

HANFORD COMMUNITIES

HANFORD NEWS RECAP

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OFFICE OF ENVIRONMENTAL MANAGEMENT

HANFORD'S VIT PLANT SHARES PASSING OF PROJECT DIRECTOR VALERIE MCCAIN



RICHLAND, Wash. – Valerie McCain, project director of the Waste Treatment and Immobilization Plant (WTP) and a Bechtel senior vice president at the Hanford Site, died on March 26 following a short illness.

"Val was highly respected, exemplified our One Hanford spirit and consistently inspired all who were lucky enough to serve with her," said Brian Vance, manager of EM's Office of River Protection and Richland Operations Office. "She will be greatly missed and fondly remembered for her profound influence on our team and our important work."

"Val was highly respected, exemplified our One Hanford spirit and consistently inspired all who were lucky enough to serve with her."

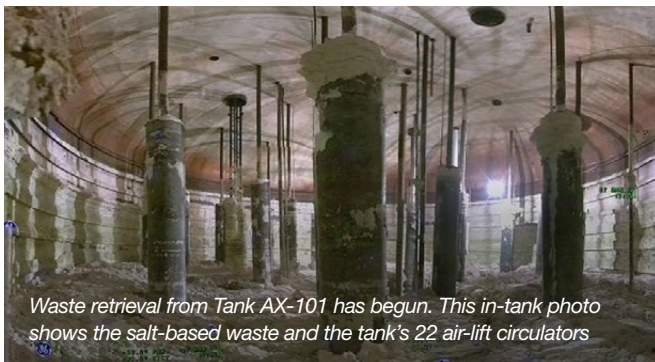
Since joining the WTP in October 2018, McCain led a team of 2,250 employees in completing all construction for the Direct-Feed Low-Activity Waste Program. The team transitioned to commissioning and ramping up the commissioning workforce before shifting to a 24/7 operational culture. Team members managed through the COVID-19 pandemic while continuing to advance the mission. McCain's leadership recently culminated in the highest-ever rating for the project's performance from DOE just a week prior to her death.

McCain also served on the boards of organizations such as the Energy Facility Contractors Group, Tri-Cities Development Council, STEM Foundation and Columbia Industries.

McCain passed away while surrounded by her family. ■

WORKERS START EMPTYING RADIOACTIVE WASTE FROM MASSIVE, LEAK-PRONE HANFORD TANK

Tri-City Herald Published January 24, 2023



By Annette Cary

Emptying of another leak-prone underground tank holding radioactive and other hazardous waste at the Hanford nuclear reservation has begun for the first time since August 2021.

The Hanford site has 149 single-shell tanks built as early as World War II storing waste until it is transferred to a limited number of tanks that better guard against leaks and then treated for disposal. At least some of it will be treated at the Hanford vitrification plant under construction. To date, 20 of those single-shell, underground tanks have been emptied to regulatory requirements, with waste transferred to 27 newer double-shell tanks.

“Seeing retrieval begin on another single-shell tank is always good news,” said Ryan Miller, spokesman for the Washington state Department of Ecology, a Hanford regulator. “One of our agency’s biggest priorities is getting waste out of single-shell tanks, moved to safer double-shell tanks, and eventually treated and disposed of permanently in a way that’s protective of human health and the environment,” he said.

The waste is left from the past production of plutonium at Hanford, adjacent to Richland, Wash., for the nation’s nuclear weapons program through the Cold War.

> Read the full story on Tri-City Herald’s website [HERE](#) 



The High Level Waste Facility at the Hanford site’s vitrification plant is required to start treating radioactive waste for disposal by 2033. (Photo courtesy Bechtel National)

RECORD HANFORD WA NUCLEAR CLEANUP BUDGET PROPOSED. BUT WILL IT HIT A POLITICAL ROADBLOCK?

Tri-City Herald Published March 15, 2023 | By Annette Cary

Washington state officials are optimistic that the Hanford nuclear reservation budget for the next fiscal year could top \$3 billion — a record level of funding.

“There’s more work to do, but this is a big step in the right direction to getting this cleanup done efficiently, effectively and safely,” Washington Gov. Jay Inslee posted on Twitter Tuesday afternoon. The Biden administration is proposing a budget that increases spending from \$8.2 billion to \$8.3 billion for fiscal 2024 on environmental cleanup of Department of Energy sites used for nuclear weapons production.

According to information released this week to back up the budget request, it includes an increase in spending at the Hanford site while some others programs and sites could see cuts.

The Hanford vitrification plant being prepared to treat radioactive waste for disposal could see a budget of \$1 billion in the coming fiscal year, which starts in October. That’s up from about \$875 million in current spending, according to the federal documents.

The Hanford tank farms, where 56 million gallons of the waste are stored in underground tanks until it can be treated for disposal, could see an increase of about \$34 million, according to the federal documents.

> Read the full story on Tri-City Herald’s website [HERE](#) 

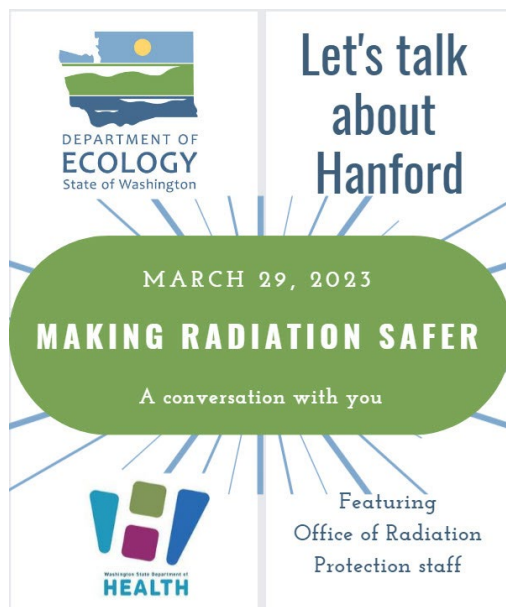
ECOLOGY CONTINUES “LET’S TALK ABOUT HANFORD” SERIES WITH DISCUSSION ON RADIATION PROTECTION

WASHINGTON STATE DEPARTMENT OF ECOLOGY | Live event from March 29, 2023

The Washington State Department of Ecology rolled out its latest edition of “Let’s Talk About Hanford”, this time consulting its colleagues from the radiation program team at the Washington State Department of Health’s Office of Radiation Protection. The live, virtual discussion took place on Wednesday, March 29th via Zoom and Facebook Live.

The Office of Radiation Protection protects and improves the health of people in Washington by ensuring exposure to radiation is as low as reasonably achievable. For this conversation, the radiation program team presented on the work they do at Hanford.

Those in attendance on the Zoom stream had the opportunity to ask questions and engage with the speakers, which included DOH representatives John Martell, Mike Priddy and Mark Henry.



This recorded event is now available on Ecology's YouTube channel. ■



**WATCH THE VIDEO
RECORDING HERE...**

FEDS MOVE AHEAD WITH TESTS FOR FASTER, CHEAPER TREATMENT OF RADIOACTIVE HANFORD WASTE

Tri-City Herald

Published March 27, 2023 | By Annette Cary



The Test Bed Initiative demonstration is proposed to show whether some radioactive waste held in Hanford's underground tanks, such as at the tank farm shown, could be grouted and disposed of out of state. (Photo courtesy Department of Energy)

The Department of Energy is moving forward on a demonstration project to stabilize 2,000 gallons of radioactive waste in grout, five years after an initial successful test of three gallons.

A pilot project called the Test Bed Initiative is being used to see if encapsulating Hanford nuclear reservation waste in

concrete-like grout could be used for treatment in addition to glassifying radioactive waste at Hanford's vitrification plant. Unlike proposed waste grouting projects decades ago, the grouted waste would not remain at Hanford but would be sent out of state.

The results of the test project will be used to evaluate the benefits of further use of grouting for some of the least radioactive waste stored in underground tanks as DOE and its regulators discuss a path forward for tank waste treatment.

The federal government needs to add more waste treatment capacity for the 56 million gallons of radioactive and hazardous chemical waste in underground tanks at Hanford in Eastern Washington. The waste is left from the past production of nearly two-thirds of the plutonium for the nation's nuclear weapons program.

> [Read the full story on Tri-City Herald's website HERE](#)



WILL A HALF-BUILT, MULTI-BILLION-DOLLAR NUCLEAR WASTE PLANT IN EASTERN WA EVER GET USED?

Tri-City Herald

Published Jan. 24, 2023 | By Annette Cary



Richland, WA – A massive building, already partially built at the Hanford nuclear reservation's vitrification plant, may not be needed after all. The facility was expected to prepare the site's most radioactive waste to be treated for disposal.

Now, a long-awaited Department of Energy analysis proposes other options for preparing that waste, which could change plans made more than 20 years ago based on the state of technology then.

The analysis was started after it became apparent that a court-enforced deadline for treating the waste was highly unlikely to be met.

The Hanford site near Richland in Eastern Washington has 56 million gallons of radioactive and hazardous chemical waste stored in underground tanks from the past production of plutonium for the nation's nuclear weapons program from World War II through the Cold War.

Currently the nasty mix of high level and low activity radioactive waste is being held in aging underground tanks at

the Hanford site, with plans to glassify much of that waste at the vitrification plant to prepare it for disposal.

CONSTRUCTION STOPPED IN 2012

When construction began in 2002 on the vit plant, the largest of the plant's planned four main buildings, the Pretreatment Facility, was to be used to separate radioactive and hazardous chemical waste from the tanks into separate streams of highly radioactive waste and low activity waste.

The waste will be treated and disposed of separately, with high level radioactive waste required by law to go to a national repository such as the one once proposed at Yucca Mountain, Nev.

> [Read the full story on Tri-City Herald's website](#) HERE 

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CREWS TRANSPORT HANFORD TANKS FOR DISPOSAL



Hanford Mission Integration Solutions transports two empty tanks weighing more than five tons each from outside the Hanford Site's Effluent Treatment Facility to an onsite landfill, making room for wastewater treatment work by EM Office of River Protection contractor Washington River Protection Solutions.

RICHLAND, Wash. – EM Richland Operations Office contractor Hanford Mission Integration Solutions (HMIS) recently removed two large tanks near the Effluent Treatment Facility (ETF) on the Hanford Site to make way for future wastewater treatment at the ETF.

HMIS provides Hanford Site services, including many transportation services. Its motor carrier services team worked with EM Office of River Protection contractor Washington River Protection Solutions (WRPS) to remove the excess tanks, each of which weighs more than five tons and stands nearly two stories high.

“This is another example of our One Hanford team working together to complete a risk-reduction project safely,” said Brian Harkins, EM assistant manager for mission support. “Each step, large or small, helps pave the path to tank-waste treatment on the Hanford Site.”

The tanks once held contaminated wastewater from Hanford Site operations for treatment at the adjacent ETF. WRPS is upgrading and expanding the ETF to improve capacity and treatment capability in support of the Direct-Feed Low-Activity Waste Program, and the tanks were no longer needed. The work required months of planning, covering all aspects of disconnecting, removing and disposing of the tanks.



Electrical lineworkers with Hanford Mission Integration Solutions carefully lift overhead power lines to allow a trailer hauling empty tanks to Hanford's landfill to pass.

Once loaded on a trailer, the tanks extended higher than overhead power lines at some locations on the site. So HMIS electrical utilities staff planned a transport route minimizing the number of utility lines that would need to be raised for the tanks and trailer to pass.

“To some, raising power lines may look like a simple task, but in reality, it is hazardous work that requires careful teamwork,” said Rick Boarder, HMIS electrical utilities director.

HMIS completed the seven-mile drive from the ETF to Hanford's onsite landfill and disposed of the tanks. ■



Pictured is a spent fuel container used during plutonium production operations decades ago on the Hanford Site.

JOINT CONTRACTOR TEAMS SAFELY TRANSFER AGING SPENT FUEL CANISTERS AT HANFORD

OFFICE OF ENVIRONMENTAL MANAGEMENT | Published January 13, 2023

RICHLAND, Wash. – EM Richland Operations Office (RL) contractors Central Plateau Cleanup Company (CPCCo) and Hanford Mission Integration Solutions (HMIS) worked together recently at the Hanford Site to dig up five spent fuel containers from former plutonium production operations and relocate them to a nearby interim storage area.

The project required close collaboration between the contractors and a select team of workers with special qualifications and experience needed to complete the job.

“Our One Hanford team continually delivers results on important work that reduces risk,” said Andy Wiborg, RL Projects and Facilities Division team lead for Hanford’s Central Plateau Cleanup Project. “Making efficient use of time and resources, the contractor teams remediated potential hazards from the national defense era while advancing the cleanup mission.”

CPCCo engineers kicked off the project in summer 2022 by ensuring environmental compliance and proper permitting. Field teams from both contractors developed training programs and mock-ups of the location where the spent fuel canisters were buried. This allowed the teams to rehearse the work prior to beginning actual retrieval and transfer.



Teams with contractors Central Plateau Cleanup Company and Hanford Mission Integration Solutions recently recovered spent fuel containers from former plutonium production activities on the Hanford Site.

The HMIS team dug up each container from the burial site. Once the containers were ready for removal, crane operators and ironworkers lifted and transported them to a safe storage area on the Hanford Site.

CONTINUED ON PAGE 6



Workers packaged spent fuel containers before moving them to a nearby safe storage area on the Hanford Site.

“Completing difficult tasks is our specialty,” said CPCCo President John Eschenberg. “This effort allowed us to showcase our skills, safe work practices and commitment to delivering a mission-critical activity.”

“This project demonstrates the strength and expertise of our One Hanford team to complete a sensitive assignment safely and successfully,” said HMIS President Bob Wilkinson. “The training and experience of our teams allowed us to complete the work seamlessly.” ■

ECOLOGY: BEHIND THE SCENES AT THE NUCLEAR WASTE PROGRAM

WASHINGTON STATE DEPARTMENT OF ECOLOGY | Published February 14, 2023

PERMITTING NUCLEAR WASTE with Annette Carlson



NUCLEAR WASTE PROGRAM
EMPLOYEE SPOTLIGHT
Annette Carlson

In this edition of Ecology's *Behind the Scenes at the Nuclear Waste Program* series, they sat down with Annette Carlson, the permitting project manager for the program.

AN ENCOURAGING FORCE BEHIND PERMITTING

Annette is a familiar face for many working at Hanford. She's been a part of the Nuclear Waste Program for more than 20 years and has been working around Hanford even longer.

She is passionate about the work she performs within the permitting section since it's a vital process at NWP. Annette leads the program's permit coordinators, data specialist, the State Environmental Policy Act (SEPA) specialist, and the permit lead for the Integrated Disposal Facility at Hanford. “Supporting my team and helping them be successful is my favorite part,” she said.

A DAY IN THE LIFE

One of the most important tasks for Annette and the permitting section right now is completing the Hanford Sitewide Permit revised renewal, Rev. 9A. This permit is our agency's main tool for overseeing the U.S. Department of Energy's cleanup of Hanford.

Annette enjoys working with the rest of the team.

“Ecology has a family atmosphere. Everyone looks out for each other. When working on projects, everybody provides support and help to get things done. It is the people who make my job so special,” she points out.

> Read the full story on Ecology's website [HERE](#) 

HANFORD OFFERS INNOVATIVE RESPIRATORY TRAINING CURRICULUM



HAMMER Federal Training Center staff collaborated with Hanford Mission Integration Solutions carpenters, sign painters and metal shop employees to build large puzzle pieces for students to use during respiratory protection training on the Hanford Site.

RICHLAND, Wash. – EM Richland Operations Office contractor Hanford Mission Integration Solutions (HMIS) recently revised a respiratory protection course at the Hanford Site's Volpentest Hazardous Materials Management and Emergency Response (HAMMER) Federal Training Center. The revision uses a scavenger hunt and large puzzle pieces to offer participants an innovative way to experience the benefits and limitations of respiratory protection equipment.

HAMMER instructors train Hanford workers on a range of skills in a controlled environment to maintain safety. In their latest training, instructors test participants on the respirators by having them work in groups going from room to room on a scavenger hunt to find and solve riddles based on learning objectives before their air bottles empty.

"Hanford's HAMMER Federal Training Center provides realistic training paired with constant improvements to ensure our workforce has the knowledge and skills to complete work safely," said Angela Stoddard, EM program manager. "The trainers develop innovative educational methods to provide advanced safety training experiences."

Trainers also test respiratory protection proficiency by having trainees complete puzzles while wearing respirators. Using long-reach tools to retrieve puzzle pieces from a small pit, they work together to move and assemble the pieces in another location. To complete the puzzle, participants must communicate and effectively manage their air hoses.



Trainees at the HAMMER Federal Training Center work through a scavenger hunt activity as part of an update to the center's respiratory protection training program for the Hanford Site.

HAMMER has a history of creating unique ways to teach different curricula that help workers retain knowledge and use it in the field. A previous update to a similar course includes an escape room scenario where participants complete challenges before the air in their bottles runs out.

"Using innovative training reinforces learning objectives and provides an opportunity to experience and overcome the equipment limitations, such as communication, mobility and visibility," said HAMMER Director Paul Vandervert. ■