

2014 Hanford Lifecycle Scope, Schedule and Cost Report

U.S. Department of Energy Washington State Department of Ecology U.S. Environmental Protection Agency

February 2014

The Hanford Lifecycle Scope, Schedule and Cost Report (Lifecycle Report) is a milestone requirement (M-036-01) under the Hanford Federal Facility Agreement and Consent Order, commonly referred to as the Tri-Party Agreement (TPA). The Lifecycle Report describes the scope, schedule and cost for completion of the Hanford Site cleanup mission. The report reflects all cleanup work that must be completed by both of the U.S. Department of Energy (DOE) Environmental Management (EM) project offices [Richland Operations Office (RL) and Office of River Protection (ORP)] to fully meet all applicable obligations under the TPA; the Consent Decree and Tri-Party Agreement modifications settling State of Washington v. the U.S. Department of Energy; and in the Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion Revision 8C, for the Treatment, Storage, and Disposal of Dangerous Waste, Washington State Department of Ecology Nuclear Waste Program, September 2010 Permit Number: WA7 89000 8967 Revision Number: 8C, September 30, 2013.

The Lifecycle Report serves as an agreed upon foundation for preparing federal budget requests and for informational briefings to affected Tribal Governments and Hanford stakeholders. The report shall also serve as the basis for annual discussions with the U.S. Environmental Protection Agency and the Washington State Department of Ecology on how and when DOE-RL and DOE-ORP will complete cleanup, and how milestone changes and adjustments will affect lifecycle scope, schedule and cost.

The 2014 Lifecycle Report information reflects scope, schedule and cost information that is current as of December 1, 2013, and the costs shown have been escalated for inflation.

The 2014 Lifecycle Report Does:

- Provide project scope, schedule and cost from fiscal year (FY) 2014 – FY 2090 for both DOE Hanford project offices, and will be modified annually;
- Include scope, schedule and cost information across the entire Hanford Site regardless of whether the cleanup decision has been made;
 - Appendix A describes the multiple kinds of cleanup decisions to be made and identifies decisions that are considered to be final
 - Appendix B describes future actions required to complete cleanup and presents information on plausible alternatives for future cleanup actions

- Include current regulatory decisions, scope, schedule, and cost estimate revisions;
- Overlap with the funding approval process for the current budget execution year and with the DOE Headquarters and Office of Management and Budget review of funding requirements for the next fiscal year;
- Include post closure Long-Term Stewardship (LTS)/ institutional controls, safeguards and security, pension costs, community and regulatory agency support;
- Provide a listing of all existing Hanford cleanup decisions.

The 2014 Lifecycle Report *Does Not:*

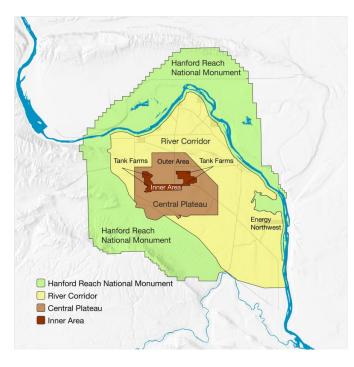
- Include DOE Office of Science funded work, Natural Resource Damage Assessment and Restoration liabilities, or leased lands such as U.S. Ecology;
- Make or replace any cleanup decisions, nor is it a *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* or RCRA decision document;
- Substitute for, nor preempt, the cleanup decision processes as set forth in the TPA.



Background/What's New in the 2014 Lifecycle Report

Hanford Scope

The Hanford Site cleanup consists of three major scope components: 1) River Corridor, 2) Central Plateau and 3) Tank Waste. The Tank Waste component is contained geographically within the Central Plateau area. Cleanup also includes mission support activities related to safeguards and security, community and regulatory support, Hanford Site infrastructure and services, and LTS.



Hanford Site map showing Hanford's principal areas designated for cleanup purposes

The scope of Hanford Site cleanup work is broken down into a series of Project Baseline Summaries (PBSs), ten for DOE-RL and two for DOE-ORP. Details of these PBSs are identified in the Lifecycle Report (see Chapters 3 to 6).

Significant Changes to the 2014 Report

- Updated cost and schedule planning basis for each PBS to incorporate updated scope, regulatory changes, and contract changes so this information reflects the RL and ORP configuration-controlled planning cases that are current as of December 1, 2013.
- Clarified that when PBS RL-0041 Nuclear Facility D&D-River Corridor Closure Project ends in FY2019 the remaining work scope (including B Reactor support) will transition to PBS RL-0040 Nuclear Facility D&D-Remainder of Hanford.
- Descriptions for the work elements RL Directed Activities, Usage-Based Services Distributions, and Usage-Based Services, General and Administrative (G&A), Direct Distributions have been added to the scope summary tables for each PBS and in Appendix C.
- Added the prime contract responsibility to the PBS summaries in Table 2-1.
- Clarified that T Plant is acceptable for interim sludge storage in Section 3.2.
- Clarified in Section 6.1 that when PBS RL-0020 Safeguards and Security ends in 2059, then protection of human health and the environment transfers to LTS (PBS RL-LTS).
- Reduced the size of the report and made it easier to read.

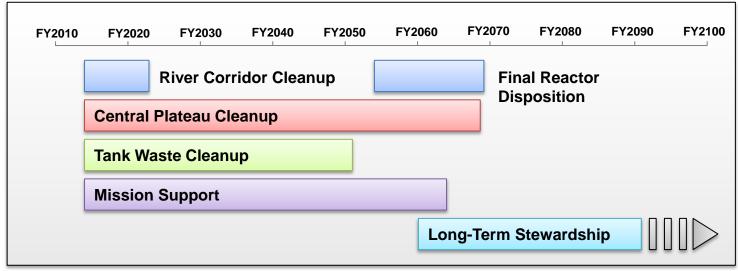
TPA Milestone

On October 25, 2010, the TPA agencies (DOE, EPA and Ecology) added a new milestone (M-036-01) to the TPA, requiring that DOE submit a *Hanford Lifecycle Scope, Schedule and Cost Report* to EPA and Ecology by January 31 each year.

Hanford Schedule and Cost Estimates

Hanford Schedule

The schedule below represents the projected duration of cleanup operations at Hanford. Though most cleanup on site will be complete by 2060, this schedule includes uncertainty to allow for time-related risk impacts and other project uncertainties. After 2060, when cleanup is expected to be complete, most, if not all, of the cleaned up areas will be transferred into LTS and eventually Legacy Management. DOE will maintain a presence at Hanford for the foreseeable future.



Scale dates represent start of fiscal year

Hanford Cost

Hanford's remaining cleanup costs through FY 2090 are estimated to be about \$113.6 billion. DOE-RL scope accounts for about \$55.5 billion. DOE-ORP scope accounts for about \$58.1 billion.

These include estimates to account for cost uncertainty because many of the final cleanup decisions have not been made. Once these decisions are made, estimates will be reflected in future Lifecycle Reports.



Hanford Site cost estimate FY 2014 - FY 2090 \$113.6 billion

Cost Estimate Alternative Analysis

The TPA agencies reviewed the alternative analyses included in the 2011, 2012 and 2013 Lifecycle Reports, the level of effort required to conduct those analyses and the benefits and insights gained from those analyses.

After considering the remaining cleanup actions to be analyzed (Appendix B, Table B-6), the timing of anticipated regulatory decisions, the potential benefits and the effort required to conduct the analyses, the TPA agencies agreed that the 2014 Lifecycle Report would not include an alternative analysis.

Outreach

- The 2014 Lifecycle Report was submitted to EPA and Ecology by January 31, 2014, in time to support DOE's annual budget development process and help inform decision makers about schedule and prioritization. Development of the 2015 Lifecycle Report is currently underway.
- Request for feedback will be an ongoing part of the annual report preparation process.
- Input from Tribal Governments, State of Oregon, Hanford stakeholders, and the public will support future Lifecycle Report development. Feedback received on the 2014 report will be considered for inclusion into the 2015 and future Lifecycle Reports.

The 2014 Hanford Lifecycle Report is available at www.hanford.gov on the rotating banner.

Feedback received on the 2011, 2012 and 2013 Lifecycle Reports is located on the Hanford website at: www.hanford.gov under the "Quick Links" on the right side of the main page.

The Lifecycle Report is also available for review at the Public Information Repositories:

University of Washington, Suzallo Library Government Publication Division Box 352900, Seattle, WA 98195 (206) 543-5597 www.lib.washington.edu/govpubs/

Portland State University, Branford Price Millar Library Science and Engineering Floor P.O. Box 1151, Portland, OR 97207-1151 (503) 725-4542 http://library.pdx.edu/

U.S. Department of Energy Public Reading Room Washington State University, Tri-Cities Consolidated Information Center, Room 101-L 2770 University Drive, Richland, WA 99352 (509) 375-3308 http://reading-room.pnnl.gov/

Gonzaga University, Foley Center 502 East Boone Ave., Spokane, WA 99258 (509) 313-6110 www.gonzaga.edu/Academics/Libraries/Foley-Library/

TPA Administrative Record and Public Information Repository

2440 Stevens Center Place, Room 1101 P.O. Box 950, Mail Stop H6-08 Richland, WA 99352 (509) 376-2530 http://www5.hanford.gov/arpir/

Public input needs to be in writing and submitted by April 18, 2014.



Please E-mail feedback to: LCSSC@rl.gov or mail to:

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