U.S. Department of Energy
Hanford Site

19-BUD-0083

AUG 0 1 2019

Ms. Susan Leckband, Chair
Hanford Advisory Board
713 Jadwin Ave., Suite 4
Richland, Washington 99352

Dear Ms. Leckband:

THE U. S. DEPARTMENT OF ENERGY (DOE) RICHLAND OPERATIONS OFFICE (RL) AND OFFICE OF RIVER PROTECTION (ORP) FISCAL YEAR (FY) 2021 BUDGET PRIORITIES

Thank you for your April 18, 2019, advice regarding the DOE Hanford Site FY 2021 Budget priorities. The U.S. Department of Energy Richland Operations Office and Office of River Protection value the Hanford Advisory Board's (HAB) advice and appreciates their recommendations.

RL and ORP look forward to providing briefings on the topics that the HAB requested in your budget advice letter at the appropriate time. On May 15, 2019, a briefing on the RL and ORP FY 2020 and 2021 budget was provided to the Hanford Regulators. Both offices are currently working on the FY 2021 budget submittal in which your budget advice will be included. For planning purposes enclosed is a combined list of FY 2021 Hanford work scope with estimated cost ranges.

In the future, we invite the HAB to provide an integrated priority list of projects that reflect the HAB's priorities.

If you have any questions, please contact me, or your staff may contact Greg Jones, Assistant Manager for Business and Financial Operations, at (509) 372-8977.

Sincerely,

Brian T. Vance
Manager

BUD: TH

Enclosure

cc: See page 2

cc w/encl:
David A. Borak, EM-4.32
John B. Price, Ecology
Emerald Laija, EPA-HQ
Administrative Record

HANFORD SITE
FY 2021 ABB LISTING AND PLANNING DATA

Org	Control Point	PBS	Scope	2021 Low End	2021 High End	2021 Cum Low	2021 Cum High	FY 2021 Accomplishments
ORP	Tank Farms	ORP-0014	Integrity Program for Aging Tanks	26,800	32,700	26,800	32,700	Inspection and analysis to maintain integrity and structure of waste storage tanks.
ORP	Tank Farms	ORP-0014	Maintenance of Aging Tanks	15,300	18,700	42,100	51,400	Maintain functionality of Tank Farms facilities and equipment.
ORP	Tank Farms	ORP-0014	Tank Farm Vapors	5,400	6,600	47,500	58,000	Complete Nucon Pilot testing for tank farm vapor abatement.
ORP	Tank Farms	ORP-0014	Tank Farms Base Operations	332,300	406,200	379,800	464,200	Tank Farms min safe operations, including industrial safety, industrial hygiene, radiological control, maintenance, and engineering support.
ORP	WTP	ORP-0060	HLW - Preservation	27,000	33,000	406,800	497,200	Continue min safe and facility preservation and maintenance.
ORP	WTP	ORP-0060	PT - Preservation	18,000	22,000	424,800	519,200	Continue min safe and facility preservation and maintenance.
RL	Central Plateau	RL-0013C	Solid and Liquid Waste S&M	65,100	79,500	489,900	598,700	Solid Waste Stabilization and Disposition programs and facilities required for continuity of operations; mission critical systems and equipment.
RL	Central Plateau	RL-0030	Groundwater	41,400	50,600	531,300	649,300	Analyze laboratory samples to meet RCRA/CERCLA compliance monitoring requirements. Complete annual Well Drilling Commitments for CERCLA/RCRA compliance monitoring. Provide preventive and corrective maintenance of existing remediation systems.
RL	Central Plateau	RL-0201	RL Direct	65,300	79,900	596,600	729,200	Activities include contracted services for steam, occupational health, and IT support; critical heating systems; performance assessment activities; site access control; records management; general services such as sanitation, warehousing, facility maintenance, fleet management, and custodial; land management; regulatory grants, permits, and fees; litigation support; NHPA compliance; and rent.
RL	Central Plateau	RL-0201	Site Wide Services	201,700	246,500	798,300	975,700	Activities include minimum safe operations and essential site services necessary to maintain functionality (but not upgrade) of required site infrastructure; fire protection; emergency management services; physical control of government property and equipment; services including, but not limited to, critical utilities and other essential functions; safety, environmental, health, and training; business services; and information management.
RL	Community & Regulatory	RL-0100	Reg/Stakeholder Support	2,300	2,800	800,600	978,500	Support offsite agency emergency preparedness programs, State of Oregon input on Hanford activities, and independent radiological monitoring during events by the WA State Department of Health. Also support the Hanford Advisory Board for public involvement related to the cleanup mission at the site.
RL	Community & Regulatory	RL-0100	Reg/Stakeholder Support - PILT	5,600	6,800	806,200	985,300	Payment in lieu of tax to three counties in accordance with settlement agreements between DOE and each county.
RL	FFTF	RL-0042	FFTF S&M	2,300	2,800	808,500	988,100	Long-term safe and compliant surveillance and maintenance for Fast Flux Test Facility and support facilities. Annual support includes periodic surveillances and walk-throughs, maintaining sodium systems under an inert atmosphere, and maintenance of the 400 Area water system. Support will be required until the residual and bulk sodium is dispositioned and facility deactivation and decommissioning is resumed.
RL	River Corridor	RL-0040	Facility/Waste Site/Canyon S&M	16,300	20,000	824,800	1,008,100	Surveillance and maintenance activities to ensure safety of waste sites and surplus facilities on the Central Plateau, including Environment, Safety, and Health oversight, quality management, safety and job hazards analysis, technical support, and integration with site activities.
RL	River Corridor	RL-0041	100K Area Remediation S&M	1,800	2,200	826,600	1,010,300	Maintain 100K Area in a safe and compliant manner by supporting minimum required surveillance and maintenance activities.
RL	River Corridor	RL-0041	324 Bldg.	8,100	9,900	834,700	1,020,200	Maintain 324 Building (CAT 2 nuclear facility) in a safe and compliant manner by supporting minimum required surveillance and maintenance activities.
RL	River Corridor	RL-0041	K Basin S&M	17,100	20,900	851,800	1,041,100	Maintain K West Basin (CAT 2 nuclear facility) in a safe and compliant manner by supporting minimum required surveillance and maintenance activities.

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RL	Safeguards & Security	RL-0020	S&S	86,700	105,900	938,500	1,147,000	Conducting vulnerability assessments, workforce studies, and environmental impact assessments; planning, and implementation of a new minimum safe S&S comprehensive Hanford Site UAS Program for the detection, interdiction, reporting, and protection measure implementations to address the evolving unauthorized Unmanned Aerial Systems threat at Hanford.
RL	River Corridor	RL-0040	Aging Facility/Risk Mitigation	18,000	22,000	956,500	1,169,000	Risk mitigation activities to reduce potential threats to workers and the public for degrading high risk facilities, including stabilization, facility demo prep, and demolition of degrading structures.
ORP	Tank Farms	ORP-0014	222-S Laboratory Operations (DFLAW Waste Samples)	49,300	60,200	1,005,800	1,229,200	Analytical laboratory services for DFLAW samples.
ORP	Tank Farms	ORP-0014	DST Upgrades (DFLAW)	4,000	4,900	1,009,800	1,234,100	Complete Double Shell Tank pump replacement to provide Low Activity Waste feed to WTP.
ORP	Tank Farms	ORP-0014	Effluent Treatment Facility and Liquid Effluent Retention Facility upgrades (DFLAW)	19,800	24,200	1,029,600	1,258,300	Tank repairs and IX System repairs to support system capacity needed for DFLAW.
ORP	Tank Farms	ORP-0014	Effluent Treatment Facility Operations (DFLAW)	20,900	25,500	1,050,500	1,283,800	Effluent Treatment Facilty capability for min safe and DFLAW operations.
ORP	Tank Farms	ORP-0014	Tank Side Cesium Ion Exchange Columns (DFLAW)	22,500	27,500	1,073,000	1,311,300	Procure ion-exchange columns required for Tank Side Cesium Removal operations.
ORP	Tank Farms	ORP-0014	Tank Side Cesium Removal Equipment Operations (DFLAW)	7,700	9,400	1,080,700	1,320,700	Process supernate through Tank Side Cesium Removal and stage for feed to Low Activity Waste Facility.
ORP	Tank Farms	ORP-0014	Waste Feed Delivery - Integration (DFLAW)	31,500	38,500	1,112,200	1,359,200	ILAW transporter, glass testing, tank farms operations planning, and waste processing flowsheet.
ORP	Tank Farms	ORP-0014	WTP DFLAW Support	2,500	3,100	1,114,700	1,362,300	Support WTP operational readiness.
ORP	WTP	ORP-0060	WTP LBL-DFLAW	495,400	605,500	1,610,100	1,967,800	Complete system testing and achieve DFLAW Loss-of-Power milestone, enabling melter heat-up. Initiate heat-up of Melters #1 and #2, and initiate cold commissioning. Initiate preparations for contractor and DOE Operational Readiness Reviews.
ORP	WTP	ORP-0060	WTP LBL-DFLAW Contingency	197,600	241,500	1,807,700	2,209,300	Complete system testing and achieve DFLAW Loss-of-Power milestone, enabling melter heat-up. Initiate heat-up of Melters #1 and #2, and initiate cold commissioning. Initiate preparations for contractor and DOE Operational Readiness Reviews.
ORP	WTP Commissioning	ORP-0070	WTP Operations and Commissioning - DFLAW	45,000	55,000	1,852,700	2,264,300	Complete fabrication and receipt of LAW melter bubblers. Prepare for Melter #3 arrival to assemble.
RL	Central Plateau	RL-0013C	IDF DSA/Permitting/Upgrades (DFLAW)	12,600	15,400	1,865,300	2,279,700	Complete preparation for Interim Storage facility operations, including construction of access roads; installation of required infrastructure (water, sewer, electrical); construction/installation of staff offices; construction of fencing and lighting; construction of support buildings; construction of holding pad; and preparation and approval of environmental permits and safety analyses as needed.
RL	Central Plateau	RL-0201	Critical Infrastructure to Support - DFLAW	11,700	14,300	1,877,000	2,294,000	Funds remaining three of thirteen critical system sustainment activities required to support DFLAW, including repairs to the 230kV Electrical Transmission System (North Loop) and the Single Circuit Electrical Distribution System and delivery of specified quantities of properly conditioned water at adequate pressures for DFLAW operations.
RL	Central Plateau	RL-0201	Critical Infrastructure Support and Maintenance	49,500	60,500	1,926,500	2,354,500	Expand existing Fire Station 92, construct a new Fire Station, and construct new fleet maintenance facilities.
ORP	Tank Farms	ORP-0014	242-A Evaporator Operations	14,800	18,100	1,941,300	2,372,600	Operate the Evaporator to support Tank Farms.
ORP	Tank Farms	ORP-0014	242-A Evaporator Upgrades	16,200	19,800	1,957,500	2,392,400	Slurry line replacement and aging facility upgrades.
ORP	Tank Farms	ORP-0014	AX Retrievals	78,600	96,100	2,036,100	2,488,500	Complete retrieval system installation, upgrades, and retrieval of last tank in AX Farm.
ORP	Tank Farms	ORP-0014	222-S Laboratory Operations	14,400	17,600	2,050,500	2,506,100	Analytical laboratory services for Tank Farms base operations and Low Activity Waste Facility operations.

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RL	Central Plateau	RL-0013C	Base Operations: Solid and Liquid Waste	27,800	34,000	2,078,300	2,540,100	Overall management and customer interface to support operations and services for Hanford's Solid Waste Stabilization and Disposition programs and facilities that are not required for min-safe operations.
RL	Central Plateau	RL-0030	Base Operations: Groundwater	54,100	66,100	2,132,400	2,606,200	Operation of groundwater pump and treat activities, including necessary modifications of existing remediation systems to minimize the amount of contamination reaching the Columbia River, ready-to-serve activities to provide integration of Site-wide groundwater and vadose zone cleanup activities, progress towards the completion of the RI/FS Report and Proposed Plan Comprehensive Environmental Response, Compensation and Liability Act process decision documentation needed to obtain the Interim Record of Decision for the 200 East Area (C Tank Farm Area) groundwater operable units on the Central Plateau.
RL	Central Plateau	RL-0013C	Cs/Sr Capsule Disposition - Remainder of CAP	28,800	35,200	2,161,200	2,641,400	Complete and submit critical decision package for DOE approval, including baseline cost and schedule, documented safety analysis, environmental permits, risk analysis, and establishment of management reserve and contingency for the Capsule Storage Area and Cask Storage System.
RL	Central Plateau	RL-0013C	Cs/Sr WESF Modifications Line Item	13,500	16,500	2,174,700	2,657,900	Complete and submit critical decision package for DOE approval, specifically building modifications needed to remove capsules from the Waste Encapsulation and Storage Facility. Upon authorization, select construction contractor and start modifications. Includes submission and approval of safety basis, technical safety requirements, fire hazards analysis, and environmental permit for facility modifications.
RL	Central Plateau	RL-0013C	Cs/SR WESF Modifications Line Item - OPC	4,500	5,500	2,179,200	2,663,400	Complete and submit critical decision package for DOE approval, including baseline cost and schedule, documented safety analysis, environmental permits, risk analysis, and establishment of management reserve and contingency for modifications to the Waste Encapsulation and Storage Facility.
ORP	Tank Farms	ORP-0014	Tank Closure	16,500	20,200	2,195,700	2,683,600	Complete regulatory documentation required to initiate grouting of the C-200 Tanks in Waste Management Area C.
RL	River Corridor	RL-0041	RC Operations Activity - 105 KW Characterization & Dewatering	34,400	42,000	2,230,100	2,725,600	Complete 105KW Fuel Storage Basin above and below water debris disposition and deactivation activities to prepare the basin for dewatering.
ORP	WTP	ORP-0060	HLW - EPC	45,000	55,000	2,275,100	2,780,600	Complete contractor rebaseline, initiate flow sheet updates, initiate design reviews, and initiate new procurements or resume suspended procurements.
ORP	Tank Farms	ORP-0014	A Retrievals	26,800	32,800	2,301,900	2,813,400	Complete A Farm retrieval equipment and system procurement and installation.
ORP	Low-Level Offsite Disposal	ORP-0014A	Low-Level Waste Offsite Disposal (TBI)	32,900	40,200	2,334,800	2,853,600	Procure new Tank Side Cesium Removal Unit for Test Bed Initiative Phase 3.
ORP	Tank Farms	ORP-0014	HQ Hold Back	7,200	8,800	2,342,000	2,862,400	HQ management initiatives.
ORP	Tank Farms	ORP-0014	Waste Feed Delivery - Integration	15,200	18,600	2,357,200	2,881,000	Planning work for future mission execution, including the System Plan and the Multi-Year Operating Plan.
RL	Central Plateau	RL-0013C	Certify Large/Small Container TRU and Disposition	6,300	7,700	2,363,500	2,888,700	Preparation for retrieval, treatment as needed, repackaging, preparation for certification and shipment of contact- and remote-handled transuranic mixed waste, including processing or repackaging at an off-site commercial facility or within the Hanford site.
RL	Central Plateau	RL-0013C	Certify Large/Small Container TRU and Disposition - PFNW	23,400	28,600	2,386,900	2,917,300	Shipment of specified quantities of transuranic/mixed low-level waste to a commercial facility to be processed as required, repackaged, and placed into certifiable containers for eventual disposal at the Waste Isolation Pilot Plant in Carlsbad, NM.
RL	Central Plateau	RL-0013C	ERDF Disposal Operations	19,500	23,900	2,406,400	2,941,200	Operations beyond min-safe activities; transportation, receipt, acceptance, and disposal of waste at ERDF.
RL	Central Plateau	RL-0201	HQ MI Holdback	3,600	4,400	2,410,000	2,945,600	HQ management initiatives.
RL	FFTF	RL-0042	FFTF - Infrastructure	3,600	4,400	2,413,600	2,950,000	Replace Fast Flux Test Facility aging infrastructure.
RL	River Corridor	RL-0040	HQ MI Holdback	3,600	4,400	2,417,200	2,954,400	HQ management initiatives.

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RL	Central Plateau	RL-0030	River Corridor GW Remedial Action Implementation	32,000	39,200	2,449,200	2,993,600	Expand well network and make minor modifications to existing pump and treat facilities as identified in CERCLA Interim and Final Records of Decisions, which are focused on cleaning up groundwater and minimizing the amount of contamination reaching the Columbia River. Support final ROD remedy implementation.
RL	River Corridor	RL-0041	100K Structures Demo	14,400	17,600	2,463,600	3,011,200	Resume demolition activities for the 165KE Power House and 166KE Oil Storage Vault to complete the remaining facility demolition of the eastern side of the 100K Area.
RL	River Corridor	RL-0041	RC Operations Activity - Waste Sites	34,200	41,800	2,497,800	3,053,000	Resume remediation and removal of 100K Area waste sites inside the fence to complete remaining waste site remediation on the east side of the 100K Area.
RL	Central Plateau	RL-0013C	Select Sludge Treatment Technology	14,500	17,700	2,512,300	3,070,700	Determine the technology for processing and treating (as required) K basin transuranic sludge for shipment and final disposal at the Waste Isolation Pilot Plant in Carlsbad, NM. Includes engineering analysis, alternative analysis, cost estimation, and regulatory consideration of the treatment/processing method recommended for acceptance by DOE.
ORP	WTP	ORP-0060	PT - EPC	166,500	203,500	2,678,800	3,274,200	Restart engineering on the Pretreatment Facility.
RL	River Corridor	RL-0041	324 Building Demolition	40,500	49,500	2,719,300	3,323,700	Complete design and planning documentation, and initiate deactivation activities (after completing remote excavation of the 300-296 waste site) to work toward putting the building into cold and dark status, thus reducing min safe requirements.
RL	River Corridor	RL-0041	Complete 105-KE and 105-KW Reactor ISS	18,900	23,100	2,738,200	3,346,800	Award subcontract for backfill and foundation fieldwork to support installation of safe and secure enclosure for 105-KE Reactor.
RL	Central Plateau	RL-0013C	Cs/Sr Capsule Disposition - Remainder of CAP	36,000	44,000	2,774,200	3,390,800	Complete and submit critical decision package for DOE approval, including baseline cost and schedule, documented safety analysis, environmental permits, risk analysis, and establishment of management reserve and contingency for the Capsule Storage Area and Cask Storage System.
RL	Central Plateau	RL-0030	Base Operations: Groundwater	18,000	22,000	2,792,200	3,412,800	Operation of groundwater pump and treat activities, including necessary modifications of existing remediation systems to minimize the amount of contamination reaching the Columbia River, ready-to-serve activities to provide integration of Site-wide groundwater and vadose zone cleanup activities, progress towards the completion of the RI/FS Report and Proposed Plan Comprehensive Environmental Response, Compensation and Liability Act process decision documentation needed to obtain the Interim Record of Decision for the 200 East Area (C Tank Farm Area) groundwater operable units on the Central Plateau.
RL	Central Plateau	RL-0030	Central Plateau GW Remedial Action Implementation	14,000	17,100	2,806,200	3,429,900	Completes well drilling associated with the 200-BP-5/200-PO-1 operable unit (C Tank Farm Area) groundwater remedy implementation supporting the Record of Decision (M-015 series) and ultimately supporting the M-016 milestone series for remediation. Supports chromium remedy implementation in support of the 200-UP-1 Record of Decision.
RL	Central Plateau	RL-0030	Central Plateau RI/FS Rev 0 Work Plans	1,100	1,300	2,807,300	3,431,200	Significant progress towards completion of the Comprehensive Environmental Response, Compensation and Liability Act RI/FS Work Plans that support the characterization and decision documentation required to obtain final decisions for the 200 Area Central Plateau waste sites and pipeline operable units.
RL	Central Plateau	RL-0030	Characterize WA-1 OU & Issue ROD	3,600	4,400	2,810,900	3,435,600	Significant progress towards completion of the characterization and supporting decision documentation needed to complete the Comprehensive Environmental Response, Compensation and Liability Act RI/FS process and obtain the final Record of Decision for the 200-WA-1 operable unit.
RL	Central Plateau	RL-0030	CP Waste Sites/Pipelines/Canyons RODs	31,300	38,300	2,842,200	3,473,900	Significant progress towards completion of the characterization and supporting decision documentation needed to complete the Comprehensive Environmental Response, Compensation and Liability Act RI/FS process and obtain final Records of Decision for the 200 Area Central Plateau waste site, pipeline, and canyon operable units.

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RL	Central Plateau	RL-0030	Deep Vadose Zone ROD	1,300	1,500	2,843,500	3,475,400	Prepare decision documentation in support of TPA commitments.
RL	Central Plateau	RL-0030	River Corridor RODs	1,400	1,800	2,844,900	3,477,200	Complete Record of Decision for a 100 Area River Corridor operable unit and make significant progress towards completion of other decision documentation needed to complete and obtain final Records of Decision for the remainder of the 100 Area River Corridor groundwater operable units.
RL	River Corridor	RL-0040	200 Area Remediation	62,900	76,900	2,907,800	3,554,100	Remediate Central Plateau Waste site in support of PW-1/3/6 operable unit approved Record of Decision and Model Group 1 & 2 operable unit Action Memorandum. Close identified TSD Units per the Closure Plan(s).
RL	River Corridor	RL-0040	Canyon Demo Prep/Risk Reduction	11,700	14,300	2,919,500	3,568,400	Canyon demolition preparation activities within the REDOX Complex to reduce risk to workers and the environment. Includes ventilation upgrades to support hazards removal activities and supports CERCLA Decision documents for interim removal actions within canyon high-risk areas.
RL	River Corridor	RL-0040	U Plant Canyon Disposition (D&D)	13,100	16,000	2,932,600	3,584,400	Support U Plant Canyon disposition to reduce risk to workers and the environment and support the Site's ability to complete Response Actions for Specified Canyon Facilities and Waste Sites.
RL	River Corridor	RL-0040	U Plant Canyon Disposition (Waste Site Remediation)	13,800	16,800	2,946,400	3,601,200	Remediation activities to support U Plant Canyon Disposition.
RL	River Corridor	RL-0041	618-11 Burial Ground Remediation	18,000	22,000	2,964,400	3,623,200	Design and planning documentation to remediate the 618-11 Burial Ground.
ORP	Low-Level Offsite Disposal	ORP-0014A	Low-Level Waste Offsite Disposal (Treatment/Disposal)	90,000	110,000	3,054,400	3,733,200	Treatment and disposal of grouted waste offsite.
RL	Central Plateau	RL-0030	Hanford Site RCRA Work Permit (Rev 9)	1,900	2,300	3,056,300	3,735,500	Perform Soil and Groundwater scope supporting the revision of the Hanford Site RCRA Permit.
				3,056,300	**3,735,500**			