

U.S. Department of Energy Hanford Site

OCT 06 2010

10-HAB-0014

Ms. Susan L. Leckband, Chair Hanford Advisory Board Enviroissues Hanford Project Office 713 Jadwin, Suite 4 Richland, Washington 99352

Dear Ms. Leckband:

HANFORD ADVISORY BOARD (HAB) ADVICE #234, "FISCAL YEAR 2012 BUDGET REQUESTS," DATED JUNE 4, 2010

Dear Ms. Leckband:

Thank you for the HAB Advice #234 (enclosed) regarding the Fiscal Year (FY) 2012 Budget Submittal. The U.S. Department of Energy Richland Operations Office (RL) and the Office of River Protection (ORP) are pleased the HAB recognized our cleanup progress and our efforts to keep our stakeholders and the public informed on the future Hanford activities and our FY 2012 budget request. Responses are organized by the HAB's advice categories.

Advice #1: DOE should adjust the budget targets for FY 2012 to fully fund the work proposed by DOE-RL and DOE-ORP to assure regulatory compliance and to support the TPA for an increase of \$500 million above the previously approved target level.

Response: This advice has been forwarded on to the U.S. Department of Energy Headquarters (HQ) for its consideration.

Advice #2: DOE-RL and DOE-ORP should request funding for all the work identified in Activity Building Blocks (ABBs) for FY 2012. In 2012, almost all of the ARRA funding for cleanup projects will have been used, requiring significant increased commitment in annual base appropriations requests for DOE to meet TPA schedules, rather than seeking additional deferments and delays in those schedules.

Response: RL and ORP submitted a request for all the work identified in the Activity Building Blocks (ABBs) as presented during the public workshop on May 25, 2010.

Advice #3: DOE-RL and DOE-ORP should each submit requests to DOE-Headquarters for adequate funding, of \$1.6 billion for DOE-RL and \$1.2 billion for DOE-ORP, to meet all requirements for safe operation and regulatory compliance of the Hanford Site.

Response: The U.S. Department of Energy (DOE) is committed to significant accomplishments in FY 2012 to continue to clean up the Hanford Site and to meet our compliance commitments to our Regulators. DOE's focus priorities are to maintain worker safety and Hanford Site safety

Office of River Protection P.O. Box 450 Richland, Washington 99352 Richland Operations Office P.O. Box 550 Richland, Washington 99352 practices in all our cleanup activities. Both DOE offices have submitted their requests for all work identified in the ABBs presented to the HAB and the public during the May 2010 budget workshop.

Advice #4: DOE should develop and fund characterization and remediation technologies for the deep vadose zone (see Advice #231 regarding TPA change packages).

Response: RL is currently conducting treatability tests for Tc-99 and uranium. The new Central Plateau milestone change package, M-15-09-02, includes new milestones for that work. A broad range of remediation approaches have been evaluated and the most promising are now being tested in actual field conditions.

In addition, RL and ORP, in cooperation with HQ's Office of Environmental Management (EM), Office of Groundwater and Soil Remediation (EM-32), have initiated planning for the Hanford Site Deep Vadose Zone Field Research Center. A long-range plan is under development that will guide future investments in deep vadose zone research and technologies related to improvements in: 1) characterization, 2) prediction, 3) remediation, and 4) monitoring. This plan is supported from input received during a technical forum held July 20-21, 2010 in Richland, Washington. Attendees at this forum represented a broad spectrum of national experts on this subject matter from the DOE complex and private industry. Hanford and DOE-HQ staff are working together to increase the investment in improving the capabilities needed to develop final, protective remedies for Hanford's deep vadose zone challenges.

Advice #5: DOE-RL should request adequate funding for the characterization and/or removal, treatment, and disposal of pre-1970 transuranic (TRU) wastes sites (e.g. Purex Tunnel). The Board shared this similar concern in Advice #231.

- To reduce potential risks to the public and the environment from the various waste sites, DOE-RL should identify the funding required for characterization and initiation of actions to remove, treat (as necessary), and dispose of chemical and pre-1970 disposed TRU radioactive wastes, including radioactive waste burial grounds, and non-radioactive dangerous waste and solid waste landfills. This will require funding above the levels identified in the ABBs as well as above target funding levels since DOE assumes that capping will be an adequate remedy. The Board reminds the Tri-Party agencies that DOE's analyses in the draft Tank Closure and Waste Management Environmental Impact Statement show that capping remedies, rather than retrieval, will result in unacceptable levels of risk and contamination.
- DOE should initiate action to remove and dispose of materials with pre-1970 disposed TRU
 radioactive wastes for disposal in approved disposal facilities.

- The Tri-Party agencies should try to achieve a balanced approach with additional characterization as needed to move forward with actual cleanup of the waste sites. As demonstrated in the River Corridor, extensive characterization costs may be avoided by simply adopting a retrieval or partial retrieval remedy.
- Response: The draft Tank Closure and Waste Management Environmental Impact Statement (TC&WM EIS) discussion of capping of these waste sites did not show unacceptable levels of risk and contamination. The statement in the HAB advice is not accurate.

Final remedy selection for these burial grounds will be reached through the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process. As appropriate, site-specific characterization data and remedy evaluation will support selection of these remedies. DOE does not support the HAB advice that would preempt formal remedy selection or prematurely eliminate consideration of remedies that must be evaluated by the CERCLA process.

Advice #6: DOE-RL should continue to request adequate funding for TRU waste retrieval and mixed waste treatment rates to achieve compliance with the existing TPA milestones (as shown in the ABBs). The Board is pleased that these retrieval rates are ahead of the TPA schedule adjusted last year to reflect prior budget reductions. The Board adopted parallel advice on the proposed changes to the TPA, which advises on the Tri-Party agencies to not further relax the TPA schedule. Funding for this activity may not be available if schedules are relaxed or made into unenforceable targets. The funding required to maintain the current pace is reasonable as shown in the ABBs.

Response: RL submitted a request for transuranic waste retrieval and mixed waste treatment as indicated in #2 response to the HAB's advice.

Advice #7: The Board repeats our prior advice that safeguards and security funding should not come from the DOE-Environmental Management budget, which could reduce funds for cleanup. The Board requests DOE to explain why safeguards and security funding increase is sought for FY 2012 after wastes were consolidated and plutonium removed from the Hanford Site.

Response: Security of legacy nuclear material, particularly special nuclear material (SNM), is inherently a part of the EM cleanup scope and stewardship responsibility for Hanford. Due to the security related risks associated with SNM, EM funds security related costs along with other operational and safety related minimum safe requirements as part of its basis of operation. Thus, security expenses are an integral part of EM activities and are necessary because security presence must take place in order for the direct cleanup to take place. To further the point, without prescribed security measures and armed forces, no other personnel would be allowed on the Hanford Site to perform cleanup, as that would pose an unacceptable risk to the U.S. Government.

In response to the second part of Advice #7, the HAB should be aware that a significant amount of plutonium (SNM) remains at Hanford in the form of irradiated (spent) nuclear fuel and requires high security. Hence, the overall activities conducted by safeguards and security (SAS) has been slightly reduced, but not eliminated, since some of the legacy plutonium (SNM) was consolidated and shipped offsite, because SNM is present in both these situations. The SAS funding for FY 2012 is considered that amount necessary for minimum safe/secure operations and interim storage.

Advice #8: DOE-ORP should request adequate funding for technology development in support of low activity waste (LAW) supplemental treatment processes that create a safe and stable waste form to meet requirements. Currently there is inadequate funding in the base program for LAW supplemental treatment. Technology for supplemental treatment should be available in time to support processing large amounts of LAW which will require treatment prior to disposal. LAW vitrification remains the best available process and satisfies regulatory requirements. Therefore, funding for exploring alternative treatments should not detract from the funding needed to provide supplemental treatment on the agreed upon schedule.

Response: As mentioned in response to consensus Advice #221, "FY 2011 Hanford Clean-Up Budgets and Priorities," the External Technical Review of System Planning for Low-Activity Waste (LAW) Treatment at Hanford determined that a decision on how to proceed with LAW supplemental treatment is not needed until 2017. Further, the proposed Consent Decree No. 08-5085-FVS requires DOE to make a decision on LAW supplemental treatment no later than April 30, 2015. ORP feels it has ample time to determine a path forward on LAW supplemental treatment options, and that a push to make these decisions years ahead of schedule could potentially offset funding for the Waste Treatment and Immobilization Plant (WTP) design and construction. Even as ORP focuses on WTP construction, preparation for WTP operations, tank retrievals and tank integrity, significant effort is being applied to improving the tank waste treatment flow sheet.

Advice #9: DOE should provide, and make available to the public, a five year integrated priority list, including those projects receiving ARRA funding. This list should be made available to the public for information and review purposes to illustrate the significant cleanup progress which is being accomplished through the availability of ARRA funding.

Response: The proposed TPA Milestone M-36-09-01 includes the annual Lifecycle Report (LR) that will account for all actions necessary to complete the Hanford Site cleanup mission, to include a detailed cost estimate, and will provide a foundation for preparing future budget requests. DOE has no plans at this time to develop a five-year Integrated Priority List (IPL). However, DOE will continue to make the annual IPL publically available.

If you have any questions regarding the responses to Consensus Advice #234, please feel free to contact Paula Call, RL, at (509) 376-2048 or Pamela McCann, ORP, at (509) 376-7663.

Richland Operations Office U.S. Department of Energy David A. Brockman, Manager Office of River Protection U.S. Department of Energy

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Enclosure: HAB Advice #234

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