

January 28, 2020

20-NWP-022

William F. Hamel, Assistant Manager
River and Plateau
Richland Operations Office
United States Department of Energy
P.O. Box 550, MSIN: H5-20
Richland, Washington 99352

Re: Federal Fiscal Year (FFY) 2020 Budget and Integrated Priority List

References: See page 3

Dear William F. Hamel:

The United States Department of Energy-Richland Operations Office (USDOE-RL) briefed the United States Environmental Protection Agency (EPA) and the Washington State Department of Ecology (Ecology) on the impacts of a FFY 2020 Continuing Resolution on Hanford.

The briefing was given in compliance with Hanford Federal Facility Agreement and Consent Order (HFFACO) paragraph 149.F. USDOE-RL has also repeatedly discussed with us its Integrated Priority List (IPL).

EPA and Ecology believe it is important for us to receive the Continuing Resolution briefing and other briefings required by HFFACO Article XLVIII, *Cost, Schedule, Scope, Integration, Planning and Reporting*. We provide the following comments to USDOE-RL focusing not on FFY 2020, but on a 5-year vision for Hanford cleanup. These comments are consistent with HFFACO Paragraph 149.C, which states in part:

Ecology and EPA shall be given . . . 2) the opportunity to review, comment and make integrated recommendations on that budget request, including work scope, priorities, schedules/milestones, and *five-year* target and compliance cost/funding projections.
[emphasis added]

A joint USDOE-RL and USDOE-Office of River Protection *5 Year Plan* was shared with the Hanford Advisory Board/River and Plateau Committee on January 7, 2020 (Reference 1).

EPA repeatedly made the comment in our IPL meeting, and Ecology concurs, that the USDOE-RL IPL for FFY 2020 should consider multi-year funding requirements. In other words, USDOE-RL should not start projects in FFY 2020 if USDOE-RL can't support out-year funding peaks for those projects. EPA and Ecology have observed in our decades of Hanford oversight that the starting, stopping, and re-starting of Hanford projects has been expensive.

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EPA provides the enclosed 5-Year priorities table for you to compare with your own *5 Year Plan*. Ecology provides our own 8-year *2019-21 Strategic Alignment Map* for the work of Ecology's Nuclear Waste Program. EPA and Ecology believe our priorities are closely aligned.

In addition to recommending a multi-year funding approach, we provide the following high-level comments on implementation:

1. **Planning Case Assumption.** USDOE-RL's IPL and multi-year funding assumption appears to be annual funding of \$914 million. EPA and Ecology remind USDOE-RL that for the 2016 HFFACO changes (Reference 2):

“We did not base our negotiations on the assumption that future funding would be constrained to a flat funding level. We considered that the agencies were able to support greater amounts of work than present funding, as evidenced by performance during the period of the American Reinvestment and Recovery Act.”

USDOE-RL should use a planning case of \$1,100 MM per year.

2. **High-Risk Facilities.** USDOE-RL wants to prioritize risk reduction for aging facilities, especially around the Plutonium Finishing Plant (PFP). We remind you that a CERCLA Record of Decision (ROD) is in place since 2011 for many of these facilities (Reference 3) and any early actions should not impede the ability to implement the selected remedial action.

USDOE-RL has repeatedly declined EPA requests for the required ROD implementation schedule. USDOE shall provide the schedule within 30 days of receipt of this letter for approval by EPA.

3. **Contaminated Soil for ERDF.** Our joint letter 19-NWP-201 requested a multi-year strategic plan to generate contaminated soil to mix with building debris disposed at the Environmental Restoration Disposal Facility (ERDF). The USDOE-RL response 20-PFD-0013 asserted that USDOE-RL will generate an adequate amount of contaminated soil in FY2020, but didn't include a multi-year plan.

- a. We remind you that both the PFP-area ROD (above) and the Action Memorandums for the 200-MG-1/200-MG-2 are approved, shovel-ready projects that can generate contaminated soil in future years. USDOE should provide a schedule to Ecology for the latter, as required by the HFFACO milestone M-16-250.
- b. The Representative Analogous Sites Coordinating Agency Liaisons (RASCAL) team is working to identify soil contamination areas for early action. The RASCAL team is expected to report to Tri-Party Management in March.

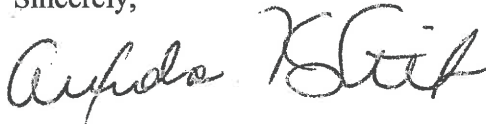
USDOE should develop a schedule for soil remediation at the affected operable units 200-EA-1, 200-BC-1, 200-WA-1, and 200-IS-1. EPA and Ecology can work with a USDOE representative as a core team to expedite cleanup of these units.

William F. Hamel
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If you have questions or comments regarding this letter please contact Craig Cameron of EPA at (509) 376-8665 or Anne Knapp of Ecology at (509) 372-7977.

Sincerely,



Alexandra K. Smith
Program Manager
Nuclear Waste Program
Washington State Department of Ecology



David R. Einan
Hanford Program Manager
Hanford Project Office
United States Environmental Protection Agency

jbp/lkd

Enclosures:

1. EPA Hanford Priorities through 2024
2. Ecology 2019-21 Strategic Alignment Map

References:

1. RAP Summary January 7, 2020, Attachment 1: The Hanford Site 5 year Plan
https://www.hanford.gov/files.cfm/Hanford_Site_5_Year_Plan_Rev_1_120519.pdf
2. *Final Approval Package for the Tentative Agreement an Hanford Federal Facility Agreement And Consent Order Revisions For Central Plateau Cleanup May 2016*, Document date May 25, 2016,
<https://pdw.hanford.gov/document/0076600H>
3. *Record of Decision Hanford 200 Area Superfund Site 200-CW-5 and 200-PW-1 200-PW-3 and 200-PW-6 Operable Units September 2011* Document date September 30, 2011,
<https://pdw.hanford.gov/document/0093644>

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**U.S. Environmental Protection Agency (EPA)
View of Hanford Priorities through 2024**

Project	2020	2021	2022	2023	2024
224T	Put off	Put off	EE/CA, AM, Removal action work plan and SAP	Demolition prep	Demolition prep and demolition?
CIE	Continue CIE development	Begin making use of CIE in support of RI/FS process	Continue using	Continue using	Continue using
C Farm	Finalize TPA milestones	Implement milestones	Implement milestones	Implement milestones	Implement milestones
ERDF		Scope need for expansion based on various waste stream forecasting	Plan for creation of new super cell(s)	Design cell(s)	Begin expansion, if necessary
300 Area					
324 Building Cells	Continue work on B Cell	Finish B Cell Excavation	N/A	N/A	N/A
324 Building and soils	N/A	N/A	Begin Demo	Continue Demo	Finish Demo and begin work on soils
Groundwater and apatite monitoring	Finish review of 300 area GW as promised to Yakama	Investigate 618-7	Investigate 618-7	Change remedy as needed	N/A
618-11	Put off until 324 is complete in 2025	Put off until 324 is complete in 2025	Put off until 324 is complete in 2025	Put off until 324 is complete in 2025	Put off until 324 is complete in 2025
Hanford sitewide					
M-24	Continue drilling number to meet milestones given ahead of schedule	Continue drilling	Continue drilling	Continue drilling	Continue drilling

**U.S. Environmental Protection Agency (EPA)
View of Hanford Priorities through 2024**

Project	2020	2021	2022	2023	2024
200-EA-1	Finalize new milestones and revise RI/FS work plan and SAP	Begin site characterization of remaining uncharacterized representative sites	Finish site characterization	RI Report, draft FS Report	FS Report and PP out to public comment
200-DV-1		Lab tests	Field test, if identified	Field test	Write report
200 Outer Area (200-CW-1/3 and OA-1)	Draw from for some early actions	RI/FS work plan and SAP	Initiate field characterization	RI Report	FS Report and PP
200-IS-1	Draw some UPRs for early actions?				
200-SW-2			Coordinate characterization with M-91 retrievals		
200-CU-1	Waiting on 200-WA-1	Waiting on 200-WA-1	Waiting on 200-WA-1	Begin updating design of cap and demolition	Continue design and updating of documents
Canyon removal actions	Continue at opportunistic pace if budget freed up	Continue at opportunistic pace if budget freed up	Continue at opportunistic pace if budget freed up	Continue at opportunistic pace if budget freed up	Complete all active portions of removal actions
200-CP-1	Draft RI/FS work plan, re-lamp facility	Complete RI/FS work plan	Begin field characterization	Continue characterization	RI/FS Report, draft PP
200-CB-1	Finalize design for dry cask storage of Cs and Sr capsules	Set up dry storage	Begin removing capsules	Complete removal into dry storage	Drain and treat basin water if necessary
224B	EE/CA	AM, Removal action work plan and SAP	Demolition prep	Demolition prep	Demolition to wait until after Cs and Sr capsules removed from WESF

**U.S. Environmental Protection Agency (EPA)
View of Hanford Priorities through 2024**

Project	2020	2021	2022	2023	2024
200 Area					
Early Actions	Identify early actions and begin removal or remedial development process	Public comment and AM or remedial following RD/RA work plan (select 200-PW sites)	Begin implementing early actions not included in PW OUs	Continue actions	Continue actions
200-BP-5 and PO-1 GW Interim RA	PP out to public comment and ROD	ROD completed if not done in FY 2021, RD/RA work plan	Begin constructing and implementing interim remedy	Fully operational	Continue P&T
Upgrades to 200 West P&T facility	Continue optimization study through 2024; continue to perform RA for ZP-1 and UP-1	Continue optimization study through 2024; continue to perform RA for ZP-1 and UP-1	Continue optimization study through 2024; continue to perform RA for ZP-1 and UP-1	Continue optimization study through 2024; continue to perform RA for ZP-1 and UP-1	Determine if additional 2 years are needed for optimization study; continue to perform RA for ZP-1 and UP-1
200-PW-1/3/6 and CW-5	Design and plan early actions for stabilization; finalize revised schedule for RD/RA WP; initiate early actions for stabilization	Begin remediation of non-early action sites	Continue implementation of remedy	Continue implementation of remedy	Continue implementation of remedy
200-BC-1	FS including info on two TTs	PP and Public Comment	ROD and RD/RA work plan	Begin remedial action	Continue actions
200-WA-1	Finalize new milestones and revise RI/FS work plan and SAP	Begin site characterization of remaining uncharacterized representative sites	Continue site characterization including in U Plant Area and PFP	Complete site characterization and roll up in an RI Report	FS Report and PP

U.S. Environmental Protection Agency (EPA) View of Hanford Priorities through 2024

Fundamentally, EPA wants to see contaminated soil balanced with building debris for effective use of ERDF. Also want to see decisions completed and soil excavation work to continue through operation of ERDF while building D&D continues. We may want to set up a deliverable from DOE for waste forecasting to make sure the balance of waste streams is optimized. EPA also believes that we should ensure appropriate public involvement is conducted as part of the decision-making process.

Note that our top priorities for 2020 are bolded.

Project	2020	2021	2022	2023	2024
100 Area					
100 K soil OUs	Continue progress on waste site remediation in order to meet 2024 milestone	Continue remediation	Continue remediation	Continue remediation	Complete all response actions for the 100 K Area. Complete 105-KE and 105-KW Reactor Interim Safe Storage in accordance with the Removal Action Work Plan.
100 K Basins	Remove debris	Demolish basins	Select K Basin sludge treatment and packaging technology and propose new interim sludge treatment and packaging milestones.	Complete deactivation, demolition & removal of 105-KW Fuel Storage Basin.	Initiate soil remediation under 105-KW Fuel Storage Basin.
100 K Final	Complete RI/FS	Complete PP and ROD	RD/RA work plan	Remediation	Remediation
100 BC	Complete Final ROD	RD/RA work plan	Remediation	Remediation	Close out?
100 N Final	Complete RI/FS	Complete PP and ROD	RD/RA work plan	Expand apatite barrier and perform other remediation	Remediation
Groundwater actions	Continue pump and treat operations	Continue pump and treat operations	Continue pump and treat operations	Continue pump and treat operations?	



Ecology's mission is to protect, preserve, and enhance Washington's environment for current and future generations

ECOLOGY'S STRATEGIC PRIORITIES

- Reduce & prepare for climate impacts
- Prevent & reduce toxic threats
- Deliver integrated water solutions
- Protect & restore Puget Sound

ECOLOGY'S GOALS

- Protect and restore land, air and water
- Prevent pollution
- Promote healthy communities and natural resources
- Deliver efficient and effective services

PROGRAM VISION

The legacy contamination at the Hanford Site is cleaned up to restore, protect, and preserve the land, air, and water for beneficial use.

PROGRAM MISSION

Protect the State's air, water, and land at and adjacent to the U.S. Department of Energy's Hanford Site by overseeing effective and efficient cleanup to ensure sound management of mixed hazardous wastes in Washington.

OUR SHARED VALUES & COMMITMENTS

- Perform our work in a **professional and respectful** manner.
- Listen carefully and communicate in a **responsive and timely** manner.
- Solve problems through **innovative** ways.
- Build and maintain **cooperative relationships**. Work in partnership with the Department of Energy and their contractors, other regulated entities, local communities, tribes, stakeholders, and other regulators.
- Practice **continuous improvement**.

Strategic Alignment Map

NUCLEAR WASTE PROGRAM GOALS

Clean Up Contamination Remedy legacy environmental contamination and promote restoration of damaged natural resources at Hanford.	Safe Waste Management Ensure safe treatment, storage, cleanup, and disposal of radioactive and mixed waste statewide.	Environmental Protection Protect the environment, including the Columbia River, by applying the State's waste, water, and air regulations consistent with other Ecology programs.	Professional Organization Maintain strength and diversity to meet challenges, solve problems, deliver excellent services, and build and sustain critical partnerships while promoting a healthy and satisfying work environment.
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2019-2027 OBJECTIVES AND FOCUS AREAS

<ul style="list-style-type: none"> • Make all CERCLA decisions needed to begin cleanup of central Hanford waste sites and groundwater. • Ensure groundwater entering the Columbia River meets drinking water standards. • Complete the RI/FS and draft cleanup action plan for the commercial low-level waste facility. • Assess success of groundwater protection actions. • Complete Hanford Natural Resource Injury Assessment. 	<ul style="list-style-type: none"> • Reissue the Hanford Sitewide Permit (Rev 9). • Complete permits and certification for Direct Feed LAW activities and facilities. • Monitor preparations and progress on low-activity and high-level waste vitrification. • Ensure facilities comply with applicable dangerous waste regulations and TSD permits. • Ensure single-shell tank waste is treated or placed in double-shell tanks. • Permit treatment of large, highly radioactive mixed waste containers. 	<ul style="list-style-type: none"> • Maintain protective air and water permits. • Build and strengthen collaborative partnerships through stakeholder and public involvement. • Ensure USDOE and its contractors produce defensible analytical data for Ecology regulatory decisions. • Support implementation of RCRA air emission controls for tank farms. • Use modern technology to develop a strategic workforce planning system. 	<ul style="list-style-type: none"> • Clarify, standardize, and emphasize our developmental tools and opportunities. • Enhance the NWP culture using innovative and effective techniques. • Create and maintain a successful Administrative Support Team across sections and duties to ensure effective, continuous administrative professional services for the Program.
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2019 – 2021 INITIATIVES

<ul style="list-style-type: none"> • Complete cleanup decisions for N Area sites. • Implement 100 D/H actions. • Approve enhanced N Area strontium barrier. • Complete interim record of decision for East Area Groundwater Operating Units. • Track and enforce TPA milestones to ensure processing of TRUM (M-91). 	<ul style="list-style-type: none"> • Complete permits and closure plans for Solid Waste Operating Complex and Cs/Sr capsules. • Reissue Puget Sound Shipyard and PermaFix permits. • Ensure our dangerous waste compliance program is consistent with HWTR and the EPA PPA. 	<ul style="list-style-type: none"> • Ensure compliance with air and water permits on Hanford. • Define and establish a compliant ambient air boundary for air permitting. • Provide for open dialogue with stakeholders and the public using existing and innovative communication tools. 	<ul style="list-style-type: none"> • Engage all staff to develop strategic and workload plans. • Establish and carry out an NWP Wellness Plan. • Develop modern technology for strategic project planning and workforce management. • Improve use of peer review and plain talk in documents.
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