

Draft HAB Advice for the 2013-2014 Lifecycle Scope, Schedule, and Cost Report

(Highlighting denotes notable changes from version 3)

Background –

The Hanford Advisory Board (HAB) appreciates the opportunity to once again formally comment on the 2013 and 2014 Hanford Lifecycle Scope, Schedule, and Cost Reports (Lifecycle Report or Report). If used properly, the Lifecycle Report should provide the foundation for annual budget requests from DOE Richland Operations Office (DOE-RL) and the DOE Office of River Protection (DOE-ORP) to DOE Headquarters (DOE-HQ). The Lifecycle Report is the single document that should provide a reasonably complete picture of the Hanford cleanup mission's cost, schedule, and long term stewardship **costs for the entirety of the mission**. The evolution of the Lifecycle Report involves the U.S. Environment Protection Agency (EPA), Washington State Department of Ecology (Ecology), tribal nations, the State of Oregon, and both Hanford and Washington State stakeholders.

The **goals** identified in the Table 1-2 on pages 1-7 and 1-8 of the 2013 Lifecycle Report are consistent with HAB Values. These are high reaching goals that truly capture the cleanup mission. The DOE Time-Phased Cleanup Priorities in Table 3-2 on page 3-4 provide an excellent level of detail for cleanup **priorities**. The Lifecycle Report does reflect the assumption that the Tri-Party Agreement (TPA) milestones and the required funds to support **those milestones** will be requested annually **by DOE-RL, DOE-ORP and DOE-HQ**.

The Board believes the Lifecycle Report is intended to be the foundation and/or tool for developing and submitting funding requests from local DOE Offices to DOE-HQ. Today, sequestration poses a new challenge to Hanford's budget **and the goals set forth in the Lifecycle Report**. Any reduction of funds impacts completion of projects, the ability to start new projects, cost escalations of existing projects, and the ability to meet legally required TPA milestones.

Hanford's recent budget history reflects consistent budgets in the \$2 billion range. Looking at 2013 funding today, the out-year funding profiles must be adjusted to compensate for this **reduction** in order to meet TPA Milestones, the Consent Decree, and the Hanford Dangerous Waste Permit.

The funding profile in the 2013 Lifecycle Report (see Figure 3-3 on page 3-6) reflects a significant increase in funding over the next 20 years to accommodate the TPA milestones. In FY2014 through FY2041, the projected budget is as much as \$1 billion dollars higher than it is for FY2013. If the budget were to remain at the FY2013 level, the completion date for cleanup could be extended out an additional 20 to 40 years, and could lead to increased risk and **cost**.

The HAB is generally pleased with the improvements reflected in the 2013 Lifecycle Report, although further improvements are still needed. Looking ahead to the 2014 Lifecycle Report, the HAB is still concerned with the number of **actions** that have been identified as part of the

mission, but have not yet been scheduled or have a funding baseline. For example, the actual re-baselining of the Waste Treatment and Immobilization Plant (WTP) construction, and pretreatment design and construction have not been incorporated into this latest report.

Advice

1. The Board advises DOE that the 2014 Lifecycle Report needs to reflect realistic budgets, including sequestration-level funding impacts and estimates from DOE Headquarters -- not budgets based on meeting unrealistic TPA milestone schedules. The Board advises DOE to use the Lifecycle Report as a tool to make the case for compliant funding of Hanford cleanup. The Board advises that DOE include a variety of Hanford funding scenarios that show the impact of reduced budgets on out-year cleanup schedules.
2. The Board advises the TPA agencies to consider the impact of reduced funding levels on the Lifecycle Report and TPA Milestones. The Lifecycle Report should reflect alternate funding levels, priorities and schedule changes that would be required if funding levels are reduced. The HAB believes the Lifecycle Report cannot reflect meaningful budget projections as long as there are conflicts between cost and scheduling documents.
3. The Board advises DOE that the 2014 Lifecycle Report should contain all available information on the re-baselining cost and schedule of the WTP and pretreatment design and construction.
4. The Board advises DOE to determine a path forward for interim, onsite storage and permanent offsite disposition for the vitrified high level waste from the WTP. That path forward and cost should be included in the 2014 Lifecycle Report.
5. The Board advises DOE that construction of additional tank storage (per HAB Advice #263) should be addressed in, and a funding profile developed for, the 2014 Lifecycle Report. In addition, the Lifecycle Report should estimate the cost of responding to a double shell tank leak and/or collapsed dome.
6. The Board advises, based on the assumption that a second LAW Facility will be build and operational by 2021, that a funding profile for the facility or any other supplemental treatment facility be developed and included in the FY 2014 Report.
7. Page 4-15, section 4.4, "River Corridor Cleanup Assumptions and Uncertainties," includes an assumption that "Final RODs will confirm that cleanup levels established in the interim RODs are protective of human health and the environment." This is a significant assumption. The Board advises that a range of impacts should be included in the FY14 Report if this assumption proves to be incorrect.
8. On page 5-37, the last assumption listed is that "WIPP¹ will remain operational through the end of Hanford Site cleanup operations that have the potential to generate TRU²

¹ Waste Isolation Pilot Plant

² Transuranic

waste.” The Board advises that this is an issue that needs further exploration within this document. The topic also provides an opportunity to demonstrate the necessity to ensure that these cleanup activities at Hanford are not dramatically delayed, because one of the impacts may be the need to extend the planned operating life of WIPP (at what would be a considerable cost), and that cost should be included in the document. With continued delays in the transuranic waste retrieval program, there is the potential for a major disconnect between Hanford cleanup and WIPP availability.

9. The Board advises that Appendix C, “Hanford Site Cleanup Decisions,” should include reference to Records of Decision which designate Hanford for disposal of off-site waste. This would include the February 25, 2000 *Record of Decision for the Department of Energy’s Waste Management Program: Treatment and Disposal of Low-Level Waste and Mixed Low-Level Waste; Amendment of the Record of Decision for the Nevada Test Site*, and the June 30, 2004 *Record of Decision for the Solid Waste Program, Hanford Site, Richland, WA: Storage and Treatment of Low-Level Waste and Mixed Low-Level Waste; Disposal of Low-Level Waste and Mixed Low-Level Waste, and Storage, Processing, and Certification of Transuranic Waste for Shipment to the Waste Isolation Pilot Plant*.
10. The 2011 Lifecycle Report included a figure (Figure 5.5) that provided a graphic of the major Hanford groundwater plumes. In the Board’s November 2011 comments, we suggested that in addition to this figure, it would be useful to have additional figures that show the groundwater plumes at each of the reactor areas and in each of the 200 Areas and the 300 Area. Instead, Figure 5.5 was removed and there is no groundwater map whatsoever. The Board repeats its request for groundwater plume maps for individual areas on the site and further request that the site-wide groundwater plume map be added back.
11. Table 5-4 shows groundwater operable unit remediation. The Board had previously indicated that the estimated period of remediation for several of these pump-and-treat systems seems unreasonably short. The 2013 Lifecycle Report now has language that says these estimates are based on previous experience with interim ROD remedial actions and groundwater modeling. The Board advises that the timeframes as represented in this report are far too short and not realistic.
12. The Board advises that an explanation is needed for the funding profile for Safeguards and Security, which shows a big increase from 2018 to 2019 (\$76m to \$101 million), and then a drop in 2020 (to \$62 million). The funding profile also shows a large drop from 2037 to 2038 (\$103 million to \$54 million), again with no explanation.
13. Section 1.7, “Changes From Previous Report” indicates that Section 7.4 – Long-Term Stewardship (LTS) was revised to clarify that LTS has started and how it will continue under PBS-LTS. However, the Lifecycle Report shows no funding until 2060. If the program has started at Hanford, as Section 1.7 indicates, then the Board advises that the Lifecycle Report specify the funding source.

Comment [SH1]: I do not see this reference to graphics for groundwater plumes in HAB Advice 252, issued November 4, 2011. Is there another source for this statement?

14. Table A-6 “Anticipated Schedule for Detailed Analysis of Cleanup Action Alternatives” includes four cleanup actions for detailed analysis in the 2014 version of the Lifecycle Report. The Board advises DOE conduct an examination of “Remediate Contaminated Deep Vadose Zone” and “Restore 200 East Groundwater to Beneficial Use.” However, the Board does not support detailed examination at this time of “Disposition B Plant Canyon” and “Disposition PUREX Canyon.” The Board does not believe cleanup will move forward on either of these canyons prior to 2020. Instead, the Board advises that a detailed examination of “Disposition Cesium/Strontium Capsules” and “Restore 200 West Groundwater to Beneficial Use,” should be performed. Both projects are currently listed for detailed analyses in 2015 or later versions of the Lifecycle Report.
15. The Board believes that the costs for the Waste Encapsulation Storage Facility (WESF) Base Operations, Waste Repackaging and Processing facility (WRAP) Min-Safe Operations and Maintaining Safe and Compliant Fast Flux Test Facility (FFTF) Complex costs had significant increases in the 2013 Lifecycle Report, with no explanation. The Board advises that the 2014 Lifecycle Report should contain justification for the cost increases.

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