

Hanford Advisory Board Draft Advice

Topic: FY-2022 Hanford Cleanup Priorities

Authors: Tom Galioto, Liz Mattson, Bob Suyama, Tom Sicilia, Rebecca Holland, Shelley Cimon

Originating Committee: Budgets and Contracts Committee

Version #1: Color: pink yellow green buff x purple blue goldenrod

Cleanup Priorities Advice – Version 011620 v5

Working Title: FY-2022 Hanford Cleanup Priorities

Issue Managers: Tom Galioto, Liz Mattson, Bob Suyama, Tom Sicilia, Rebecca Holland, Shelley Cimon

Background:

In recent years the Hanford Advisory Board (HAB) has issued annual Budget Priorities advice to the Department of Energy (DOE) defining priorities for Hanford cleanup. Concerns regarding the Congressional-appropriated Hanford budget in these annual advice products were of paramount concern since progress on cleanup is a direct function of the available funds each year. Our local DOE offices are required to identify the level of budget needed to meet all DOE legal commitments identified in the Tri-Party Agreement (Reference 1) and in the Consent Decree (Reference 2). Unfortunately, the appropriated congressional budget for Hanford is typically far less than this “Compliant Budget” level.

The local DOE offices assert that they are constrained by law and/or internal DOE guidance in providing detailed budget information to the HAB before those appropriations are made public through DOE-Headquarters (DOE-HQ). These legal constraints appear to involve restriction of external budget sharing until after DOE submits their requested budget to HQ. As a consequence of this situation, the local DOE offices have requested that the title and primary focus of the annual HAB priorities advice be shifted to the identification of cleanup priorities, and not address specific budget-related concerns and issues.

In addition, DOE requested that the HAB provide their list of cleanup activities in priority order. Historically, the HAB has declined to prioritize recommended activities since all of the identified activities were considered to be critical to the success of the Hanford cleanup mission.

The HAB has considered these two DOE requests for focusing on cleanup-vs-budget issues and for prioritizing the specific HAB-recommended activities. After detailed discussions, the following reflects the HAB’s position related to these requests:

- 1) The title of the advice has been modified to reflect “cleanup priorities” as opposed to budget priorities, and no detailed discussions are included regarding budgetary concerns, and
- 2) While the HAB did not agree to list recommended activities in strict priority order, the advice presents recommended cleanup activities in three distinct categories that it is hoped will assist DOE in better understanding the HAB’s focus.

It is also important that the budget issues remain as a primary focal point in supporting all cleanup activities at Hanford going forward, and separate advice is being considered that will more address these issues in depth. As such, this current advice should not be considered as being offered in lieu of budgetary advice.

Hanford Advisory Board Draft Advice

Topic: FY-2022 Hanford Cleanup Priorities

Authors: Tom Galioto, Liz Mattson, Bob Suyama, Tom Sicilia, Rebecca Holland, Shelley Cimon

Originating Committee: Budgets and Contracts Committee

Version #1: Color: pink yellow green buff **x purple blue goldenrod**

The HAB employed the following source materials to develop the revised FY-2022 cleanup priorities identified herein:

- “Hanford Advisory Board Values” (Reference 3)
- Hanford Advisory Board Advice #300, “Re: FY2021 Budget Priorities” (Reference 4)
- DOE Response to Hanford Advisory Board Advice #300 (Reference 5)
- Hanford Site 5-Year Plan (Reference 6)

Subsequent to the issuance of the FY-2021 advice (Reference 4), additional Advice #302 (Reference 7) was issued recommending DOE employ a revised process to increase public involvement and engagement in the budget process. Current practices employed by DOE consist of holding a public meeting in the April/May timeframe each year to display general budget information and to request comments from the public. This process has not been effective in allowing the public to participate in a timely or effective manner. Ecology has formally indicated support for the recommendations made in that Advice (Reference 8). The public has a primary interest and role in the Hanford cleanup, and we look forward to DOE’s detailed response to that advice.

Finally, the HAB approved a letter (Reference 9) to be sent to DOE from all site-specific advisory boards in the EM complex. This letter requests that DOE re-establish their past practice to provide the detailed budget information that has been requested in past advice, and requests that DOE establish a revised public engagement process that is more effective and meaningful (as identified in References 7 and 9). The HAB looks forward to DOE adopting these requests.

Advice:

As always, the HAB emphasizes that worker and public safety must always be the first consideration in the planning and performance of all Hanford activities.

- A. Please formally respond to HAB Advice #302 (Reference 7) and address the specific recommended actions and activities identified therein.
- B. Some priority cleanup activities that have been identified in past HAB priority Advice remain in progress. Those activities are listed below and are assumed for the purpose of this Advice to be completed prior to FY-2022. Therefore, they are not listed as priorities for FY-2022 unless completion has, for whatever reasons, been delayed.
 - PFP demolition to slab-on-grade: Expected completion FY-2020
 - Remote excavation of the 300-296 waste site 324 Building demolition: Expected completion FY-2021

Hanford Advisory Board Draft Advice

Topic: FY-2022 Hanford Cleanup Priorities

Authors: Tom Galioto, Liz Mattson, Bob Suyama, Tom Sicilia, Rebecca Holland, Shelley Cimon

Originating Committee: Budgets and Contracts Committee

Version #1: Color: pink yellow green buff x purple blue goldenrod

C. The following HAB FY-2022 cleanup priorities are identified for DOE action and are grouped into three separate categories as shown below. These activities are not listed in priority order. The HAB believes that each of these identified activities must be effectively addressed in FY-2022, regardless of the level of appropriated funding received.

1) **Cleanup Priorities Identified in the Hanford Site 5-Year Vision:**

- **Maintain and Expand Groundwater Pump & Treat Program:** These efforts include operating the system as currently configured; expanding Pump & Treat operations for the 100 B/C area (see HAB Advice #296) to treat chromium and mitigate strontium groundwater contamination in that area; and expanding the system to capture and treat BP-1/PO-5 uranium and technetium-99 plumes.
- **Construction and Operation of DFLAW & Related Facilities:** Continue activities to complete and start-up all facilities necessary to achieve DFLAW hot commissioning by December 31, 2023.
- **Waste Encapsulation and Storage Facility (WESF) Containing Sr and Cs Capsules:** Continue work to construct above-ground interim storage facility for these capsules; updates to WESF to facilitate the transfer; and procurement of the storage containers in order to meet the 2025 TPA milestone for completion.
- **Safe Storage of Tank Waste:** Continue monitoring, surveillance, and maintenance activities necessary to ensure the safe and environmentally compliant storage of tank waste.
- **Design & Construction of the Waste Treatment Plant:** Continue design and construction activities that support Hot Start of the Waste Treatment Plant by December 31, 2033.
- **Retrieval and Closure of Single Shell Tanks (SST):** Continue retrieving waste from the SST tank farms and define the processes required for the closure of the related Waste Management areas.
- **216-Z-9 Trench and 241-Z-361 Settling Tank Located in 200-PW-1:** The Record of Decision (Administrative Record Accession #0093644) for these areas selected removal, treatment and disposal as the required action. Characterization of these plutonium-rich wastes should be started in FY2022 to begin the remediation process. Thorough characterization will allow DOE to manage risks to human health and the environment caused by extended cleanup timeframes of these wastes.

Hanford Advisory Board Draft Advice

Topic: FY-2022 Hanford Cleanup Priorities

Authors: Tom Galioto, Liz Mattson, Bob Suyama, Tom Sicilia, Rebecca Holland, Shelley Cimon

Originating Committee: Budgets and Contracts Committee

Version #1: Color: pink yellow green buff x purple blue goldenrod

2) Cleanup Priorities Partially or Not Addressed in the Hanford Site 5-Year Vision:

- **Maximize Tank Waste Storage Capacity:** This activity includes the funding, design and any actions necessary to implement additional waste tank capacity to assure timely, safe and environmentally compliant storage until tank waste treatment is available. These activities must include adequate funding for the following:
 - **242-A Evaporator Operation:** Restart and maintain evaporator campaigns to reduce the liquids stored in the Double Shell Tanks. (This is identified in DOE's 5-Year Vision.)
 - **Additional Tank Waste Storage Capacity:** Actions necessary to obtain additional tank waste storage capacity to include tank design and accelerated permit processes (ref Advice # 284). Also, any new additional tanks should consider alternate designs to those of existing tanks (see Reference 10).
- **Initiate Characterization of SW-2 Burial Grounds:** These burial grounds are known to contain large quantities of highly hazardous contamination. Characterization should begin so a strategy to safely manage the buried materials can be developed.
- **Improved Hanford Site Infrastructure:** Establish an improved site infrastructure program that can be accomplished at a reduced cost compared to prior years, thus allowing more of the appropriated Hanford budget to be employed for actual Hanford cleanup objectives. Consider earlier remediation of contaminated waste sites, more effective management of site services to contaminated sites, etc.
- **Complete 100 Area Records of Decision:** While these are listed in the 2024 vision, the following task is contingent upon completion of the RODs:
 - **Completion of the 100 N Chemical Reaction Barrier (Apatite Barrier):** The completed apatite barrier in 100-N will reduce the amount of strontium in groundwater migrating into the Columbia River.

Hanford Advisory Board Draft Advice

Topic: FY-2022 Hanford Cleanup Priorities

Authors: Tom Galioto, Liz Mattson, Bob Suyama, Tom Sicilia, Rebecca Holland, Shelley Cimon

Originating Committee: Budgets and Contracts Committee

Version #1: Color: pink yellow green buff x purple blue goldenrod

- Plan and initiate soil and groundwater cleanup actions in the Columbia River Corridor that retrieve, treat, and dispose of waste sites and groundwater in areas adjacent to the Columbia River as the Board has advised. This funded work should include:
 - Removal of contaminated pipelines as recommended in prior advice, and
 - Actions to reduce groundwater contamination, including contamination moving into the River.
- **Transuranic (TRU) and Mixed Waste: Resume retrieval of buried wastes, continue repacking of large waste boxes, and ramp-up the TRU program** for eventual interstate shipment and permanent underground disposal. This includes removal and treatment of wastes stored outdoors or without characterization in the Central Waste Complex.

3) **Supporting Activities (None are Identified in the Hanford Site 5-Year Plan)**

- **Expanded Public Involvement:** Expand funding levels for public involvement activities, including those that provide information and gather public input as follows:
 - full funding of the HAB, utilizing a facilitation contract structure that provides flexibility to adapt to shifting schedules and canceled meetings;
 - funding for regional meetings, including at least one regional HAB meeting, continuation and expansion of the new Hanford Regional Dialogue meeting format in multiple locations, regional Hanford budget meetings, and regional meetings on emerging topics;
 - reinstatement of travel reimbursement for HAB alternates, as supported by a joint Oregon-Washington letter on October 26, 2017;
 - technological improvements for all Hanford public meetings (including HAB meetings) to allow recordings to be published online; and
 - tangible investments in the next generation to be involved in Hanford's cleanup, oversight, and management.
- **Hanford Workforce Planning and Development:** Establish programmatic requirements and funding to ensure that Hanford Contractors address the need for developing and maintaining a robust Hanford workforce pipeline including internships, mentoring, diversity, succession planning, advancement/transfer opportunities, and recognition/rewards programs.
- **Vapor Engineered Exposure Controls:** Complete the testing, selection and implementation of the most effective measures to safely address vapor issues.

Hanford Advisory Board Draft Advice

Topic: FY-2022 Hanford Cleanup Priorities

Authors: Tom Galioto, Liz Mattson, Bob Suyama, Tom Sicilia, Rebecca Holland, Shelley Cimon

Originating Committee: Budgets and Contracts Committee

Version #1: Color: pink yellow green buff **x purple blue goldenrod**

- **Improved Emergency Planning Program:** Improve upon the existing program to address recently identified shortcomings. For example, during the Shelter-in-Place incident after the tunnel collapse at PUREX Tunnel #1, some workers sheltered at the site could not access food, water, or hygiene facilities.

The HAB looks forward to receiving your response to the identified advice items herein. As always, we will continue to work collaboratively with the Tri-Party Agencies in accomplishing the Hanford cleanup mission.

Thank you.
Sincerely,

Susan Leckband, Chair
Hanford Advisory Board

References:

- 1) “Hanford Federal Facility Agreement and Consent Order,” as amended on September 30, 2019 [<https://www.hanford.gov/page.cfm/TriParty/TheAgreement>]
- 2) “AMENDED CONSENT DECREE BETWEEN DEPARTMENT OF ENERGY AND STATE OF WASHINGTON,” dated March 11, 2016 [https://www.hanford.gov/files.cfm/Amended_CD1.pdf]
- 3) “Hanford Advisory Board Values,” dated November 2, 2012 [https://www.hanford.gov/files.cfm/HAB_ValuesWhitePaper_Attach.pdf]
- 4) Hanford Advisory Board Advice #300, “Re: FY2021 Budget Priorities,” dated April 18, 2019 [https://www.hanford.gov/files.cfm/HAB_Advice_FINAL_4_18_19.pdf]
- 5) DOE Response to Hanford Advisory Board Advice #300, “THE U. S. DEPARTMENT OF ENERGY (DOE) RICHLAND OPERATIONS OFFICE (RL) AND OFFICE OF RIVER PROTECTION (ORP) FISCAL YEAR (FY) 2021 BUDGET PRIORITIES,” dated August 1, 2019 [https://www.hanford.gov/files.cfm/19-BUD-0083_-_Final_RL_and_ORP_FY_2021_Budget_Priorities.pdf]
- 6) “Hanford Site 5-Year Plan,” presented at the Hanford Advisory Board Committee of the Whole (COTW), October 17, 2019 [https://www.hanford.gov/files.cfm/Hanford_Site_5_Year_Plan_Rev_0_101019.pdf]

Hanford Advisory Board Draft Advice

Topic: FY-2022 Hanford Cleanup Priorities

Authors: Tom Galioto, Liz Mattson, Bob Suyama, Tom Sicilia, Rebecca Holland, Shelley Cimon

Originating Committee: Budgets and Contracts Committee

Version #1: Color: pink yellow green buff **x purple blue goldenrod**

- 7) Hanford Advisory Board Advice #302, “Re: Public Involvement in Budget Development (HAB Consensus Advice #302),” dated September 19, 2019
[https://www.hanford.gov/files.cfm/Advice_Budget_Priorities_9_25_19.pdf]
- 8) Letter, Alexandra K. Smith (Dept of Ecology) to Susan Leckband (Hanford advisory Board Chair), “Re: Hanford Advisory Board Consensus Advice #302, “Public Involvement in Budget Development”, “dated October 31, 2019, 19-NWP-180
[<https://pdw.hanford.gov/alsearch?s=19-nwp-180>]
- 9) Letter, EMSSAB Chairs to DOE-Environmental Management Headquarters, “Recommendation on Improving EM SSAB and Public Engagement in the DOE Environmental Management Budget Process,” dated October 30, 2019
[approved by the HAB on December 5, 2019].
- 10) Letter, Ken Niles, Oregon DOE Assistant Director for Nuclear Safety, to DOE Richland Operations Office, re: Hanford Cleanup Budget Priorities, dated July 6, 2017.