

ECA Update April 20, 2016

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

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HASC Subcommittee for Strategic Forces NDAA Markup.
[Watch live here.](#)

April 2016

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EMSSAB Chairs Meeting
Oak Ridge, TN

May 2016

After Drama-Filled Markup, House Committee Quietly Advances 2017 DOE Budget to Floor

Exchange Monitor
April 20, 2016

The House Appropriations Committee late Tuesday afternoon brought Congress one step closer to a bicameral confrontation over whether to keep the mostly abandoned Yucca Mountain nuclear waste disposal facility in Nevada on life support, and how strongly to protect the Mixed-Oxide (MOX) Fuel Fabrication Facility now under construction at Department of Energy's Savannah River Site near Aiken, S.C.

The committee approved its version \$37.4-billion 2017 energy and water spending bill by voice vote, following a marathon markup session covering funding for agriculture and energy programs in which lawmakers battled over amendments unrelated to the DOE nuclear enterprise. The Senate sent its version of the DOE funding legislation, part of \$37.5-billion spending package, to the floor last week. Neither chamber's measure was scheduled for floor action, at press time.

The House's proposed DOE budget totals nearly \$30 billion: roughly flat from the current appropriation, but about 5 percent less than the Obama administration requested. The Senate bill would give DOE just under \$31 billion, a roughly 3.5-percent boost from fiscal 2016, but about 2.5 percent less than requested.

Within the House total, the National Nuclear Security Administration, responsible for materials and weapons for the Pentagon's nuclear arsenal, would get \$12.9 billion in 2017: nearly 3 percent more than in 2016, and about even with both the Senate's proposal and the White House request.

The House committee also approved \$340 million for the MOX plant, and told DOE in bill language not to close that facility.

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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

The MOX program is supposed to turn 34 metric tons of weapon-usable plutonium into commercial reactor fuel. The Senate provided \$270 million for MOX, and left the door open for cancellation. The Obama administration intends to halt the project in favor of downblending the plutonium and storing it at the DOE's Waste Isolation Pilot Plant in New Mexico.

The House bill would give DOE's Office of Environmental Management, which manages cleanup of the Pentagon's legacy nuclear projects, roughly \$6.15 billion: about even with the \$6.19 billion the White House requested, around 1 percent lower than what Congress approved for fiscal 2016, and some 4 percent less than the Senate's version of DOE's 2017 budget.

Separately, the Nuclear Regulatory Commission (NRC) would get about \$936 million under the House bill to carry out its duties, including licensing and oversight of nuclear reactors. The agency recovers about 90 percent of its budget from license fees, so the net House appropriation is about \$149 million. The Senate recommended about \$940 million with a net appropriation of about \$116 million. The House bill also proposes \$103 million for the U.S. Army Corps of Engineers' Formerly Utilized Site Remedial Action Program (FUSRAP), even with the Senate proposal.

NRC would also, under the House bill, be responsible for completing the licensing process for Yucca Mountain. The House committee approved \$150 million to carry out the Nuclear Waste Policy Act of 1982, which designated Yucca Mountain as the only site for a national repository for spent nuclear fuel and high-level radioactive waste, and \$20 million for NRC to complete licensing procedures for the facility; that funding would come from the \$34 billion Nuclear Waste Fund. The Senate provided no funding for Yucca, and instead would appropriate \$61 million for an integrated waste management pilot program — a perennial feature of committee-level Senate bills that has not made it into a final spending package, yet.

Fiscal 2017 begins on Oct. 1.

HASC Subcommittee Mark Requires Continuation of MOX Construction

Exchange Monitor

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April 20, 2016

The House Armed Services Strategic Forces Subcommittee is proposing a requirement for the fiscal 2017 National Defense Authorization Act (NDAA) that construction of the Mixed Oxide (MOX) Fuel Fabrication Facility continue unless the secretary of energy reports to Congress on activities meant to address major points of contention on the project.

According to the subcommittee's mark released Tuesday, the secretary of energy would only be allowed to waive the requirement to continue MOX construction by submitting to the congressional defense committees an updated performance baseline for the project; notification of the initiation of consultations with the "government of a foreign country" – presumably Russia – on an alternative plutonium disposition option; a commitment "to remove plutonium from South Carolina and ensure a sustainable future for the Savannah River Site"; and either a notification that the MOX contractor has not submitted a proposal for a fixed-price contract to complete construction, or a certification that an alternative option exists for a plutonium disposition program, the life-cycle cost of which "would be less than approximately half" of the estimated MOX life-cycle cost.

These conditions reflect lawmakers' calls for proper justification for the administration's proposal to terminate the MOX project, in favor of an alternative dilute and dispose method for surplus weapon-usable plutonium, including 34 metric tons covered by a nonproliferation with Russia. Congressional disagreements with the administration's decision have primarily centered around the need for updated cost estimates for the project, as well as negotiations with Russia to reach an agreement on a plutonium disposition method. While some – among them South Carolina lawmakers – oppose a change to the method under any circumstance, others believe negotiations with Russia should result either in the modification of the agreement currently governing MOX or the creation of a new one.

The Strategic Forces Subcommittee – which handles the NNSA's funding authorization – will hold its markup of the NDAA this Thursday, followed by the full Armed Services Committee the following Wednesday. The Senate is expected to

begin considering its version of the bill next month. The House Appropriations energy and water bill provides \$340 million to continue MOX construction, while the Senate version provides \$270 million and reprogramming authority for the potential reallocation of those funds. President Barack Obama's budget requested \$285 million for a different plutonium dilution and disposal method.

Court orders feds to clean up World War II era nuclear site

Cross Cut

April 18, 2016

[LINK](#)

The news slipped into the vacuum of Friday happy hour.

Late on March 11, a U.S. District judge quietly issued a novella-length ruling, which may reshape the way the U.S. Department of Energy (DOE) manages the 56 million gallons of highly radioactive waste at the Hanford Nuclear Reservation.

"It's a big deal," said Washington Attorney General Bob Ferguson in an interview. "The court specifically said that the Department of Energy must meet its deadlines."

Northwesterners have watched this movie enough times to parrot the dialogue. The feds heel-drag on Hanford cleanup, as lawmakers harrumph and scold the Department of Energy secretary. Time passes; there are new lawmakers and a new DOE secretary. Press repeat.

Now, enforceable milestones should rewrite the narrative. In addition to increased transparency, there will be earlier, set-in-cement deadlines, and the state will have the option to race back to court whenever DOE experiences a procrastination relapse.

In her 102-page ruling, Judge Rosanna Malouf Peterson notes, "Granting DOE the unilateral, virtually unbounded freedom to extend any consent decree [regarding any Waste Treatment Plant] scheduling milestone would result in the opposite of accountability. ... These milestones should be viewed as enforceable legal duties rather than optimal, idealistic goals."

Under the judge's ruling, phase one, a treatment plant to process low-activity radioactive waste, must be up and running by 2023; then a pretreatment facility has until 2033, and the full-waste treatment plant for high-level waste must begin operations by 2032.

In the slow-motion universe of nuke-waste politics, this registers as light speed.

The ruling underscored Ferguson's concern that when it comes to the most contaminated place in North America, DOE exhibits a kind of accountability avoidance.

Peterson's decision traces back to former Attorney General Rob McKenna, who filed suit against DOE in 2008 when the department continued to ho-hum deadlines set by the Tri-Party Agreement. The 1989 Tri-Party Agreement dates to former Gov. Booth Gardner and was intended as the final word on cleanup.

McKenna's lawsuit culminated in a consent decree — which is considered an enforceable, legally binding order — to govern the retrieval of tank waste and to build a permanent waste treatment plant. But by October 2014, Ferguson, who had become attorney general the year before, and the Washington Department of Ecology had become so frustrated with the Energy Department's insistence it couldn't meet the consent decree's timelines that Ferguson filed a petition to enforce the decree.

The new ruling is not a complete victory. The court will not compel DOE to produce more double-shelled tanks right away. That's upsetting to Hanford watchdogs because the expected life span of many of the leaking single-shell tanks expired around the time that the Beatles parted ways.

The ruling allows the state to return to court to demand the feds build more double-shell tanks, but only if DOE misses an interim 2020 milestone under the consent decree.

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Peterson's ruling could mark the before-and-after point in the Hanford-cleanup saga. "I'd like to think it's a turning point," said Andy Fitz, Senior Counsel with the Washington Attorney General's office. Fitz has labored on Hanford cleanup under both Democratic and Republican administrations.

So why, on the federal level, does the urgency of leaking underground tanks fall away?

Since the end of the Cold War, Hanford has been sidelined as a costly, over-there abstraction. It also doesn't have a galvanizing symbol; there's no Mr. Yuk, no drowning polar bear, no radioactive rabbit. Even the word "cleanup" illustrates the limits of language to convey problems like plutonium 239's half-life of 24,100 years. Progress is measured in geologic time.

The onus is on U. S. Energy Secretary Ernest Moniz, who has the visage and hairstyle of a Colonial War general to match an equally outdated mindset — at least regarding Hanford.

Moniz may be a dapper and brilliant defender of the Iran nuclear agreement. He also exhibits sufficient sway to change the department's culture of arrogance.

Nevertheless, when the Peterson ruling came down, DOE didn't bother to issue a statement.

It seems like a wish-it-away strategy for managing an abstraction. Now, thanks to the state and Ferguson's office, the feds may have a harder time wishing Hanford away.

Near-term happenings

Knox Blogs

April 18, 2016

[LINK](#)

Members of the Alliance for Nuclear Accountability, which includes more than 30 activists groups at DOE sites around the country, will be in Washington this week for the annual “DC Days.” The activists plan to meet with congressional staff members and decisionmakers in Washington to discuss issues of interest — especially funding for nuclear weapons and related projects and priorities for environmental cleanup at Cold War nuclear sites. IMG_5674As part of the event, the ANA will present awards to Sen. Dianne Feinstein “for extraordinary leadership to constrain destabilizing new warheads, support global nonproliferation and provide for cleaning up U.S. nuclear weapons sites”; Rep. Adam Smith “for supporting a rigorous, safe cleanup at the Hanford nuclear site by fighting to ensure that workers are protected from exposure to toxic vapors”; Chuck Montaña “for tireless efforts as an activist, author and personal exemplar of courage to hold the nuclear weapons complex accountable for waste, fraud, and whistle-blower retaliation”; and Kay Cumbow, who will receive the Judith Johnsrud Unsung Hero Award in collaboration with Beyond Nuclear “for demonstrating tireless dedication and stubborn determination, despite daunting odds, in her creative, visionary work for a Nuclear-Free Great Lakes. “

The newly created Advisory Board on Toxic Substances and Worker Health will meet for the first time next week in Washington, D.C. So far, the panel has received positive reviews from former workers and their advocates who’ve pushed for reform of the process for collecting claims under the government’s compensation program for sick nuclear workers. Terrie Barrie, founding member of the Alliance of Nuclear Worker Advocacy Groups, said, “ANWAG is extremely pleased with the makeup of the board. The representatives from the claimant community chosen by Secretary (Thomas) Perez to serve have an outstanding history of advocating for the workers.”

The Energy Technology and Environmental Business Association will host a meeting Wednesday in Washington to focus attention on plans for dealing with old and deteriorated facilities at Department of Energy nuclear sites. The Energy Facility Contractors Group and the Nuclear Energy Institute are also sponsoring the meeting. Monica Regalbuto, DOE’s assistant secretary for environmental management will

attend, as will U.S. Rep. Chuck Fleischmann, R-Tenn., and U.S. Rep. Ben Lujan, D-N.M., who co-chair the House Nuclear Cleanup Caucus. Sue Cange, who heads the Office of Environmental Management in Oak Ridge, is also expected to be there.

Leak worsens in massive Hanford tank holding nuclear waste

King5

April 18, 2016

[LINK](#)

A leak in a massive nuclear waste storage tank at the Hanford Site has expanded significantly, KING 5 learned this weekend.

After leak detector alarms sounded early Sunday morning, crews at Hanford lowered a camera into the two-foot-wide space between the tank's inner and outer walls. They discovered 8.4 inches of radioactive and chemically toxic waste has seeped into the annulus.

The U.S. Department of Energy released a statement Monday calling the leak an "anticipated" outcome of an ongoing effort to empty the tank in question. The Washington state Department of Ecology said, "There is no indication of waste leaking into the environment or risk to the public at this time."

But one former tank farm worker said the leak should be considered a major problem.

"This is catastrophic. This is probably the biggest event to ever happen in tank farm history. The double shell tanks were supposed to be the saviors of all saviors (to hold waste safely from people and the environment)," said former Hanford worker Mike Geffre.

Geffre is the worker who first discovered that the tank, known as AY-102, was failing in 2011. In a 2013 series, "Hanford's Dirty Secrets," the KING 5 Investigators exposed that the government contractor in charge of the tanks, Washington River Protection Solutions (WRPS), ignored Geffre's findings for nearly a year. The company finally admitted the problem in 2012.

Until now, the leak found by Geffre was very slow. The liquid would almost immediately dry up, leaving a salt-like substance on the floor of the two-foot space between the tank's walls, called the annulus.

Approximately three weeks ago, work began to pump out the contents of AY-102, which has the capacity to hold one million gallons of the deadly waste. The state of Washington has been pressuring the federal government, which owns Hanford, to pump out AY-102 for three-and-a-half years because of the cracking and slow leaking discovered by Geffre in 2011.

Sources told KING the disturbance caused by the pumping must have exacerbated the leak: essentially blowing a hole in the aging tank allowing the material to leak more quickly into the outer shell.

Tank AY-102 is one of 28 double-shell tanks at Hanford (there are 177 underground tanks total) holding nuclear byproducts from nearly four decades of plutonium production on the Hanford Nuclear Site, located near Richland. Initially the plutonium was used to fuel the bombed dropped on Nagasaki, Japan, in World War II.

Plutonium production continued throughout the Cold War. Since 1989 the work at Hanford has focused solely on cleanup – the most difficult being getting rid of the liquid waste left behind that threatens the health of people, wildlife and the environment, including the nearby Columbia River.

The new leak poses problems on several fronts. The outer shell of AY-102 does not have the exhaust or filtration system needed to keep the dangerous gases created by the waste in check. Workers have been ordered to wear full respiratory safety gear in the area, but the risk remains.

“The hazards to workers just went up by a factor of 10,” said Geffre.

In addition, the breakdown calls into question the viability of three other double-shell tanks at Hanford that have the exact design of AY-102.

“The primary tanks weren't designed to stage waste like this for so many years,” said a current worker. “There’s always the question, ‘Are the outer shells compromised’?”

The accumulation of waste in the outer shell also means the deadliest substance on earth is that much closer to the ground surrounding the tank. And currently there is no viable plan in place to take care of it.

“It makes me sad that they didn’t believe me that there was a problem in 2011,” said Geffre. “I wish they would have listened to me and reacted faster. Maybe none of this would be happening now. It’s an example of a culture at Hanford of ‘We don’t have problems here. We’re doing just fine.’ Which is a total lie,” said Geffre.

Full statement from Dept. of Energy:

The U.S. Department of Energy (DOE) and Hanford tank farms contractor Washington River Protection Solutions (WRPS) are evaluating recently identified, anticipated changes in the amount of waste between the inner and outer shells (the annulus) of Hanford double-shell tank AY-102.

Since March 3, DOE and WRPS have been retrieving waste from Tank AY-102, and to date approximately 95 percent of the material has been retrieved. Early on the morning of April 17, crews identified an increase in the waste level in the tank’s annulus. Early on the morning of April 18, a slight decrease in the height of the waste in the annulus was detected. Out of an abundance of caution, DOE and WRPS are in the process of evaluating the tank’s condition.

DOE and WRPS are committed to ensuring the safety of the Hanford workforce, the public and the environment.

WA Dept. of Ecology statement:

RICHLAND – An alarm was activated on Sunday, April 17, at the Hanford Nuclear Reservation while crews working for the U.S. Department of Energy were pumping waste out of the double-shell tank AY-102.

There is no indication of waste leaking into the environment or risk to the public at this time.

The Department of Energy notified the Washington Department of Ecology that the leak detector alarm went off.

The alarm indicates an increase in waste seeping from the primary tank into the space between the primary and secondary tank, known as the annulus.

Crews have been actively removing waste from AY-102 since March because mixed radioactive and chemical waste had previously leaked into the secondary containment area. Approximately 20,000 gallons of waste remains from the original 800,000 gallons in the tank.

According to the Department of Energy, the removal work is currently on hold while engineers evaluate the situation and prepare a plan to recover the material that leaked between the two walls of the tank.

This morning, an Ecology Nuclear Waste Program engineer assessed the situation with the Department of Energy waste retrieval engineers to assure that contingency response plans are being followed.

Additional leaking into the annulus was a known possibility during pumping and is addressed in the Department of Energy's contingency plan that was submitted to Ecology as part of a Settlement Agreement. That plan delineates actions for Energy to take.

Ecology continues to monitor the situation as spelled out in the settlement agreement that directs waste retrieval.

There are 28 double-shell tanks at the Hanford site.

Melter 2 at Defense Waste Processing Facility doubles the waste turned to glass

Aiken Standard

April 19, 2016

[LINK](#)

The “heart” of the Defense Waste Processing Facility at the Savannah River Site continues to set records in turning radioactive waste into glass.

Melter 2, the second melter installed in the facility, is now 13 years old and has poured just more than 10.4 million pounds of glassified waste.

Melter 1 poured about 5.2 million pounds of glass during its seven-year run at the facility

Twenty years ago in March, the first high-level waste at SRS was converted into glass at the facility, the nation’s only operating vitrification facility. The facility is the workhorse of liquid waste operations at SRS.

A melter is a 65-ton, teapot-shaped vessel that treats high-level radioactive waste being stored in SRS waste tanks by blending it with a borosilicate frit to form a molten glass mixture. The mixture is poured into stainless steel canisters, which are decontaminated and stored safely on-site until a permanent storage facility is identified.

This melter has poured 2,678 canisters compared to the 1,339 canisters poured by Melter 1. In total, the facility has poured nearly 16 million pounds of molten glass since 1996.

The predicted number of canisters needed to dispose of SRS’ current high-level waste inventory is 8,210, so the facility is nearly halfway to completing its mission.

Jim Folk, DOE-Savannah River assistant manager for waste disposition, said canister production continues to be a high priority for SRS's liquid waste program.

"Since beginning operations, DWPF has immobilized more than 58 million curies of radioactivity," Folk said. "DOE continues to ensure that waste is removed from the tanks further reducing the risk posed by this high-level waste."

Mark Schmitz, acting SRR president and project manager, added that the facility's continued success was a tribute to innovative thinking by employees.

SRR keeps one melter in storage in case the working melter needs to be replaced. Currently, Melter 3 is waiting in storage and is ready when needed.

The SRS Liquid Waste contract is managed by SRR, which is composed of a team of companies led by AECOM with partners Bechtel National, CH2M and BWX Technologies. Critical subcontractors for the contract are AREVA, EnergySolutions and URS Professional Solutions.
