## HANFORD ADVISORY BOARD

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April 20, 2000

Keith Klein, Manager

U.S. Department of Energy, Richland Operations

P.O. Box 550 (A7-50)

Richland, WA 99352

Subject: U.S. Department of Energy-Richland FY2002 Integrated Priority List

Dear Mr. Klein:

The Hanford Advisory Board (HAB) has completed its review of the proposed Fiscal Year 2002 (FY2002) budget and submits the attached Consensus Advice for your consideration. We appreciate the assistance that has been provided to the HAB and its committees by U.S. Department of Energy, Richland Office (DOE-RL) program managers and staff. During its review of the budget and development of this advice, several concerns were identified and are summarized below:

- The creation of the Office of River Protection resulted in essentially three budgets for Hanford: DOE-RL, DOE-ORP, and tank waste vitrification. This served to create a more complex budget process and made it more difficult for members of the public and the HAB to understand and respond to the interrelationships between the budgets and identify potential shortfalls and their impacts on the entire cleanup program.
- In April 2000, DOE-ORP will receive a cost proposal from BNFL Inc. to build a vitrification facility to treat Hanford's tank wastes. The importance of this program to the region and country cannot be overstated, and budget allocations will have a significant impact on its success or failure. In light of the pending April 24 deadline for BNFL Inc. to provide cost information to DOE-ORP, the HAB did not have an opportunity to review costs associated with the vitrification project. Treating Hanford's tank waste is critical.
- During review of the FY2002 IPL, it was difficult for the HAB to determine the size of the compliance gap. Both DOE-RL and DOE-ORP created new categories of budget priorities called "unfunded critical needs" and "total requirements," in which higher funding priority was given to items that are not legally required than to other work required by laws and regulations.
- Cost estimates for several projects will undergo significant change. DOE has accepted a proposal from its contractor to change the sequencing and schedule for the K Basin's Spent Nuclear Fuel project. The HAB has not reviewed or evaluated the cost impacts of this change. Also, DOE-RL has proposed a

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Nuvotec, Inc. - Administration 723 The Parkway, Suite 200, Richland, WA 99352 HAB Consensus Advice #107 Subject: U.S. Department of Energy FY2002 Integrated Priority List Phone: (509) 943-5319 Fax: (509) 943-5528 Adopted: April 20, 2000

- placeholder of \$20 million for accelerating cleanup in the 300 Area without a clear definition of what that acceleration would accomplish or what would be its real costs.
- There has been a significant reduction in the opportunity for regulators, tribal government, the HAB, and the public to participate effectively in the development of the FY2002 budget priorities. The budget workshop and hearings provide an opportunity to increase public awareness of Hanford's needs and build a broader metropolitan constituency. The HAB believes that participation in the budget development process is essential to the credibility and success of the cleanup program and suggests that next year, drafts of proposed budgets must be made available in time for the regulators and others to provide meaningful input into the final budget priorities.

We look forward to your response. We will also appreciate periodic progress updates on the FY2000, FY2001, and FY2002 budgets.

Very truly yours,

Merilyn B. Reeves, Chair Hanford Advisory Board

Merilyn B Leeve

cc: Carolyn Huntoon, Department of Energy Headquarters
Chuck Clarke, U.S. EPA
Tom Fitzsimmons, Washington Department of Ecology
Dick French, Department of Energy-ORP
Wade Ballard, Deputy Designated Federal Official
The Oregon and Washington Congressional Delegations
Michael Gearheard, Environmental Protection Agency
Dan Silver, Washington Department of Ecology

This advice represents HAB consensus for this specific topic. It should not be taken out of context to extrapolate Board agreement on other subject matters.

## HANFORD ADVISORY BOARD ADVICE FY2002 PROPOSED INTEGRATED PRIORITY LIST FOR DOE-RICHLAND AND DOE-OFFICE OF RIVER PROTECTION APRIL 20, 2000

The following eight points make up the Board's advice on the FY2002 budgets proposed by the U.S. Department of Energy (DOE) Richland (RL) field office and the Office of River Protection (ORP). This advice focuses on those portions of the FY2002 budgets that were available at the time of the Board meeting.

1. Level funding is inadequate to achieve timely and effective Hanford cleanup.

Flat budgets over the last several fiscal years have forced the Hanford site to postpone critical cleanup activities, infrastructure upgrades, and facility construction. Over multiple fiscal years, these delays have built ever-increasing budgetary requirements resulting in greatly increased needs for FY2002. Lack of adequate funding in FY2002 will once again delay important cleanup activities, greatly increasing future financial obligations and risks to public, environment and workers. As a result of flat funding, the Hanford site cannot aggressively push the cleanup forward. Examples of essential work that will not be completed with level funding include:

- Tank farm infrastructure will not be upgraded to ensure worker and public safety and be ready to retrieve high-level waste and transfer it to vitrification plants.
- Characterization of soil and groundwater in the Central Plateau (200 Area) will go unfunded.
- Along the Columbia River, actions will not be taken to protect the groundwater and river from newly discovered contamination sources.
- 2. Target budgets are inadequate to fund all safety and legally required cleanup work. In the two proposed FY2002 IPLs (DOE-RL and DOE-ORP), a total of \$277 million worth of projects required by Tri-Party Agreement (TPA) milestones are not funded within the target funding level provided by DOE-HQ. The compliance gap for DOE-RL and DOE-ORP programs includes:
- a) A compliance gap of \$163 million for DOE-RL, of which \$156 million is in the Environmental Restoration (ER) Program, which includes such important activities as investigation and potential remediation of the Hanford low-level waste burial grounds and the 618-11 burial ground.
- b) A \$114 million compliance gap in unfunded legally required safety and cleanup work for the high-level nuclear waste tank programs under DOE-ORP.

Cleanup funds should be used for activities to achieve compliance with all relevant and applicable environmental, public protection, and worker protection laws, agreements, and commitments. Also, DOE should comply with other requirements to ensure protection of workers, the public, and the environment. Several non-TPA milestone activities and programs must be funded, including the Integrated Environmental, Safety & Health Management System, and the protection of existing natural, cultural, historical, biological, and ecological resources at the Hanford site. These should be considered to be essential safety and essential services.

3. Hanford cleanup funds should not be used to cleanup others' messes.

Despite the inadequacy of target level budgets to fund all legally required cleanup and safety work, and prior objections by the HAB and regulators, the FY2002 budget continues the practice of using Hanford cleanup funds for non-cleanup activities. Examples of activities that the HAB urges DOE not to fund with Hanford cleanup funds include:

- a) Defense of Hanford contractors in litigation (such as downwinder litigation), especially given DOE's recent announcement to compensate people made ill from their work in the nuclear weapons complex.
- b) Subsidizing the import and burial of offsite generated low-level and mixed wastes. The Board has previously advised DOE to charge generators the fully burdened, long-term costs of storage, treatment, disposal, monitoring, and closure. The FY2002 draft IPL includes funding for expanding burial grounds, which would not be necessary but for the continued import of offsite wastes. The low-level waste burial grounds may have become Dangerous Waste landfills, under Washington law, because of the illegal burial of hazardous or dangerous wastes from offsite generators in the past. The Hanford cleanup budget bears the burden of investigating and remediating these burial grounds, a burden which will only increase if offsite waste imports continue.
- 4. The transfer of funds to the new DOE-HQ security agency, which will permanently decrease the amount of funding available for Hanford cleanup, should not be undertaken.

The HAB has advised for several years that cleanup funds should not be used for the security and safeguarding of plutonium and other nuclear materials. The weapons, defense, and nuclear energy budgets should incur those costs. The HAB is concerned that the proposed \$40 million transfer to the National Nuclear Security Agency (NNSA) removes the tension needed to balance the needs for accelerating cleanup with security demands. Rather, the balance will be replaced by a single security agency, which may seek to expand its funding base and justify its continued existence instead of working to reduce its presence. As Hanford is cleaned up and site security needs are reduced, those savings could help close the site's compliance gap if the funding were not permanently transferred out of the Hanford cleanup budget baseline, and should remain in the cleanup budget. Openness should not be compromised by these increased security demands. The HAB urges the Secretary to carefully review the impact of removing these funds from the cleanup budget.

- 5. Contractors' costs should be validated for the purpose of identifying cost savings. Because of a lack of independent validation and/or specifics on several proposed FY2002 IPLs, it appears that several of DOE's commitments for cost saving initiatives have not been met. Therefore, we recommend that:
- a) All project budgets should have independent, external validation of baselines, and if costs increase significantly, they should be re-validated.
  - DOE-ORP committed to have completed independent validation (which has not been completed) of the costs to pump out single-shell tank wastes (interim stabilization).
  - In addition to the independent validation of the base operation cost for double-shell tanks,
     DOE-ORP should prepare a justification and breakout of costs for a proposed 16%

increase, over the next two years, to \$63.8 million in a single IPL item (double-shell tank maintenance).

- b) The cost savings and new work being accomplished as a result of the PHMC's restructuring in FY2000 and FY2001 should be identified and shown how it impacts funding shortfalls in FY2002.
- c) The costs for the 233-S facility decontamination and decommissioning could benefit from a review for efficiencies for this and future projects.
- d) The significant growth in ER program management costs should be reviewed.
- e) DOE should make available the total indirect overhead costs and present indirect overhead budgets for years other than the current year. Consistent use of a uniform, functional system of accounts for indirect costs should be adopted as part of a commitment to reduce and disclose overhead costs.
- f) DOE should review essential safety and essential services to ensure efficient operations and that they are properly prioritized.

## 6. Priorities in the proposed budgets should be revised to protect the Columbia River and comply with TPA milestones and other applicable regulations.

Work to protect the Columbia River is needed beyond the river shoreline. To properly prioritize protection of the Columbia River and compliance with TPA milestones and other applicable requirements, the HAB urges the following changes in the FY2002 IPL:

- a) Fund additional monitoring wells required to comply with both the TPA and Resource Conservation and Recovery Act (RCRA).
- b) Fund continued pumping and treatment for the UP-1 plumes.
- c) Fund investigation, monitoring upgrades, and interim action to stop the spread of contamination and begin remediation of numerous burial grounds. The recent discovery of high tritium levels (measured in January at 400 times the drinking water standard) in groundwater under the 618-11 burial ground, the potential need for expedited response action, and HAB Advice #103 (Characterization of Burial Grounds and Importation of Waste), demand burial ground monitoring, characterization, and remediation during FY2000 and FY2001 as well as FY2002. In addition, near term interim action at 618-11 may be necessary if plume growth is significant. The HAB recommends that contingency funding sources be identified for prompt response to emergencies.
- d) Fund the retrieval of buried transuranic (TRU) wastes at a much higher priority because the TRU storage drums and containers are known to be failing. Failure to retrieve buried TRU wastes now may lead to dramatically increased retrieval costs and compromise worker safety as more containers fail.
- e) Funding for building infrastructure needs should be prioritized to those that pose significant risks, based on clear criteria. Funding sources need to be identified to meet those priorities, including where other programs have deferred maintenance or upgrades and then passed the facility to the ER program.
- f) Fund research and development of methods for preventing or stopping tank leaks as a backup to interim stabilization to be able to deal with possible simultaneous multiple tank leaks.
- g) Fund development of robotics for remote handling of TRU waste.
- h) Funds should be made available for a balanced Groundwater/Vadose Zone Integration Project, including substantial environmental restoration data collection and monitoring.

Assessments of contamination of specific sites (200 Area) on Hanford must be identified and funded. Groundwater monitoring is at a minimal level and requires expansion of funding and prioritization. DOE needs to identify specific goals, objectives, and deliverables for this program, to ensure that Hanford Site decisions are defensible and possess an integrated perspective for the protection of water resources, the Columbia River environment, riverdependent life, and users of Columbia River resources.

i) Funding set aside in FY2002 for accelerating cleanup of the 300 Area buildings is premature in view of the lack of definition regarding what will be accomplished with this activity and the many other, more urgent unfunded compliance requirements. Well established investigation, prioritization, and work proposal procedures, including public and regulator review, pursuant to the TPA, Comprehensive Environmental Response Compensation and Liability Act (CERCLA), Model Toxics Control Act (MTCA), and Resource Conservation and Recovery Act (RCRA) need to be followed for the 300 Area. Budget decisions should not supplant those processes.

7. DOE should continue to strive to effectively involve regulators, tribal governments, the HAB, and the public in the development of outyear budget priorities.

The HAB agrees with the Washington State Department of Ecology and U.S. Environmental Protection Agency that there has been a significant reduction in the opportunity for regulators, tribal government, the HAB, and the public to participate effectively in the development of the FY2002 budget priorities. Drafts of proposed budgets must be made available in time for the regulators and others to provide meaningful input into the final budget priorities. There is also a need for greater review of and detail about the categories of essential safety and essential services.

8. The proposed changes in the Spent Nuclear Fuel program are encouraging; progress will continue to be monitored and TPA milestones should be established for a well-defined path forward.

DOE-RL is in the process of discussing with regulators a TPA change that would delay completion of fuel removal from K-East basin by seven months, while advancing completion of sludge removal from both K-East and K-West by 12 months. A baseline change has been approved; however, specific information was not available at the time this advice was prepared. The HAB is encouraged by the commitment of the contractor, Fluor Hanford, to fund proposed T Plant modifications to safely store the basin sludges. Such action is a positive application of program cost concerns and we look forward to continued success. The HAB will continue to monitor progress and expects Tri-Party agencies to create TPA milestones for the decommissioning of the basins and the storage, processing, and disposal of the basin sludges. The HAB is concerned with costs for decommissioning and sludge disposal, and request information on these costs, including current and projected estimates for these program elements.