

ECA Update April 18, 2016

In this update:

WIPP: 'Able to see the finish line'

ABQ Journal

DOE Awards UK Researchers \$2.5 Million Grant Related to PGDP Cleanup

WKMS

Senate Spending Bill Would Boost DOE EM 4 Percent Over House Version

Exchange Monitor

Sen. Tom Udall announces securing of WIPP funding

Current Argus

Nuclear Waste Dump Earns Positive Rating, \$11.7M in Fees

AP: ABC News

Upcoming Events

April 2016

20

**"The Challenge of Excess
Facilities on DOE Sites"
House Nuclear Cleanup
Caucus**
5:30 pm - 7:00 pm
Capitol Hill

April 2016

21

Senate expected to vote
on FY17 Energy and Water
Development
Appropriations Bill.

April 2016

20-21

EMSSAB Chairs Meeting
Oak Ridge, TN

May 2016

Nuclear Developer Details Timeline For Trailblazing Reactor Debut In Idaho

KUOW

House Hanford budget would partially restore proposed cut

Tri -City Herald

Alexander: Senate bill has nearly \$3B for Oak Ridge

Knox Blogs

WIPP: 'Able to see the finish line'

ABQ Journal

April 16, 2016

[LINK](#)

CARLSBAD – There was no road map for cleaning up the nation’s only deep geologic repository for defense nuclear waste when it was contaminated two years ago by an underground radiation accident. Now WIPP managers believe they are close to reopening.

Including one-time recovery costs and expenses associated with increased safety requirements, the annual cost of operation is expected to soar more than \$100 million this year compared to the year before the accident – thanks in part to a new ventilation system, the need for workers to wear safety suits in some areas and the fact that the going will be slower underground.

“The WIPP recovery effort has been a long and disciplined process, and we are finally able to see the finish line,” said Tammy Reynolds, deputy recovery manager for contractor Nuclear Waste Partnership, in a promotional video last month.

Monica Regalbuto, deputy assistant secretary for the Department of Energy’s Office of Environmental Management, tours the WIPP underground facility June 10, 2015

11

EMAB Meeting
Aiken County, SC

May 2016

12-13

ECA Peer Exchange:
Environmental Management
Issues

Washington, D.C.

For information contact:

Ivana@energyca.org

August 2016

9-10

Third Annual
Intermountain
Energy Summit
Idaho Falls, ID

[Visit website.](#)

September 2016

14-15

2016 National Cleanup
Workshop
Hilton Alexandria Mark
Center
Alexandria, VA

Monica Regalbuto, deputy assistant secretary for the Department of Energy's Office of Environmental Management, tours the WIPP underground facility June 10, 2015. John Vandekraats, underground operations manager for Nuclear Waste Partnership, makes a point as Regalbuto, in front of him, listens. (Courtesy of Department of Energy)

The Waste Isolation Pilot Plant is expected to begin placing waste underground again by the end of the year, U.S.

Department of Energy officials say, after notching considerable progress in the cleanup of a February 2014 radiation release. WIPP has been catching up on badly needed maintenance and implementing new safety procedures after investigations found numerous problems in how the facility was being run.

WIPP has a to-do list that still will take months to complete, managers say, including the installation of a new "interim" ventilation system and practice runs for workers who haven't ever placed waste in a contaminated environment or worked under the new safety protocol.

A new reality

WIPP's motto was to "start clean, stay clean" when it opened in 1999. That was the language used in the original permit issued by the New Mexico Environment Department for the facility, the final resting place for transuranic waste.

The waste – mostly the leftovers of nuclear weapons production like contaminated gloves and boots and radioactive sludge – is packed into containers and drums and disposed of in enormous underground rooms mined from salt beds that lie about a half mile below the surface.

In February 2014, a drum of waste from Los Alamos National Laboratory that was packed with an ignitable combination of nitrate salts and an organic cat litter erupted. Radiation was released, contaminating a large stretch of underground hallways used to transport waste into the disposal rooms.

FOLLOW US



SUBSCRIBE

**Find our most recent
Bulletin [here](#).**

Visit energyca.org

After many months of investigative work to find out what happened, WIPP got down to the difficult business of catching up with maintenance, like bolting the ceilings to prevent roof collapses; sealing up the areas where other potentially problematic drums had been stored; and “cleaning up” the radiation by wetting down the salt walls and floors to form a thin layer of brine on the surface that, once dry, secures the alpha particles.

Still to do: WIPP soon will have the “interim” ventilation system up and running that will increase underground air flow, which was curtailed significantly after a key exhaust shaft was contaminated and the ventilation system shifted to filtration mode to prevent radiation escaping to the surface.

“That allows us to bring in more people to the underground as well as equipment to bring it back to the standards we’re used to and gets us ... one step closer to waste emplacement,” says Dennis Huddleston, site infrastructure manager, in the promotional video.

The new ventilation system only will bring air flow underground to less than a third of what it was before the accident.

Ventilation issues are a “long-term concern” of Don Hancock, a WIPP critic with the Southwest Research and Information Center in Albuquerque. Poor ventilation can lead to high levels of volatile organic compounds (VOCs), which are unsafe to breathe.

“Going forward, the question is, what is the underground monitoring going to be?” he said. “And how much is dependent on individual workers and how much is an underground ventilation system that is detecting VOCs?”

For months, WIPP’s managers have been preparing an updated “documented safety analysis” – a massive document that dictates safety protocol and imagines safety risks and potential responses. The DOE is reviewing the document and, once approved, WIPP will begin “cold operations,” which are planned for this summer.

The “cold operations” entail eight weeks of practice runs, allowing waste handlers to download empty containers into a mock-up disposal area underground. They will be suited up in protective clothing and wearing respirators as if they were working in a radiologically contaminated area – which may be the case when real waste disposal slowly begins later this year.

After that, a series of “readiness reviews” by the contractor and DOE will determine if WIPP is ready to reopen.

More time, more money

According to DOE’s own estimates, the cost of the recovery has been held to the original \$500 million estimate. But as waste emplacement resumes, the regular work of running WIPP is going to cost more than it did before the accident, according Todd Shrader, manager of DOE’s Carlsbad Field Office.

The “integrated baseline” pay to WIPP contractor Nuclear Waste Partnership, which includes some one-time recovery costs, has grown to a projected \$354.8 million in fiscal 2017 from \$228 million in fiscal 2014, the year of the accident.

With radiological contamination in the underground and reduced air flow, the going will be slower, Shrader said.

Workers will have to suit up in protective gear in some areas; fewer people and equipment can perform work underground with less ventilation available; “radiological control technicians” will have to accompany workers; and fire suppression programs will add time to workloads, Shrader said.

All of these things “are making the work that much safer for all our employees,” he said. “It’s the right thing to do, but it costs more money. It’s the way we need to operate in the future.”

The Defense Nuclear Facilities Safety Board, an oversight body that makes recommendations to the executive branch, said in a March staff report that WIPP

needed to do more work on its documented safety analysis before it should be approved by DOE – that is, before cold operations or waste emplacement could begin.

“The Department of Energy strategy for preventing recurrence of the 2014 radiological release event at (WIPP) needs to be improved prior to resuming transuranic waste receipt and disposal activities,” wrote DNFSB Chairman Joyce Connery in a cover letter to Energy Secretary Ernest Moniz.

The DNFSB said the document doesn’t “analyze the possibility that an exothermic reaction could occur in a drum arriving at WIPP in the future” – the kind of reaction that caused the February 2014 radiation release. DOE has told DNFSB that contingencies to prevent improperly packed drums from reaching WIPP have been factored in elsewhere in the system.

Mark Whitney, principal deputy assistant secretary for DOE Environmental Management, reiterated the department’s commitment to WIPP at a town hall meeting in Carlsbad earlier this month.

“I come away encouraged and I also come away confident that we do have the right folks leading us into recovery by the end of this year,” Whitney said. “At DOE headquarters, this is not lost on anybody, including our senior leadership. This is a priority for them, a focus for them on a daily basis, and we are committed to seeing the resumption of operations.”

DOE Awards UK Researchers \$2.5 Million Grant Related to PGDP Cleanup

WKMS

April 14, 2016

[LINK](#)

The U.S. Department of Energy has awarded University of Kentucky researchers a grant to support the development of new cleanup strategies at the former Paducah Gaseous Diffusion Plant site.

The plant produced enriched uranium for nuclear power plants for more than half a century before shuttering in 2013.

In addition to supporting the work of UK's Center for Applied Energy Research, the five-year, \$2.5 million grant goes toward public outreach related to the plant's cleanup. This includes keeping stakeholders up-to-date on cleanup efforts and educating local high school students on the work going on at the plant.

UK is also developing a PGDP "virtual museum" with an archive of photos and videos of the plant, similar to one launched in 2012 for southern Ohio's Portsmouth Gaseous Diffusion Plant.

Senate Spending Bill Would Boost DOE EM 4 Percent Over House Version

Exchange Monitor

April 14, 2016

[LINK](#)

The Energy Department's Office of Environmental Management would get a small funding boost in fiscal 2017 under a bill approved Wednesday by the Senate Appropriations energy and water subcommittee.

The Senate bill was not available at press time, but the proposal would give EM \$6.4 billion in 2017, according to a subcommittee press release. That is just under 3 percent more than what Congress approved for 2016, and some 4.5 percent above the White House's request for cleanup of legacy defense waste at 11 active DOE sites for the next budget year.

The Senate's bill would also provide EM with nearly 4 percent more than a companion bill in the House, which that chamber's Appropriations energy and water subcommittee advanced to the committee level Wednesday.

The full Senate Appropriations Committee will mark up the upper chamber's bill Thursday morning, after which the bill and report language containing lawmakers'

line-by-line spending recommendations should be published. Sen. Lamar Alexander (R-Tenn.), chairman of the subcommittee, said his bill could be on the Senate floor as soon as Monday.

Like their counterparts in the House, Senate appropriators shot down the White House's plan to fund cleanup of former uranium enrichment facilities at DOE's Oak Ridge, Paducah, and Portsmouth sites by tapping into the moribund U.S. Enrichment Corp. fund and levying new fees on commercial nuclear power companies.

At press time Wednesday, the full House Appropriations Committee had not scheduled a markup of that chamber's 2017 DOE budget bill, House aides said. Usually, the full committee considers a bill seven days after it is approved by the subcommittee. The bill report, which contains a detailed breakdown of House spending priorities, would be released publicly a day before the full committee markup, the aides said.

House and Senate appropriators both declined, for now, to cancel the Mixed-Oxide Fuel Fabrication Facility under construction at the Savannah River Site near Aiken, S.C. In its 2017 budget request, the White House proposed canceling the facility, which is intended to turn 34 metric tons of weapon-grade plutonium into commercial reactor fuel under an arms control pact with Russia finalized in 2010. The administration instead wants to downblend the plutonium, suspend it in an inert concrete mixture, and ship it to the Waste Isolation Pilot Plant (WIPP) near Carlsbad, N.M. The House bill provided \$340 million for the Mixed-Oxide Fuel Fabrication Facility.

The Senate's bill would provide \$270 million, Sen. Dianne Feinstein (D-Calif.) said in Wednesday's markup.

Sen. Tom Udall announces securing of WIPP funding

Current Argus

April 14, 2016

[LINK](#)

After a tumultuous start to 2014, the Waste Isolation Pilot Plant showed enough improvement to be rated "good" by the Department of Energy.

The scores rating the facility's performance were released Monday, and cover the 2015 fiscal year which ran from October 2014 to September 2015.

These annual evaluations are comprised of two parts: a subjective and an objective portion. Both incentivize good performance by rewarding the contractor financially. The Nuclear Waste Partnership was awarded \$2,519,658 of the available \$3,416,486 of the subjective award fee, Department of Energy's Carlsbad Field Office Manager Todd Shrader said in a letter to Phil Breidenbach, president and project manager at the partnership.

"Nuclear Waste Partnership does not comment on award fee earnings or scores. However, in 2015, we joined with the Department of Energy to make significant progress toward safely recovering the Waste Isolation Pilot Plant, with a target of December 2016 for resuming transuranic waste operations at WIPP," NWP Communications Director Donovan Mager said in a statement. "We are extremely proud of our employees and all that they have accomplished, and we are committed to the safe resumption of waste emplacement operations."

The subjective award fee grading system weighs four criteria equally: mission performance; management performance; environment, safety and health performance; and cost control performance.

NWP received a rating of "good" on all four. Performance scores given to the contractor in each category range from 70 to 75 percent.

A long list of achievements on the fee determination scorecard is followed by a shorter list of "areas for improvement." Those listed for the facility include the delayed ventilation system projects and "subcontracting packages of poor quality."

Nuclear Waste Partnership earned \$9,194,460 of the \$10,249,460 available on their Objective Performance Based Incentive scorecard.

This score is based upon completion of specific projects throughout the fiscal year.

For example, one of the projects on the objective scorecard is "reducing preventive and corrective maintenance," of which NWP earned the maximum available fee of \$550,000.

Looking ahead

On Thursday, Sen. Tom Udall (D-NM) announced the Energy and Water Appropriations Fiscal Year 2017 bill has advanced through the Senate Appropriations Committee.

The bill allots \$279.4 million to WIPP, down from \$304.8 million in fiscal year 2016.

"Our labs and WIPP are critically important employers and crucial to our national security," Udall said in a news release. "I'm proud to support them - and the New Mexicans who are employed there - by working on the Senate Appropriations Committee to secure the funding these facilities need to stay strong."

The funding includes the \$26.8 million settlement with the state over 2014's radiological incident at WIPP.

Nuclear Waste Dump Earns Positive Rating, \$11.7M in Fees

AP: ABC News

April 14, 2016

[LINK](#)

The contractor that manages the federal government's underground nuclear waste repository is being awarded nearly \$12 million in fees and performance pay for work done while the troubled facility moves toward resuming operations following a radiation leak more than two years ago.

Documents released Thursday by the U.S. Energy Department show Nuclear Waste Partnership — which runs the Waste Isolation Pilot Plant in southern New Mexico — earned about 85 percent of the total awards that were up for grabs for the last fiscal year.

The contractor also received positive marks for work related to recovery efforts, but it was docked for persistent safety challenges, missed deadlines and delays related to the installation of an interim ventilation system that will be key to the plant's reopening.

Citing the calls for improvement outlined by federal officials, watchdogs argued that Nuclear Waste Partnership should have lost out on more of the incentives.

Don Hancock with the Southwest Research and Information Center called the awards outrageous and suggested the system was rigged given that milestones and requirements outlined in the facility's original performance plan were changed midway through the year.

Nuclear Waste Partnership did not immediately respond to a request for comment.

The Waste Isolation Pilot Plant has been shuttered since February 2014, when a container of waste burst and released radiation in the underground facility. Nearly two dozen workers were exposed and monitors at the surface recorded low levels of radiological contamination.

Investigators determined the container had been packed at Los Alamos National Laboratory with incompatible materials, and experts have said the incident could have been avoided.

As a result of the repository's closure, shipments of Cold War-era waste from sites across the country were put on hold and the Energy Department's multibillion-dollar cleanup campaign was sidelined.

Contractors for both the lab and the repository lost out on tens of millions of dollars in fees and performance pay the year before as a result of the incident and the

contract to manage Los Alamos will be opened for bid. DOE also agreed to a \$74 million settlement with the state of New Mexico.

Top Energy Department officials are pushing to reopen the repository by the end of the year.

In the scorecard released Thursday, a fee official noted what he described as "significant progress" related to the repository's recovery. The document also mentioned improved maintenance for some equipment, the stabilization of areas within the salt caverns where waste is handled and the contractor's ongoing work with the community.

Nuclear Developer Details Timeline For Trailblazing Reactor Debut In Idaho

KUOW

April 14, 2016

[LINK](#)

An Oregon-based nuclear company presented a detailed timeline Thursday for the deployment of its first small modular nuclear power plant. An executive from NuScale Power presented the roadmap during a keynote address to the International SMR and Advanced Reactor Summit taking place this week in Atlanta.

NuScale Power is leading the charge to develop a new generation of small modular reactors that are billed as cheaper, safer and faster to build.

NuScale's Chief Commercial Officer Mike McGough described the variety of partners his company has lined up to build a power plant for its first customer. He said the site selection process has narrowed down to four or five locations on the grounds of the Idaho National Laboratory outside Idaho Falls.

Simultaneously, McGough said NuScale is preparing to submit a 12,000 page application for design certification to the Nuclear Regulatory Commission this fall. The NRC is expected to take three or more years to review the trailblazing design.

In an interview with public radio Thursday, McGough predicted the plant will be commercially operational in the middle of 2024.

“I know that is eight years from now,” McGough said. “That seems like a long time, but in the space of what we're doing in the technology development and deployment, it's actually quite short.”

McGough said Richland, Washington-based Energy Northwest has signed up to operate the initial NuScale commercial project. McGough said Energy Northwest eventually wants to co-locate a modular nuclear plant next to its longstanding commercial nuclear reactor at Hanford.

A wholesale electricity provider to utilities in the Intermountain West called Utah Associated Municipal Power Systems (UAMPS) will own NuScale's first plant. NuScale is headquartered in Portland and has a large engineering office in Corvallis.

McGough told conference attendees that his company is currently spending \$12 million per month to create, test and license its design. He estimated the entire development process will cost \$1 billion by the time it is through. Funding is coming from a combination of private investment and government grants.

Also speaking at the nuclear energy conference in Atlanta was state Sen. Sharon Brown from Kennewick, Washington. For the past several years, Brown, a Republican, has sponsored legislation to promote small modular reactor manufacturing and siting in Washington.

Energy Northwest's Columbia Generating Station is the only commercial nuclear reactor currently operating in the Northwest. The 1,190-megawatt reactor can power a city the size of Seattle.

By comparison, NuScale Power's factory-built small reactors are designed to produce about 50 megawatts of emission-free electricity per module. Multiple modules can be combined to create a larger power plant, which is UAMPS's intention at the eastern Idaho project.

House Hanford budget would partially restore proposed cut

Tri-City Herald

April 13, 2016

[LINK](#)

The U.S. House proposed budget for Hanford in fiscal 2017 would partially restore money cut in the Obama administration's budget request released in February.

The administration proposed an increase of about \$86 million to almost \$1.5 billion in fiscal 2017 for the Hanford Office of River Protection, which is responsible for 56 million gallons of waste held in underground tanks and the vitrification plant being built to treat the waste.

But it proposed a cut from current spending of about \$190 million to \$800 million for the Richland Operations Office, which is responsible for all other environmental cleanup at Hanford after the site was used to produce plutonium for the nation's nuclear weapons program.

The House budget proposal would match the administration's increase for the Office of River Protection and restore about \$40 million of the cut to the Richland Operations Office.

The House budget would bring Richland Operations Office spending up to about \$838 million.

The proposed increase comes as the overall environmental management budget for DOE is reduced.

The Richland Operations Office is responsible for projects such as cleaning out and tearing down the Plutonium Finishing Plant, removing radioactive sludge from underwater storage in the K West Basin near the Columbia River and cleaning up a highly radioactive spill beneath the 324 Building near Richland and the Columbia River.

It also is responsible for cleaning up contaminated groundwater and cleanup of other contaminated buildings, waste sites and soil near the river and in central Hanford. Its budget also must cover sitewide services, from security to maintaining roads.

“The administration’s proposed FY 2017 budget cut for Hanford funding, and specifically the Richland Operations Office, would result in cleanup delays, increased total project costs and missed legal milestones within the river corridor,” said Rep. Dan Newhouse, R-Wash., when the proposal was released in February.

The U.S. Senate’s proposed Hanford budget is expected to be released today.

Sen. Patty Murray, D-Wash., called the administration’s budget proposal “inadequate” and “shortsighted” when it was released in February.

She pressed Energy Secretary Ernest Moniz for information on DOE’s plans for cleanup under a reduced budget scenario in March as a senior member of the Senate Appropriations Committee.

“I find it unacceptable that the president’s budget essentially robs Richland Operations to pay for the Office of River Protection’s waste treatment mission,” she said then.

Sen. Maria Cantwell, D-Wash., also grilled Moniz as ranking member of the Senate Committee on Energy and Natural Resources. A funding shortfall would endanger continued progress on projects managed by the Richland Operations Office, she said.

Alexander: Senate bill has nearly \$3B for Oak Ridge

Knox Blogs

April 13, 2016

[LINK](#)

In a telephone call with reporters this afternoon after the subcommittee mark-up for the FY 2017 energy and water appropriations bill, U.S. Sen. Lamar Alexander, R-Tenn., said the bill contains nearly \$3 billion for Oak Ridge activities. That would include funding for Oak Ridge National Laboratory and the Y-12 National Security Complex, as well as money (\$575 million) to complete design for the Uranium Processing Facility at Y-12 and \$263 million for nuclear waste cleanup and other environmental activities on the Department of Energy's Oak Ridge reservation. The full Appropriations Committee in the Senate is expected to vote on the bill Thursday.

Alexander touted a big boost in funding for DOE's Office of Science, supercomputing and nuclear power, which he favors as a big part of the nation's energy future. Included in the funding packages would be about \$110 million for the Leadership Computing Facility at ORNL.

Overall, the bill as put together would provide about \$656 million for the Department of Energy's Scientific Computing Research Program, with additional funding for the exascale program (to be jointly funded by DOE Science and the National Nuclear Security Administration).
