

U.S. Department of Energy Hanford Site

MAY 22 2003

03-FMD-0241

Mr. Todd Martin, Chair Hanford Advisory Board 1933 Jadwin Avenue, Suite 135 Richland, Washington 99352

Dear Mr. Martin:

RESPONSE TO HANFORD BUDGET PROCESS ADVICE

Thank you for the advice letter (#147) dated April 4, 2003, same subject as above. We recognize your concerns regarding the changed budget process at the U.S. Department of Energy (DOE). As you know, in the last few years, the Department has fundamentally changed the way it does business in the Environmental Management (EM) Program. Through the EM Top to Bottom Review and the development of Performance Management Plans (PMP), we have developed a long-term plan for cleanup. The DOE Richland Operations Office (RL) and Office of River Protection (ORP) prioritization of work is based upon the Hanford PMP strategic initiatives.

These initiatives flow down to RL and ORP cleanup contracts in the form of performance incentives that meet or beat Tri-Party Agreement milestones. Contractors develop detailed lifecycle baselines that allow them to achieve the performance incentives and have the responsibility to manage their funds accordingly. The work is not re-planned each year. The annual budget requests flow from the lifecycle baselines. These baselines are under configuration control by the Assistant Secretary for EM.

This change in philosophy has been discussed with the HAB and the Regulators in the past year. It is recognized that because of the change in DOE business practices that the Tri-Party Agreement Paragraphs 148 and 149 need to be updated. DOE has been meeting with the Regulators to discuss the current budget process and the tools available to support regulatory oversight consistent with the intent of the Tri-Party Agreement.

If you have questions, you may contact us, or your staff may contact Bob Tibbatts, Director, RL Financial Management Division, at (509) 376-8669, or Kevin Ensign, Director, ORP Office of Project Administration at (509) 373-9555. Answers to your specific requests for information are attached.

Kenh A. Klein, Manager Richland Operations Office Roy J. Schepens, Manager

Attachment

Mr. Todd Martin 03-FMD-0241

cc w/attach:

K. S. Ballinger, Navarro

S. Wailsey, EM-11

T. C. Fitzsimmons, Ecology

M. F. Gearheard, EPA

L. J. Iani, EPA

P. Mabie, EnviroIssues

M. A. Wilson, Ecology

Site Specific Advisory Boards

The Oregon and Washington Congressional Delegations

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1. DOE Office of River Protection

1a. The level of funding in each fiscal year on the alternatives to vitrification (so-called "supplemental" technologies, such as concrete grout or steam reforming); including the cost, scope and schedule for contracts in place for review and development of these alternatives.

RESPONSE:

Cost:

	<u>FY 2003</u>	FY 2004
Bulk Vitrification	\$ 9,210K	\$ 59K
Steam Reforming	\$ 605K	\$ 556K
Containerized Grout	\$ 5,528K	\$ 59K
Low-Activity Waste Treatment	\$ -0-	\$3,015K
Pretreatment	\$ 662K	\$2,534K
•	\$16,005K	\$6,223K

Scope & Schedule:

Technology	Scope	Schedule
Bulk Vitrification	Simulant Lab-scale Test	4/2003
	Radioactive Lab-scale Tests	5/2003
	Engineering Scale Tests	4/2003
	Large Scale Tests	5/2003
	Preconceptual Design (production facility)	8/2003
Containerized Grout	Simulant Lab-scale Tests	7/2003
Containerized Grout	Simulant Lab-scale Tests Radioactive Lab-scale Tests	7/2003
Containerized Grout		7/2003 7/2003
Containerized Grout	Radioactive Lab-scale Tests	,
Containerized Grout	Radioactive Lab-scale Tests Preliminary	7/2003

1b. The level of funding in each fiscal year for specific activities related to High-Level Nuclear Waste Tank "closures" (since Ecology has not defined what is required to close a tank or tank farm, while ORP authorized the contractor to expend funds to close up to 40 tanks by 2006, it is vital for the public and regulators to know what DOE is expending funds on, and whether this expense will adversely impact reaching Tri-Party Agreement milestones or other legal requirements).

RESPONSE:

Budget estimates and expected funding for waste retrieval and storage for FY 2003 and FY 2004 are shown in the table below.

	FY 2003	FY 2004
Total Retrieval	\$48,413K	\$95,823K
Total Closure	\$3,974K	\$18,905K
Cross cutting activities	\$28,409K	\$23,753K

The table above shows that both retrieval and closure activities are ramping up from 2003 to 2004. Retrieval activities account for the greater amount of work and begin to result in a significant reduction in environmental risk. The cross cutting activities are for work that is applicable to more than one tank farm. Some examples are the leak detection studies, transfers of waste across the site and fulfillment of environmental and other regulatory requirements.

These retrieval and closure budget estimates do not adversely impact the Tri-Party Agreement milestones or other legal requirements. They are consistent with those requirements but in many cases do accelerate them. One of the guidelines for establishing the overall budget was that the milestones would be met.

1c. The cost (or reduction in spending) of the 3rd melter in the Low-Activity Waste Vitrification Plant, which DOE and Bechtel national have deleted from the construction scope. Deletion of this melter jeopardizes the ability of the DOE to achieve vitrification of all tank wastes by 2028, which remains the TPA requirement.

RESPONSE:

The costs associated with retrofitting the Low-Activity Waste Facility with a third melter is dependent upon when the decision is made. A near term installation of the third melter would increase the project cost by \$75M in FY 2003. A deferred decision could impact the facility commissioning schedule and increase the project cost by \$125M if done in FY 2005 or beyond. Deletion of the 3rd melter does not jeopardize the Department of Energy's ability to meet the 2028 Tri-Party Agreement date.

1d. The expenditure in each fiscal year for removal of Tc-99 from tank wastes, which DOE is unilaterally pursuing without regulatory or NEPA coverage.

RESPONSE:

The initial estimates of cost savings to eliminate the Tc-99 removal are based on current Waste Treatment plant design information and operational plans. The initial capital cost of the equipment is estimated at \$30M. The life-cycle cost to operate the equipment is more difficult to estimate because we do not know how long each load of the unique resins used to remove the Tc-99 will perform before it has to be removed. The life cycle cost savings range from \$106M to several hundred million.

Relative to the suggestion that DOE acted unilaterally without regulatory or National Environmental Policy Act (NEPA) coverage, that is simply incorrect. In 1997, the U.S. Nuclear Regulatory Commission (NRC) concurred with DOE that Tc-99 removal was neither technically nor economically practical. Despite continued efforts to find technical solutions that would make Tc-99 removal practical and beneficial, the answer remains that it is not technically or economically practical to this day. The average Tc-99 concentrations in our immobilized Low-Activity Waste (LAW) will be at Class A low-level waste concentrations as set forth in the NRC's regulation for low-level waste, 10 CFR Part 61.55, Table 1. The performance assessments performed for disposal of LAW at Hanford indicate that projected dose levels through a variety of postulated pathways, even thousands of years in the future, are well below limits established by the NRC and the U.S. Environmental Protection Agency in regulations as being protective of human health and the environment. Finally, waste treatment was addressed in the Tank Waste Remediation System (TWRS) Environmental Impact Statement (EIS) Record of Decision (ROD) in 1997. The DOE indicated that it would pretreat wastes to remove Cs-137 above certain concentrations and would perform liquid/solids separations for actinides and Sr-90); Tc-99 removal was not a requirement. The TWRS EIS ROD is consistent with the above mentioned agreement with the NRC.

2. DOE-Richland:

2a. Groundwater activity level funding: The funding for groundwater remediation, and for groundwater monitoring well installation to meet legal requirements for monitoring Waste Burial Grounds, around Tank Farms; and each area along the Columbia river. The pace of well installation and remediation to meet cleanup goals by 2018 is a primary concern.

RESPONSE:

- FY 03: \$50M (10M well monitoring, 18M Operating Pump and Treats, 5M Science & Technology, 2M Risk Assessment, 15M well installation & system upgrades)
- FY 04: \$50M (See breakout above)
- FY 05: \$50M (See breakout above)

2b. soil cleanup activity for each area on site;

RESPONSE:

- FY 03:
 - 100 Area \$26M
 - **300** Area \$9M
 - Operation of Environmental Disposal Facility \$24 M
- FY 04:
 - 100 Area \$32M
 - 300 Area \$7M
 - Operation of Environmental Disposal Facility \$21M
- FY 05:
 - 100 Area \$29M
 - 300 Area \$14M
 - Operation of Environmental Disposal Facility \$21 M
- 2c. funding levels for the N-Area cleanup, since US-DOE is seeking a waiver (N Area ESD) from cleanup requirements to protect groundwater at the N-Reactor cribs, where Sr 90 levels in seeps along River shore are 1,600 times the federal Drinking Water Standard: how do we know it's too expensive (without knowing what the priorities are and what is being spent on other priorities; and, without knowing what will not happen instead?)

RESPONSE:

- FY03: \$8M
- FY 04: \$8M
- FY 05: \$4M
- 3. Site Wide:
 - 3a. Overhead and infrastructure costs by contractor for both RL and ORP. Include site wide indirect overhead costs for 2003 and budgets for 2004 and 2005.

RESPONSE:

Hanford has evolved its cost profiles consistent with private industry to treat the entire contract (or business) as a single source of funds. Labels such as "overhead", "indirect", and "site wide", which were once used for oversight, have been replaced with an integrated performance-based incentive approach focused on goals and outcomes. The 2002 Hanford Performance Management Plan outlines how "cleanup of the Hanford Site... accelerate[s] from 2070 to 2035, and possibly as soon as 2025". The Richland Operations Office and the Office of River

Protection have outlined significant changes in the way business is to be completed - driving the focus from annual cost reduction exercises to multi-year contractual performance incentives for work acceleration, as well as decreasing subjectivity, minimizing barriers to get work done, and eliminating non-value-added requirements. The results from this strategy are significant - annual, piecemealed cost savings are replaced with accelerated site closure and long-term, strategic cost reductions.

Contractually mandated performance incentives are included in all major prime Hanford "cleanup" contracts. Aggressive funding and schedule objectives have been required to meet accelerated mission objectives. Contractor baselines represent a significant acceleration of activities with fewer worked individually to achieve savings, as well as coordinating and consolidating efforts when all parties can achieve savings.

3b. The funding levels for regulatory fees and grants, Oregon oversight and for the Hanford Advisory Board for 2003, 2004 and 2005. These have been put into one PBS, which is the only Richland PBS with reduced funding in the FY 2004 Request:

2012 Acceleration	+ 6.5%
2033 Acceleration	+20%
Safeguards & Security	+33%
Community & Regulatory Support	- 7.8%
Cleanup Projects	+21%

RESPONSE:

Below is a table with FY 2003 - FY 2005 budget estimates for the activities in the Community and Regulatory Support PBS. Prior to submittal of the FY 2004 budget to Congress, all PBSs received an across the board general reduction. However, significant increases more than offset the reduction to the other PBSs. While the FY 2004 budget request for Community and Regulatory Support shows a reduction from FY 2003 levels, specific allocations by regulatory fee, grant, etc. have not yet been made pending Congressional action.

Attachment 03-FMD-0241

Richland Operations Office PBS RL-100 Community and Regulatory Support Budget Estimates \$ in Thousands

	FY 2003 <u>Request</u>	FY 2003 Total Available <u>Funds</u>	FY 2004 Congressional <u>Request</u>	FY 2005 Field <u>Request</u>
WDOH Oversight Grant Oregon Grant WDOE: CERCLA Grant WDOE: RCRA Mixed Waste F Washington Military Grant (Er Hanford Advisory Board Payment in Lieu of Taxes (PIL Air Emissions Monitoring Miscellaneous Permits & Fees	ner. Prep) 777 583 T) 3,592 1.256	550 550 2,432 6,4376 579 965 2,3,710 6,1,256	1/ TBD 1/ TBD 1/ TBD 1/ TBD 1/ TBD 2/ TBD TBD TBD TBD	620 600 2,336 4,279 757 588 3,619 1,231 229
Total PBS RL-0100	14,270	14,575	13,149	14,259

^{1/} Adjusted grants for offsetting carryover funds available and change to federal fiscal year.2/ Includes facilitation contract placed in September.