R31FX2 YNA0

Lead Estimator Appvl.: JA LAPIERRE FOR J. CHAPMAN

Date: 9/22/97
By: JA LAPIERRE
Chk'd: D LEONHARDT
Rev.: 4

ITEM	Description	QTY	UN	Unit Costs			Labor Hours		Wage \$/HR	Subtotals				SUBTOTAL	ADDITIONAL COSTS					TOTAL
				Equip	MU	S/C	Unit Hr	Total Hr		Equip.	Material	Labor	S/C		MATL SALES TAX 8.00%	S/C OH&P 25%	DIRECT DISTRIBS 18.09%	G&A 4.04%	CONTINGENCY N/A	
POST CLOSURE ACTIVITIES:																				
11	SITE RESTORATION (REVEGETATION)	484,600	SF			\$0.03							\$15,507	\$15,507		\$3,877	\$3,507	\$925		\$23,816
	SUBTOTAL												\$15,507	\$15,507	\$0	\$3,877	\$3,507	\$925		\$23,816
12	INSPECTION OF SUBSURFACE WELL CONDITIONS	8	WELLS			\$256.63							\$2,069	\$2,069		\$517	\$468	\$123		\$3,177
	PLANNING & CONTROLS	1	HRS				1.00	1	\$52.08					\$52	\$52		\$9	\$2		\$63
	DESIGN ENGINEER	3	HRS				1.00	3	\$65.27					\$196	\$196		\$35	\$9		\$240
	ENVIRONMENT COMPLIANCE	4	HRS				1.00	4	\$61.36					\$245	\$245		\$44	\$12		\$301
	FIELD SUPPORT	3	HRS				1.00	3	\$47.68					\$143	\$143		\$26	\$7		\$178
	SAFETY & HEALTH	1	HRS				1.00	1	\$54.51					\$55	\$55		\$10	\$3		\$68
	HEAVY DRIVERS	2	HRS	\$15.52			1.00	2	\$36.01	\$31				\$72	\$103		\$19	\$5		\$127
	SUBTOTAL							14		\$31		\$763	\$2,069	\$2,863		\$517	\$611	\$161		\$4,152
13	GROUNDWATER WELL MAINTENANCE	8	WELLS			\$4,333.00							\$34,664	\$34,664		\$8,666	\$7,636	\$2,067		\$53,235
	PLANNING & CONTROLS	2	HRS				1.00	2	\$52.08					\$104	\$104		\$19	\$5		\$128
	DESIGN ENGINEER	4	HRS				1.00	4	\$65.27					\$261	\$261		\$47	\$12		\$320
	ENVIRONMENTAL ENGR	4	HRS				1.00	4	\$54.45					\$218	\$218		\$39	\$10		\$267
	FIELD SUPPORT	16	HRS				1.00	16	\$47.68					\$763	\$763		\$136	\$36		\$937
	SAFETY & HEALTH	2	HRS				1.00	2	\$54.51					\$109	\$109		\$20	\$5		\$134
	HEAVY DRIVERS	6	HRS	\$15.52			1.00	6	\$36.01	\$93				\$216	\$309		\$56	\$15		\$380
	SUBTOTAL							34		\$93		\$1,671	\$34,664	\$36,428		\$8,666	\$8,157	\$2,150		\$55,401
14	COST ESTIMATE FOR POST-CLOSURE																			
	MONITORING & MAINTENANCE																			
	PLANNING & CONTROLS	32	HRS				1.00	32	\$52.08					\$1,667	\$1,667		\$302	\$80		\$2,049
	SUBTOTAL							32						\$1,667	\$1,667		\$302	\$80		\$2,049
15	QUARTERLY SITE INSPECTIONS																			
	ENVIRONMENTAL ENGR	32	HRS				1.00	32	\$54.45					\$1,742	\$1,742		\$315	\$83		\$2,140
	ENVIRONMENT COMPLIANCE	16	HRS				1.00	16	\$61.36					\$982	\$982		\$176	\$47		\$1,207
	LIGHT TRUCK (AT 50% ENV ENG TIME)	16	HRS			\$4.74								\$76	\$76		\$19	\$5		\$117
	SUBTOTAL							48						\$2,724	\$2,800		\$519	\$135		\$3,464
16A	PERMIT COMPLIANCE (FY00 THROUGH FY27)																			
	REGULATORY SUPPORT	200	HRS				1.00	200	\$53.69					\$10,737	\$10,737		\$1,942	\$512		\$13,191
	ENVIRONMENTAL ENGR	8	HRS				1.00	8	\$54.45					\$436	\$436		\$78	\$21		\$536
	SUBTOTAL							208						\$11,173	\$11,173		\$2,021	\$533		\$13,727
16B	PERMIT COMPLIANCE ADDER, RE-ASSESS MODIFIED																			
	CLOSURE OPTION (FY03, 06, 13, 18, 23)																			
	PLANNING & CONTROLS	80	HRS				1.00	80	\$52.08					\$4,166	\$4,166		\$754	\$199		\$5,119
	ENVIRONMENT COMPLIANCE	20	HRS				1.00	20	\$61.36					\$1,227	\$1,227		\$222	\$59		\$1,508
	PROJECT MANAGEMENT	10	HRS				1.00	10	\$75.40					\$755	\$755		\$137	\$36		\$928
	QUALITY ASSURANCE	5	HRS				1.00	5	\$56.43					\$282	\$282		\$51	\$13		\$348
	ADMINISTRATIVE SERVICES	16	HRS				1.00	16	\$29.86					\$475	\$475		\$86	\$23		\$584
	LEGAL	5	HRS				1.00	5	\$72.83					\$364	\$364		\$66	\$17		\$447
	SUBTOTAL							136						\$7,269	\$7,269		\$1,316	\$347		\$8,832

POST CLOSURE - ONE YEAR \$

BECHTEL HANFORD Inc.
 ERC & PRIME CONTR (S/C, DIRECT WORK)
 Job Number / Charge #

ONE YEAR COST FOR
 300 AREA PROCESS TRENCHES CLOSURE / POST CLOSURE
 JOB NO. 22192-103 / R31FX2 YNA0

Date: 9/22/97
 By: JA LAPIERRE
 Chk'd: D LEONHARDT
 Rev.: 4

File: F:\ReadWrite\ESTIMATE\297 Closure\297 CLOSURE R4.sh\POST CLOSURE - ONE YEAR \$

Lead Estimator Appvl.: JA LAPIERRE FOR J. CHAPMAN

ITEM	Description	QTY	UN	Unit Costs			Labor Hours		Wage	Subtotals				SUBTOTAL	ADDITIONAL COSTS					TOTAL																
				Equip	Mil	S/C	Unit Hr	Total Hr	\$/HR	Equip.	Material	Labor	S/C		MATL SALES TAX 8.00%	S/C OH&P 25%	DIRECT DISTRIBS 18.00%	G&A 4.04%	CONTINGENCY N/A																	
POST CLOSURE ACTIVITIES:																																				
17A	GROUNDWATER MONITORING (FY99-06) PNHL TWO WELLS SAMPLED QUARTERLY AND SIX WELLS SAMPLED SEMIANNUALLY URANIUM, PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS, AND FIELD PARAMETERS	570	HRS		\$2 20	\$48.46	1 00	570	\$96.73		\$1,255	\$55,134	\$27,624	\$84,013	INCLUDED	INCLUDED	N/A	N/A		\$84,013																
	SUBTOTAL						570				\$1,255	\$55,134	\$27,624	\$84,013						\$84,013																
17B	GROUNDWATER MONITORING (FY07) PNHL TWO WELLS SAMPLED QUARTERLY AND SIX WELLS SAMPLED SEMIANNUALLY URANIUM, PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS, AND FIELD PARAMETERS PLUS ONE MOD TO SITEWIDE PERMIT CIRCA	702	HRS		\$1 79	\$39.35	1 00	702	\$131.68		\$1,255	\$92,442	\$27,624	\$121,321	INCLUDED	INCLUDED	N/A	N/A		\$121,321																
	SUBTOTAL						702				\$1,255	\$92,442	\$27,624	\$121,321						\$121,321																
17C	GROUNDWATER MONITORING (FY08-27) PNHL EIGHT WELLS SAMPLED SEMIANNUALLY URANIUM, PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS, AND FIELD PARAMETERS	536	HRS		\$2 34	\$42.28	1 00	536	\$96.73		\$1,255	\$51,846	\$22,660	\$75,761	INCLUDED	INCLUDED	N/A	N/A		\$75,761																
	SUBTOTAL						536				\$1,255	\$51,846	\$22,660	\$75,761						\$75,761																
18	POST-CLOSURE CARE CERTIFICATION CERTIFICATION SUBCONTRACT	1	LOT			\$27,760.00							\$27,760	\$27,760		\$6,940	\$6,277	\$1,655		\$42,632																
	SUBTOTAL												\$27,760	\$27,760		\$6,940	\$6,277	\$1,655		\$42,632																

BECHTEL HANFORD Inc.
 ERC & PRIME CONTR (S/C, DIRECT WORK)
 Job Number / Charge #

ONE YEAR COST FOR
 300 AREA PROCESS TRENCHES CLOSURE / POST CLOSURE
 JOB NO. 22192-103 / R31FX2 YNA0

Date: 9/22/97
 By: JA LAPIERRE
 Chk'd: D LEONHARDT
 Rev.: 4

File: F:\ReadWrite\SI\MAH\297 Closure\297 Closure R4.s\POST CLOSURE - 25% YEAR \$

Lead Estimator Appvl.: JA LAPIERRE FOR J CHAPMAN

ITEM	Description	QTY	UN	Unit Costs			Labor Hours		Wage	Subtotals				SUBTOTAL	ADDITIONAL COSTS					TOTAL		
				Equip	Mtl	S/C	Unit Hr	Total Hr	\$/HR	Equip.	Material	Labor	S/C		MATL SALES TAX 8.00%	S/C OH&P 25%	DIRECT DISTRIBS 18.09%	G&A 4.04%	CONTINGENCY N/A			
POST CLOSURE ACTIVITIES:																						
15	QUARTERLY SITE INSPECTIONS (FY28)																					
	ENVIRONMENTAL ENGR	BHI	8	HRS			1	00	8	\$54.45			\$436		\$436					\$70	\$21	\$536
	ENVIRONMENT COMPLIANCE	BHI	4	HRS			1	00	4	\$61.36			\$245		\$245					\$44	\$12	\$301
	LIGHT TRUCK (AT 50% ENV ENG TIME)		4	HRS									\$19		\$19				\$5	\$4	\$1	\$29
	SUBTOTAL								12				\$681	\$19	\$700				\$5	\$127	\$34	\$866
17C	GROUNDWATER MONITORING (FY28)	PNNL	134	HRS		\$2.34	\$42.28	1.00	134	\$96.73		\$314	\$12,962	\$5,665	\$18,941	INCLUDED	INCLUDED	N/A	N/A			\$18,941
	EIGHT WELLS SAMPLED SEMIANNUALLY URANIUM, PERCHLOROETHYLENE AND ITS DEGRADATION PRODUCTS, AND FIELD PARAMETERS																					
	SUBTOTAL								134			\$314	\$12,962	\$5,665	\$18,941							\$18,941

BECHTEL HANFORD Inc.
 ERC & PRIME CONTR (S/C, DIRECT WORK)
 Job Number / Charge #

ONE YEAR COST FOR
 300 AREA PROCESS TRENCHES CLOSURE / POST CLOSURE
 JOB NO. 22192-103 / R31FX2 YNA0

Date: 9/22/97
 By: JA LAPIERRE
 Chk'd: D LEONHARDT
 Rev.: 4

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Lead Estimator Appvl.: JA LAPIERRE FOR J. CHAPMAN

ITEM	Description	QTY	UN	Unit Costs			Labor Hours		Wage	Subtotals				SUBTOTAL	ADDITIONAL COSTS					TOTAL
				Equip	MU	S/C	Unit Hr	Total Hr	\$/HR	Equip.	Material	Labor	S/C		MATL SALES TAX	S/C OH&P	DIRECT DISTRIBS	G&A	CONTINGENCY	
														8.00%	25%	18.00%	4.04%	N/A		
POST CLOSURE ACTIVITIES:																				
12	INSPECTION OF SUBSURFACE WELL CONDITIONS (FY98)	8	WELLS			\$258.63							\$1,552	\$1,552		\$388	\$351	\$93		\$2,384
	PLANNING & CONTROLS	0.75	HRS				1.00	0.75	\$52.08				\$39	\$39			\$7	\$2		\$48
	DESIGN ENGINEER	2.25	HRS				1.00	2.25	\$65.27				\$147	\$147			\$27	\$7		\$181
	ENVIRONMENT COMPLIANCE	3.00	HRS				1.00	3.00	\$61.30				\$184	\$184			\$33	\$9		\$226
	FIELD SUPPORT	2.25	HRS				1.00	2.25	\$47.88				\$107	\$107			\$19	\$5		\$131
	SAFETY & HEALTH	0.75	HRS				1.00	0.75	\$54.51				\$41	\$41			\$7	\$2		\$50
	HEAVY DRIVERS	1.50	HRS	\$15.52			1.00	1.50	\$38.01	\$23			\$54	\$77			\$14	\$4		\$95
	SUBTOTAL							10.50		\$23			\$572	\$1,552	\$2,147	\$388	\$458	\$122		\$3,115
15	QUARTERLY SITE INSPECTIONS (FY98)																			
	ENVIRONMENTAL ENGR	24	HRS				1.00	24	\$54.45				\$1,307	\$1,307			\$238	\$62		\$1,605
	ENVIRONMENT COMPLIANCE	12	HRS				1.00	12	\$61.38				\$738	\$738			\$133	\$35		\$904
	LIGHT TRUCK (AT 50% ENV. ENG. TIME)	12	HRS			\$4.74							\$57	\$57		\$14	\$13	\$3		\$87
	SUBTOTAL							36					\$2,043	\$57	\$2,100	\$14	\$382	\$100		\$2,596
16A	PERMIT COMPLIANCE (FY98)																			
	REGULATORY SUPPORT	150	HRS				1.00	150	\$53.69				\$8,053	\$8,053			\$1,457	\$384		\$9,874
	ENVIRONMENTAL ENGR	8	HRS				1.00	8	\$54.45				\$327	\$327			\$59	\$18		\$402
	SUBTOTAL							156					\$8,380	\$8,380			\$1,516	\$400		\$10,296
17A	GROUNDWATER MONITORING (FY98)	402	HRS		\$2.34	\$59.81	1.00	402.00	\$96.73		\$941	\$38,885	\$24,044	\$63,870	INCLUDED	INCLUDED	N/A	N/A		\$63,870
	EIGHT WELLS SAMPL'D SEMIANNUALLY FOR URANIUM, PERCHLOROE THYLENE AND ITS DE GRADATION PRODUCTS (1,2-CIS-DICHLOROETHYLENE, AND VINYL CHLORIDE, IRON, MANGANESE, THALLIUM, PCB/C, CHRYSENE, BENSO (A)PYRE AND FIELD PARAMETERS (PH, SPECIFIC CONDUCTANCE, TURBIDITY, AND TEMPERATURE)																			
	SUBTOTAL							402.00			\$941	\$38,885	\$24,044	\$63,870						\$63,870

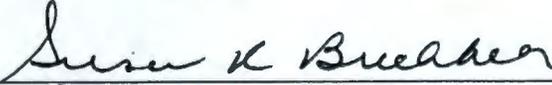
**CERTIFICATION OF THE PROJECTIONS OF ANTICIPATED CLOSURE AND
POSTCLOSURE COSTS FOR TREATMENT, STORAGE, AND/OR DISPOSAL UNITS,
IN ACCORDANCE WITH
CONDITION I.F. OF THE HANFORD FACILITY
RESOURCE CONSERVATION AND RECOVERY ACT PERMIT,
DANGEROUS WASTE PORTION, REVISION 3A**

PROJECTIONS OF ANTICIPATED COSTS FOR CLOSURE AND/OR POSTCLOSURE
FOR
TREATMENT, STORAGE, AND/OR DISPOSAL UNITS INCLUDED IN THE HANFORD FACILITY
RESOURCE CONSERVATION AND RECOVERY ACT PERMIT, DANGEROUS WASTE PORTION,
REVISION 3A

CERTIFICATION

The following certification, required by WAC 173-303-810(13), is hereby included:

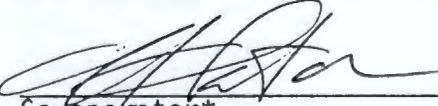
I certify under penalty of law that this document and all attachments/enclosures were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Owner/Operator
John D. Wagoner, Manager
U.S. Department of Energy
Richland Operations Office

10/31/97

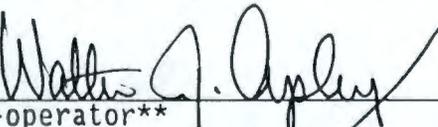
Date



Co-operator*
Henry J. Hatch, President
Fluor Daniel Hanford, Inc.

10/29/97

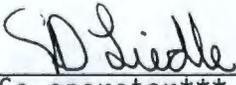
Date



Co-operator**
William J. Madia, Director
Pacific Northwest National Laboratory

10/30/97

Date



Co-operator***
Steve D. Liedle, President
Bechtel Hanford, Inc.

10/28/97

Date

- Fluor Daniel Hanford, Inc. has responsibilities for the following treatment, storage, and/or disposal (TSD) units on the Hanford Facility and is signing for the information on these TSD units only: 616 Nonradioactive Dangerous Waste Storage Facility, PUREX Storage Tunnels, 300 Area Solvent Evaporator, 2727-S Storage Facility, 218-E-8 Borrow Pit Demolition Site, 200 West Area Ash Pit Demolition Site, 2101-M Pond, 216-B-3 Expansion Ponds, Hanford Patrol Academy Demolition Sites, 105-DR Large Sodium Fire Facility, 304 Concretion Facility, 4843 Alkali Metal Storage Facility, 3718-F Alkali Metal Treatment and Storage Area, and 303-K Storage Facility.
- Pacific Northwest National Laboratory (Pacific Northwest) has responsibility for the following Hanford Facility TSD units and is signing for the information on these TSD units only: 305-B Storage Facility, Simulated High-Level Waste Slurry Treatment and Storage, and groundwater monitoring costs for the 183-H Solar Evaporation Basins and the 300 Area Process Trenches, based on the current version of the closure/postclosure plans (Attachments 11 and 31 to the Hanford Facility RCRA Permit, DW portion).
- Bechtel Hanford, Inc. has responsibility for the following Hanford Facility TSD units and is signing for the information on these TSD units only, excluding the groundwater monitoring conducted by Pacific Northwest: 183-H Solar Evaporation Basins, and 300 Area Process Trenches.

CORRESPONDENCE DISTRIBUTION COVERSHEET

Author

Addressee

Correspondence No.

J. E. Rasmussen, RL
 W. D. Adair, FDH
 F. A. Ruck, FDH, 376-9876
 (D. B. Jensen, WMH, 373-9327)

M. N. Jaraysi, Ecology

Incoming:9760569

Xref: FDH-9759283.1

Xref: WMH-9759283

Page 1 of 2

Subject: PROJECTIONS OF ANTICIPATED COSTS FOR CLOSURE AND/OR POSTCLOSURE FOR HANFORD FACILITY TREATMENT, STORAGE, AND/OR DISPOSAL UNITS

DISTRIBUTION

Approval	Date	Name	Location	w/att
		Correspondence Control	A3-01	X
		<u>Fluor Daniel Hanford, Inc.</u>		
		W. D. Adair	H6-21	
		T. J. Harper	H8-69	
		C. G. Mattsson	N1-26	
		E. S. McGinley, II	H8-68	
		L. J. Olguin	N1-26	
		S. M. Price	H6-23	X
		F. A. Ruck, III	H6-22	X
		M. C. Skriba	H8-68	
		W. E. Toebe	H6-22	
		L. K. Trent	H8-67	
		A. M. Umek	S7-40	
		N. H. Williams	R3-11	
		B. D. Williamson	B3-15	X
		SMP File/LB	H6-23	X
		<u>B&W Hanford Company</u>		
		T. A. Dillhoff	N2-57	X
		K. A. Hadley	R3-56	
		G. J. LeBaron	S6-15	X
		E. F. Loika	N2-51	
		I. L. Metcalf	L6-26	
		D. E. Rasmussen	N1-47	X
		J. A. Remaize	L6-26	X
		S. W. Scott	N2-57	
		C. D. Sorensen	R3-56	
		J. M. Steffen	N1-47	
		<u>DE&S Hanford, Inc.</u>		
		P. G. LeRoy	R3-11	
		D. J. Watson	X3-79	X
		<u>DynCorp</u>		
		B. J. Dixon	B4-20	X
		L. S. McDaniel	H5-33	

The enclosure to this letter is the same as the attachment to letter WMH-9759283.

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CORRESPONDENCE DISTRIBUTION COVERSHEET

Author
 J. E. Rasmussen, RL
 W. D. Adair, FDH
 (D. B. Jensen, WMH)

Addressee
 M. N. Jaraysi, Ecology

Correspondence No.
 Incoming:9760569
 Xref:WMH-9759283.1
 Xref: WMH-9759283

Page 2 of 2

Subject: PROJECTIONS OF ANTICIPATED COSTS FOR CLOSURE AND/OR POSTCLOSURE FOR
 HANFORD FACILITY TREATMENT, STORAGE, AND/OR DISPOSAL UNITS

DISTRIBUTION

Approval	Date	Name	Location	w/att
		<u>Lockheed Martin Hanford Corporation</u>		
		D. J. Carrell	R1-51	X
		B. G. Erlandson	R2-36	X
		E. E. Mayer	H5-24	
		<u>Lockheed Martin Services, Inc.</u>		
		EDMC	H6-08	X
		Hanford Fac. Oper. Rec.	H6-08	X
		<u>Numatec Hanford Corporation</u>		
		A. R. Hawkins	B3-55	
		R. A. Kaldor	H5-25	X
		<u>Waste Management Federal Services of Hanford Inc.</u>		
		E. S. Aromi	H6-30	
		B. M. Barnes	T4-04	X
		R. C. Bowman	H6-24	
		R. H. Engelmann	H6-26	
		R. J. Giroir	T4-05	
		D. B. Jensen	H6-26	X
		J. McCoy	H6-21	
		K. M. McDonald	T4-04	X
		D. L. Renberger	T3-03	
		J. C. Sonnichsen	H6-24	
		J. A. Winterhalder	H6-21	X
		M. T. Yasdick	H6-10	
		DBJ File/LB	H6-26	X

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 WMH-9759283.