0060694

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

OCT 23 2003

04-RCA-0015

Mr. Michael A. Wilson, Program Manager
Nuclear Waste Program
State of Washington
Department of Ecology
1315 W. Fourth Avenue
Kennewick, Washington 99336

Dear Mr. Wilson:

FISCAL YEAR 2003 PROJECTIONS OF ANTICIPATED COSTS FOR CLOSURE AND/OR POSTCLOSURE FOR HANFORD FACILITY TREATMENT, STORAGE, AND/OR DISPOSAL (TSD) UNITS

Enclosed is the subject annual report submitted to meet the October 31, 2003, compliance due date established in Conditions II.H.1. and II.H.2. of the Hanford Facility Resource Conservation and Recovery Act (HF RCRA) Permit, Dangerous Waste Portion. No new TSD units were incorporated into the HF RCRA Permit, Dangerous Waste Portion, during the reporting period. One TSD unit was closed. Consistent with guidance offered in the HF RCRA Permit Handbook, Condition II.H.1, Item 4, TSD units that have been accepted as being "clean closed" by Ecology are not included in this report. If you have any questions, please contact Anthony C. McKarns, Regulatory Compliance and Analysis Division, on (509) 376-8981.

Sincerely,

Joel Hebdon

Joel Hebdon, Director
Regulatory Compliance and Analysis Division

Enclosure

cc: See page 2

cc w/encl:
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Co-Operators' Signature Page

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Roby D. Enge, Director
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ENCLOSURE

Fiscal Year 2003 Projections of Anticipated Costs for Closure and/or Postclosure
for Hanford Facility Treatment, Storage, and/or Disposal Units

including

Table 1,
Status of Treatment, Storage, and/or Disposal Units
in the Hanford Facility Resource Conservation and Recovery Act Permit,
Dangerous Waste Portion, Revision 6

Consisting of 7 pages, including this coversheet

FISCAL YEAR 2003 PROJECTIONS OF ANTICIPATED COSTS FOR CLOSURE AND/OR POSTCLOSURE FOR HANFORD FACILITY TREATMENT, STORAGE, AND/OR DISPOSAL UNITS

INTRODUCTION AND BACKGROUND

The Hanford Facility Resource Conservation and Recovery Act Permit (HF RCRA Permit), Dangerous Waste Portion (DW Portion), Conditions II.H.1 and II.H.2, require an annual report updating projections of anticipated costs for closure, postclosure, and postclosure monitoring and maintenance for treatment, storage, and/or disposal (TSD) units incorporated into Part III, Part V, or Part VI of the HF RCRA Permit.

The organization of this annual report is consistent with the approach approved by Mr. Moses N. Jarayssi, who represented the Washington State, Department of Ecology (Ecology) at the October 3, 1995, HF RCRA Permit Steering Committee Meeting, and confirmed by an Ecology memo dated January 12, 1996. This approach entails the estimated cost of closure and/or postclosure of the 14 TSD units currently in the HF RCRA Permit, DW Portion, Revision 6, and are categorized as follows. For purposes of analysis, each unit is assigned to one of the following five categories:

- Anticipated closure cost projection has been submitted for a TSD unit in a previous annual report; no significant change in the approach to closure has been made following that submittal; and the cost projection includes an escalation factor applied to the dollar figure reported in the previous annual report;

- Anticipated closure cost projection has been submitted for a TSD unit in a previous annual report and a significant change in the approach to closure has been made following that submittal, warranting a full cost projection revision;

- Clean closure certification documentation has been submitted for a TSD unit; however, administrative or indefinite (referred to as 'other') costs remain;

- Clean closure certification documentation has been submitted for a TSD unit and no additional costs remain. An update of an anticipated closure cost projection is no longer needed;

- No anticipated closure cost projection has been submitted previously for a TSD unit; a new cost projection is provided.

Table 1 delineates which TSD units fall into each of these categories. The second and last categories are combined into the column entitled "New Estimate Provided". Previous annual reports can be reviewed for historical information.

DEVELOPMENT DESCRIPTION

For the following discussion, refer to Table 1 of this annual report. Please note that any projections of anticipated costs are estimates and are based on knowledge that is current during issuance of this annual report. Projections of anticipated costs could change in subsequent annual reports based on change in any of the following: completion of identified work, costs of labor and materials, negotiated closure strategy, Hanford Site budgetary priorities, or new or expanded knowledge of estimates reported in previous annual reports.

The Permittees co-operating a TSD unit with the U.S. Department of Energy, Richland Operations Office, appear in parentheses following the name of the TSD unit for which that Permittee had management responsibilities as of September 30, 2003: i.e., Bechtel Hanford Inc. (BHI), CH2M Hill Hanford Group, Inc. (CHG), Fluor Hanford (FH), or Pacific Northwest National Laboratory (Pacific Northwest). Note that the permittee designations for the individual TSD units could have changed to accommodate reorganized contractual responsibilities.

There are no new units to report for fiscal year (FY) 2003. There are 12 'escalation only' projections 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 changed. As in years past, one TSD unit has the entire estimate deferred until a future date.

In addition to the projection of anticipated costs discussed, 14 TSD units currently incorporated into the HF RCRA Permit have been accepted by Ecology as closed. No further costs are anticipated; therefore, no costs are presented in this report. Additionally, if the TSD unit was presented in a previous annual report with no further costs pending, the separate report on that individual TSD unit is no longer provided in the annual report. Consistent with guidance offered in the Hanford Facility RCRA Permit Handbook, Condition II.H.1, Item 4, TSD units that have been accepted as being "clean closed" by Ecology are not included in this report.

Each of the anticipated closure and/or postclosure cost projections has been reviewed by BHI, CHG, FH, and Pacific Northwest for the respective TSD units managed.

UPDATING OF PROJECTIONS OF ANTICIPATED CLOSURE AND/OR POSTCLOSURE COSTS

Projections of anticipated closure and/or postclosure costs that are updated with an escalation factor are based on previously submitted cost estimates and the latest revision of the closure and/or postclosure plans, adjusted for inflation for FY 2003. The escalation factor does not take into account changes in specific cost elements included in previous estimates; it is an overall factor applied to the total of the previous estimate. Projections of anticipated costs also are updated if a change to the closure and/or postclosure plan affects the cost of closing the unit. These projections are 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. The escalation factor provided for FY 2003 is 2.7 percent. The cost estimates have been rounded to three significant figures to reflect the appropriate level of accuracy.

Table 1: Status of Treatment, Storage, and/or Disposal Units in the Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion, Conditions II.H.1. and H.2., Revision 6.					
TSD Unit Name (Managing Subcontractor)	**Previously Provided; Escalation Factor Only**	**New Estimate Provided (Combined Category)**	**Administrative or Other Costs Remaining**	**Clean-Closed (CY); No Estimate Needed**	**Closure and/or Postclosure Costs (dollars) Based on FY 2003**
Part III, Chapter 2: 305-B Storage Facility (Pacific Northwest)	X				3,790,000
Part III, Chapter 3: PUREX Storage Tunnels (FH)			X		0
Part III, Chapter 4: LERF (FH)	X				5,320,000
Part III, Chapter 4: 200 Area ETF (FH)	X				
Part III, Chapter 5: 242-A Evaporator (CHG)	X				1,160,000
Part III, Chapter 6: 325 Hazardous Waste Treatment Units (Pacific Northwest)	X				7,910,000
Part V, Chapter 10: 105-DR Large Sodium Fire Facility (BHI)	X				275,000
Part V, Chapter 14: 303-K Storage Facility (FH)				X (2003)	0

Table 1: Status of Treatment, Storage, and/or Disposal Units in the Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion, Conditions II.H.1. and H.2., Revision 6.					
TSD Unit Name (Managing Subcontractor)	**Previously Provided; Escalation Factor Only**	**New Estimate Provided (Combined Category)**	**Administrative or Other Costs Remaining**	**Clean-Closed (CY); No Estimate Needed**	**Closure and/or Postclosure Costs (dollars) Based on FY 2003**
Part V, Chapter 16: 1325-N Liquid Waste Disposal Facility (BHI) Costs combined with 1301-N	X				30,100,000
Part V, Chapter 17: 1301-N Liquid Waste Disposal Facility (BHI)	X				
Part V, Chapter 18: 1324-N Surface Impoundment (BHI) Costs combined with 1324-NA	X				1,790,000[1]
Part V, Chapter 19: 1324-NA Percolation Pond (BHI)	X				
Part VI, Chapter 1: 300 Area Process Trenches (FH)	X				3,200,000
Part VI, Chapter 2: 183-H Solar Evaporation Basins (FH)	X				1,960,000
TOTAL					55,505,000

[1] The 1324-N/NA estimate only includes postclosure costs.

PART III, CHAPTER 2: 305-B STORAGE FACILITY

The closure strategy/approach has not changed. The total cost for closure is estimated to be approximately $3.79 million (2003 dollars).

PART III, CHAPTER 3: PLUTONIUM-URANIUM EXTRACTION PLANT STORAGE TUNNELS

The closure strategy for this TSD unit has not been finalized and is expected to occur during decommissioning and decontamination (D&D) of the Plutonium-Uranium Extraction (PUREX) Plant. As agreed with Ecology, the PUREX Storage Tunnels projection of anticipated costs is deferred until a future date when a definitive closure strategy is developed. When these costs become available, costs will be included in a future annual report.

PART III, CHAPTER 4: LIQUID EFFLUENT RETENTION FACILITY

The closure strategy/approach has not changed. The total estimated costs for closure do not include the cost to operate the 200 Area Effluent Treatment Facility to treat waste generated during Liquid Effluent Retention Facility closure activities. The total cost for closure is estimated to be approximately $3.96 million (2003 dollars).

PART III, CHAPTER 4: 200 AREA EFFLUENT TREATMENT FACILITY

The closure strategy/approach has not changed. The total cost for closure is estimated to be approximately $1.36 million (2003 dollars).

PART III, CHAPTER 5: 242-A EVAPORATOR

The closure strategy/approach has not changed. The total cost for closure is estimated to be approximately $1.16 million (2003 dollars).

PART III, CHAPTER 6: 325 HAZARDOUS WASTE TREATMENT UNITS

The closure strategy/approach has not changed. The total cost for closure is estimated to be approximately $7.91 million (2003 dollars).

PART V, CHAPTER 10: 105-DR LARGE SODIUM FIRE FACILITY

D&D activities began in FY 1999 with D&D of the 116-DR Exhaust Stack. Interim safe storage of the 105-DR Reactor Building will be completed in FY 2003. Remaining D&D activities at the LSFF must be completed by September 2005, in accordance with the 105-DR Action Memorandum. The estimate includes activities associated with completion of D&D and to support certification of closure. The cost to complete closure activities is estimated at $275,000 (2003 dollars).

PART V, CHAPTER 14: 303-K STORAGE FACILITY

The clean closure certification and professional engineer's certification of closure were sent to Ecology on July 18, 2003. An acknowledgment of receipt and verification that Ecology accepted the closure was date stamped on July 22, 2003, and was received on August 5, 2003.

PART V, CHAPTERS 16 & 17: 1325-N AND 1301-N LIQUID WASTE DISPOSAL FACILITIES

The 1301-N and 1325-N Liquid Waste Disposal Facilities closure/postclosure plan was approved and incorporated into the HF RCRA Permit during FY 1999. Closure activities are ongoing. The plan calls for completion of closure activities at 1301-N and 1325-N, followed by a 30-year postclosure period.

Postclosure activities include periodic assessments and groundwater monitoring. Institutional controls will be required during the postclosure period. The total cost of closure and postclosure activities is estimated at approximately $30.1 million (2003 dollars).

PART V, CHAPTERS 18 & 19: 1324-N SURFACE IMPOUNDMENT AND 1324-NA PERCOLATION POND

The 1324-N Surface Impoundment and 1324-NA Percolation Pond closure/postclosure plan was approved and incorporated into the HF RCRA Permit during FY 1999. The 1324-N and 1324-NA sites were backfilled in FY 2003. The Certification of Closure was submitted to Ecology in February 2003.

Postclosure activities include periodic assessments and groundwater monitoring for 30 years. The postclosure estimate includes costs for groundwater monitoring, groundwater well inspection and maintenance, and Permit compliance activities. The total cost of postclosure activities is estimated at approximately $1.79 million (2003 dollars).

PART VI, CHAPTER 1: 300 AREA PROCESS TRENCHES

The 300 Area Process Trenches modified closure/postclosure plan was approved and incorporated into the HF RCRA Permit in FY 1997. In May 1998, closure activities at the 300 Area Process Trenches were completed, and postclosure began. Postclosure will continue for a 30-year period, culminating in postclosure certification in FY 2028. The cost of remaining postclosure activities is estimated at $3.20 million (2003 dollars).

PART VI, CHAPTER 2: 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. Postclosure activities are scheduled to be completed in FY 2027 and will culminate in postclosure certification. 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 (beginning in FY 2003). The total cost for the remaining postclosure activities is estimated at approximately $1.96 million (2003 dollars).