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March 31, 2016

Cincinnati -- The U.S. Department of Energy (DOE) today issued a Draft Request for Proposal (RFP) for liquid waste services at the Savannah River Site (SRS). A contract that primarily includes cost-plus-award-fee contract line items for the purpose of providing liquid waste services at SRS is anticipated. The Draft RFP provides for full and open competition, and the Draft RFP includes requirements for meaningful work to be performed by small business concerns. The total estimated value of the contract is up to approximately \$6B over the prospective period of performance of up to ten years, including the option period. The current liquid waste services contract at SRS is held by Savannah River Remediation LLC, and expires on June 30, 2017.

The purpose of the Draft RFP is to solicit input from interested parties to assist DOE in developing a Final RFP for this procurement. DOE invites all interested parties to thoroughly examine the Draft RFP and the accompanying procurement website in their entirety and to submit comments to DOE.

Additionally, a pre-solicitation, site tour, and one-on-one meetings with interested parties will be held during the week of April 18, 2016. Registration information is available via the procurement website.

The liquid waste services include but are not limited to: operations of existing radioactive liquid waste facilities for storage, treatment, stabilization, and disposal of waste; waste removal from tanks and tank closures; construction of additional saltstone disposal units; operation of the Salt Waste Processing Facility after facility commissioning, startup, and one year of operation; and liquid waste program and regulatory support.

Additional information is available via the procurement website at:

<https://www.emcbc.doe.gov/SEB/SRSLiquidWaste/>

DOE Announces Consent-Based Siting Public Meeting Schedule

DOE Website

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Consent-Based Siting Public Meeting Locations

Our next public meeting will be held in Atlanta, Georgia on April 11th at the Georgia Institute of Technology Conference Center. Please register [here](#) to attend the Atlanta meeting in person or view the event online. To see the agenda, please click [here](#).

The remaining six public meetings will be in:

Sacramento, California on April 26th at the Holiday Inn Capitol Plaza. Please register [here](#) to attend the Sacramento meeting in person or view the event online. To see a draft agenda, please click [here](#).

Denver, Colorado on May 24, 2016 at the Embassy Suites Denver - Stapleton. Please register [here](#) to attend the Denver meeting in person or view the event online.

Boston, Massachusetts on June 2, 2016 at the Hyatt Regency Boston. Please register [here](#) to attend the Boston meeting in person or view the event online.

Tempe, AZ on June 23, 2016 at the Marriott Phoenix Tempe at the Buttes. Please register [here](#) to attend the Tempe meeting in person or view the event online.

Boise, ID on July 14, 2016 at Boise Centre. Please register [here](#) to attend the Boise meeting in person or view the event online.

Minneapolis, MN on July 21, 2016 at the Hilton Minneapolis. Please register [here](#) to attend the Minneapolis meeting in person or view the event online.

We look forward to your participation!

PAST EVENTS

Our first public meeting was held in Chicago, Illinois on March 29th at the University of Chicago Conference Center. Please check back soon for a video and transcript of the event. To read more about the meeting and view the agenda, please click [here](#).

Our “kick-off meeting” was held on January 20, 2016 in Washington, DC. Dr. Lynn Orr, Undersecretary for Science and Energy, provided the keynote, which was followed by a panel discussion on DOE's planning activities for an integrated waste management system and a consent-based approach to siting. The audience asked questions to the panel, and those who attended in person participated in an informational poster session. Thank you to all who joined us at this event!

You can find more information, including a summary and video of the event [here](#).

SRS Contractor Uses Unconventional Treatment to Protect Groundwater and Reduce Cleanup Costs

Aiken Standard

March 28, 2016

[LINK](#)

Efforts are ongoing at Savannah River Site to reduce costs and maximize efficiency in the fight to clean up contaminated groundwater.

You can't fight Mother Nature and win, they say. So less expensive, more natural measures are being used to clean up contaminated groundwater beneath SRS. Savannah River Nuclear Solutions, or SRNS, personnel are using new, innovative methods to harness and enhance natural processes already

found at work within the underground water system below this U.S. Department of Energy site.

And it's working. To date, the remedial costs associated with groundwater contaminants near the site's F Area have been reduced, resulting in a cost avoidance of approximately 90 percent. The price tag has gone from about \$1 million a month to \$1 million a year.

This major cost avoidance has been accomplished by moving from using highly mechanized pump and treat facilities to a simple approach that taps into nature to isolate and clean up hazardous waste. The process has reduced the migration of tritium, uranium, strontium-90 and iodine-129 from the affected aquifer.

One of the biggest innovations involves injecting a non-traditional environmental cleanup material, silver chloride, into the contaminated groundwater to treat radioactive iodine-129. Silver chloride also is used to create photographic paper and as an antidote for mercury poisoning.

"Finely milled silver chloride particles, reduced to about one-quarter-micron in size, are injected with water into the aquifer, and are extremely effective at capturing the iodine-129," said Gerald Blount, SRNS geologist.

"Working with Savannah River National Laboratory scientists, we've found that over a short time period the silver chloride can permanently bind the hazardous iodine-129 as silver iodide, because of its strong natural chemical affinity."

Blount noted that the results of a recent test indicate a significant decrease in the hazard posed by iodine-129 in areas where silver chloride was injected into the aquifer beneath F Area.

"This is the first time sub-micron silver chloride has been used for this purpose," said Blount.

“The results of this full-scale test created a 30 to 50 percent reduction in the iodine-129 contaminant normally found in water samples taken at the test site. Next, we’ll inject an equivalent amount and measure again the level of effectiveness. Our goal is to eventually inject enough silver chloride in the right locations to remove most of the iodine-129 from the groundwater.”

“These periodic injection campaigns into the aquifer require little power, have no significant operation or maintenance cost and generate no waste,” added Blount. “As a result, the overall cost savings are significant and continue to grow.”

Since the silver chloride step was added to the process in 2005 a total cost avoidance of approximately \$100 million has been recorded.

Another benefit for injecting Silver Chloride into groundwater is that its use is not a public health or environmental concern. Studies have found that the very low solubility of this chemical compound does not negatively impact water quality. In fact, it is not detectable in treated groundwater.

From the 1950s well into the 1980s, SRS produced nuclear materials used for national defense. As a result, a portion of the groundwater beneath F Area in the past became more acidic. Small amounts of radioactive tritium, uranium, strontium-90 and iodine-129 were found as well.

“SRNS and the Savannah River National Laboratory are working together to find innovative remedial solutions at the Savannah River Site that are protective, technically feasible, safe and cost effective,” said Philip Prater, a physical scientist, in the DOE-Savannah River/Infrastructure and Area Completion Division.

Employing more sustainable remediation methods at SRS helps the entire DOE complex achieve its remediation objectives while reducing overall cleanup costs.

WIPP Ends Safety Pause

LA Daily Post

March 28, 2016

[LINK](#)

A safety pause, declared by Nuclear Waste Partnership in response to air quality issues in two remote areas of the WIPP underground, was ended and normal work in these areas has resumed.

The pause began Feb. 22 after workers detected elevated levels of carbon monoxide and volatile organic compounds (VOC) in two areas at extreme ends of the underground. The pause allowed time to thoroughly investigate each event while work in un-impacted portions of the WIPP underground continued.

We are learning from operating experience and continuing to improve our programs and processes to better protect workers,” said NWP President / Project Manager Phil Breidenbach. “We used the Safety Pause to improve our detection and measurement procedures; increase worker training and awareness of potential air quality issues, and develop procedures that help us recognize and respond to potential air quality issues before they become a problem.”

Based on the findings from the investigation, improvements have been made to procedures and processes to help ensure that workers entering low airflow areas with potential poor air quality continue to be adequately protected. Emphasis on increasing ventilation to low airflow work areas in advance of planned activities will ensure workers entering these areas have sufficient fresh air.

Additional warning signs were placed in these known low airflow areas to reflect where continuous air monitoring and additional ventilation is required for entry.

During the safety pause, additional training was provided to all workers on the use of air monitoring equipment, understanding alarm levels, and responding to alarms.

Historically, the buildup of diesel particulates, carbon monoxide and nitrogen oxide, as well as VOCs from the waste, have been detected in areas of the underground where there is minimal airflow or where the air is stagnant. These areas are generally found in the extreme north and south ends of the underground, or dead-end areas such as the entrance to closed waste panels.

The WIPP Industrial Safety monitoring equipment alarms at a much lower level than industry guidelines to ensure a conservative margin for personnel safety. Should workers detect elevated air quality conditions, they are trained to immediately retreat from the area.

Next WIPP Town Hall Meeting:

The City of Carlsbad and DOE will co-host its quarterly Town Hall meeting, featuring updates on WIPP recovery activities, at 5:30 p.m., Thursday, April 7 at the Carlsbad City Council Chambers, 101 N. Halagueno St. Live streaming of the meeting can be seen at <http://new.livestream.com/rrv/>.

Plunge in uranium prices may have sizable impact

Chillcothe Gazette

March 28, 2016

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PIKETON — While the funding outlook for cleanup work at the former Portsmouth Gaseous Diffusion Plant in Piketon appears relatively solid for the remainder of this fiscal year, a new \$40 million concern has arisen for the new year that begins Oct. 1.

As recently as a couple weeks ago, the outlook for FY 2017 was very promising as proposed federal appropriations budgets included what was considered adequate funding to keep the cleanup work of the former Cold War-era uranium enrichment site on track.

Those appropriations make up around 30 percent of the total project funding and have been the primary cause for anxiety at the site over the last couple years, bringing notices of potential layoffs before late-year funding changes were made to preserve those jobs.

The latest problem comes in a barter program that accounts for the other roughly 70 percent of project funding. Through the barter program, the Department of Energy allows the site to sell uranium from its inventory on the open market with the proceeds going to the cleanup work. Problem is, the amount of money that is brought in depends on fluctuations in the market.

"I was high-fiving everybody two weeks ago (when appropriations proposals came out) saying we've got the money, we're good," said Dennis Carr, site director for Fluor-BWXT, the lead contractor overseeing work at the site. "Then, all of a sudden last week, the bottom dropped out, and here we go again."

When the company worked with DOE two years ago on budgeting for future years, uranium was selling for more than \$100 per kilogram and Carr said they thought they were being conservative when budgeting it at \$96 per kilogram. The sudden drop was to around \$82 per kilogram, with company analysts saying over the next year or two it could dip to around \$78, Carr said.

A secretarial determination by Energy Secretary Ernest Moniz a year ago reduced the amount of uranium the barter program could make available in a given year because of concerns the program was having a negative impact on commercial uranium sellers.

That cap of around 1,600 metric tons per year is not expected to change this year, with secretarial determinations lasting two years unless a change is made in the interim, meaning they can't increase the amount of uranium being sold to make up for the shortfall in price.

That translates to about \$10 million to \$12 million that will have to be made up this year, likely putting a significant dent in the amount of available carryover hoped for into next year, and around \$40 million that will need to be made up somewhere next year — a lesser problem than the shortfall the past couple of years in appropriations, but a significant problem nonetheless.

"I don't want to panic yet because there's a base of action (to be looked at)," Carr told the Gazette. "We've got to sit down with the department (of Energy) and think through what we do here. Postpone some projects we were going to do here, starting to cut travel and cut everything I can to start saving money, cut whatever discretionary spending I have."

Carr told the Ross County Commissioners on Monday that officials will be going back to members of Ohio's congressional delegation to see if any more money can be included in the FY 2017 appropriations to make up for some of the shortfall.

He also noted that the situation only validates concerns that have been voiced in recent years of the danger in relying so heavily on the barter program rather than appropriations for the bulk of project funding.

In other news out of the Piketon cleanup:

With only \$21 million in this year's federal budget allocated for creation of a new on-site waste disposal cell on the DOE property in Piketon rather than the \$58 million originally hoped for, the scope of work has been limited to clearing the 220-acre space for the cell and other preliminary work. Proposed FY 2017 spending on the project presently sits at \$40 million, so a projected date for the cell to be completed and accept the first low-level

waste from the cleanup work has been bumped from November 2019 to November 2020. Carr said the amount of waste being shipped off-site presently has hit unprecedented levels as work to deactivate the first of the large process buildings on the site has moved forward.

Monica Regalbuto, U.S. assistant secretary for environmental management, recently made a one-day stop at the site to meet with union leadership and plant staff at both the cleanup and the DUF6 facility there. Carr said she was engaging and seemed immersed in learning more about the site and that she promised to return for another visit.

Fluor-BWXT has been working with Centrus Energy to try and fill any open positions that come up with workers who are losing their jobs at the American Centrifuge Plant after DOE decided to terminate funding for that plant. Thus far, Carr said about 10 workers have made the transition to the cleanup work and others may follow if future positions come open.

Carr and Jeff Wagner, senior manager for public affairs, presented commissioners with their community commitment dashboard which outlined highlights of the site's involvement in the community in terms of donations for economic development and charitable organizations, participation in public tours and school activities such as the recent regional offering of the National Science Bowl and involvement with its science alliance programming.

SRS Citizens Advisory Board voices concerns

WJBF.Com

March 28, 2016

[LINK](#)

AUGUSTA, GA – Those living around the Savannah River Site are discussing the impact the facility has on the surroundings. The SRS Citizens Advisory Board or CAB held a meeting Monday to talk about how the site might affect the CSRA.

SRS committees briefed the Citizens Advisory Board on natural resource management, ecology lab results, and liquid waste developments. One of the biggest concerns voiced was a supposed leak in an evaporator tank. Jim Giusti with the Department of Energy says, "The evaporator is a big pot that we put liquid high-level waste into to evaporate it down to reduce the volume we have to store in the waste tanks. It has sprung a leak in it."

The DOE says everything is contained inside the facility and there's no danger to the workers, public, or the environment. But they are unsure of how the leak appeared in the tank. "As soon as we saw a leak, we drained all the highly radioactive liquid waste out of it, we flushed it, and we've added water in. And what we're doing now is trying to figure what is causing the leak," says Giusti.

The Citizens Advisory Board complained to the DOE that no report was given to them when it happened. Virginia Jones, a member of the SRS Citizens Advisory Board says, "I'm just wondering why this was not given out as information and came as a happy surprise news to me?" Giusti claims, "When we first learned about it, we truly didn't have a lot of information that we could provide to CAB in a timely fashion. Other than to say we had a leak.

Giusti says the SRS will try to keep the CAB better informed in the future, and that SRS staff is working to fix the problem before it delays any work timelines. "We think we can fix it within the timeframe, depending on what the repair is, so that there will be minimal or no impact on our operations."

The CAB meetings with the SRS will continue Tuesday with talks about how to dispose of plutonium now that funding for the MOX project has been cut.

Nikki Haley: Federal government agrees to remove some plutonium from SRS

Aiken Standard

March 29, 2016

[LINK](#)

COLUMBIA — Gov. Nikki Haley says the federal government has agreed to remove some of the plutonium being stored in South Carolina.

Haley's office tells The Associated Press that U.S. Energy Secretary Ernest Moniz told her during a call Tuesday night 6 metric tons of plutonium currently at the Savannah River Site will ultimately be stored at a facility in New Mexico that should be operational by the end of this year.

Haley has for years spoken out against the storage of plutonium at the South Carolina complex, writing to Moniz last month saying he must stop or reroute another shipment on its way from Japan. Calling the deal a win, she also pointed out her continuing lawsuit against the Department of Energy over an unfinished project to process weapons grade plutonium also stored at the site into commercial reactor fuel.

"We will continue to watch this process carefully, as the Department of Energy has not lived up to promises made in the past," Haley said in a statement provided to AP. "We will not back down from our lawsuit until the DOE pays the \$1 million a day fine they are required to under federal law."

Energy officials didn't immediately return a message seeking comment.

Tons of plutonium have accumulated over the years at the former nuclear weapons complex along the state's border with Georgia.

Separate from the materials covered in Tuesday's conversation is about 7 tons of weapons grade plutonium, which is also at the site and ultimately intended to be processed into commercial nuclear reactor fuel, as part of a nonproliferation agreement with Russia.

The facility for that process is billions over budget and remains incomplete. South Carolina is already suing the federal government over what the

governor has called its broken promise to the state to finish the mixed-oxide fuel facility, seeking fines of \$1 million a day because the plant wasn't operational by a Jan. 1 deadline.

The Obama administration has gradually scaled down funding for the project, proposing to mothball it in 2014, citing cost overruns and delays. That prompted an earlier lawsuit, with the state saying the federal government had made a commitment to South Carolina and couldn't use money intended to build the plant to shut it down.

The state ultimately dropped the suit when the administration committed to funding the project through that fiscal year. But the administration has since said it's searching for a less expensive way to dispose of the plutonium, like immobilizing it in glass or processing it in different kinds of reactors.

DOE inks official plan for plutonium pathway out of state

Aiken Standard

March 30, 2016

[LINK](#)

The U.S. Department of Energy formally signed a plan Wednesday to prepare and move 6 metric tons of plutonium from the Savannah River Site to a repository in New Mexico.

The National Nuclear Security Administration's official record of decision designates downblending and storage as the preferred plan for the material as part of the Surplus Plutonium Disposition Supplemental Environmental Impact Statement.

The downblended nuclear material would be stored at the Waste Isolation Pilot Plant, or WIPP. The decision was first announced by Gov. Nikki Haley's office Tuesday night.

Downblending involves diluting plutonium and disposing of it at a repository.

The Environmental Impact Statement analyzed 13.1 metric tons of nuclear material that was deemed surplus in 2007, 6 tons of which are covered by this decision.

The official decision means that South Carolina will not become what Gov. Nikki Haley called a permanent dumping ground for nuclear materials in a letter to U.S. Energy Secretary Ernest Moniz.

Other options under the administration's consideration included a so-called do-nothing plan. That option meant that nuclear materials would have stayed in storage in South Carolina.

"As I've always said, we have the safest and best facilities at SRS to process the plutonium," said Mike Johnson, executive director of Citizens for Nuclear Technology Awareness.

"The DOE always needed to provide a pathway out of the state for the material, and this provides a confirmed way out," he said.

According to Tom Clements, director of the nuclear watchdog group SRS Watch, there are approximately 125 containers from SRS already interred at the WIPP site and another 97 were in queue when a fire on a salt truck shut down operations in 2014.

No concrete dates have been announced for the site's reopening.

"This agreement indicates two things to me," Clements said. "One, plutonium disposition is in chaos and any route has problems. Second, perhaps serious discussions are under way to move plutonium disposition forward."

As for the site, the newly inked decision means change is on the horizon.

“Implementing this mission will require the installation of new equipment at the site and the hiring and training of additional technical personnel,” according to the statement released by the NNSA.

“It does mean more work here,” Johnson said. “It means that we’ve got to install facilities to go from laboratory-scale processing to industrial-scale processing.”

Johnson and Clements both said processing levels at SRS are not currently at a level that would accommodate the preparations to move such a large amount of plutonium.

The materials specific to this part of the agreement are the non-weapons-grade materials at SRS which are not subject to the MOX agreement. The Mixed Oxide Fuel Fabrication Facility, currently under construction at SRS, would convert weapons-grade plutonium into commercial nuclear fuel.

Although the two portions of the 13.1 metric tons of surplus plutonium are both part of the Environmental Impact Statement, the decisions to handle the different qualities of material have followed different paths.

However, with the recommended decommissioning of the MOX program by NNSA earlier this month and the official direction out of the state for the remaining materials, SRS could see even more changes in the future.

“Now, we’ve got to develop these processes,” Johnson said, noting the move to larger scale downblending operations. “I suspect that if it works for non-weapons-grade plutonium, that it would work for weapons grade as well.”

According to the NNSA statement, this also provides a disposition pathway for foreign plutonium brought to SRS.

That means the material currently en route from Japan and future shipments would have a precedent to follow.

A proposed timeline for the preferred disposition plan has not been made available, and it is unclear when implementation measures will begin.

Oak Ridge City Council OKs water contract extension with DOE

Knoxville News Sentinel

March 29, 2016

[LINK](#)

OAK RIDGE — Oak Ridge City Council on Tuesday approved a one-year extension of a water purchase contract with its largest customer, the U.S. Department of Energy, but only after members vented their anger at the federal agency.

Council members Trina Baughn and Chuck Hope voted against the measure, while members Kelly Callison, Rick Chinn Jr., Charlie Hensley and Mayor Warren Gooch voted for it. Vice Mayor Ellen Smith was absent. The current contract between the city and the federal agency expires Thursday.

DOE under the new pact will pay less than what it costs the city to produce potable water from its antiquated plant atop Pine Ridge overlooking the Y-12 National Security Complex, and far less than what the typical residential customer pays.

The new contract calls for DOE to pay \$2.1 million for water over the next 12 months, or \$177,000 less than the previous year.

City Manager Mark Watson said DOE is cutting its water consumption at Y-12 and Oak Ridge National Laboratory, and now uses about 47 percent of the city's total production of potable water.

"This is another example of how DOE takes advantage of our community," Baughn said. She said the typical residents pays more than five times what DOE pays for water.

The city's finance director, Janice McGinnis, said another 6 percent rate hike for residential customers is on the horizon.

"We're going to give DOE an 8 percent reduction (in costs) and jack up the rates for everybody else," Baughn said.

Hensley, often at odds with Baughn on issues, agreed.

"This is another example of DOE stepping on the city of Oak Ridge," he said, adding that "the citizens have suffered because we're subsidizing DOE. I would like for us to push back."

"None of us are happy about it," Gooch said of the new contract, which Watson said was reached during negotiations with a 15-member DOE team.

Watson said the one-year extension will give the city time to study the issue and decide whether it would be appropriate to spend more money on the aging plant or build a new facility. He acknowledged the pact extension terms were "tilted slightly in their (DOE's) favor."

He said there's a 3,000-gallon-a-day leak underneath the plant, and there are concerns about the concrete aggregate used in its construction some 70 years ago.

Watson said DOE during the latest negotiations suggested it would be willing to chip in \$8 million toward either current plant improvements or a new facility — providing that the city add a matching sum.

DOE transferred ownership of the plant to the city in April 2000.

John Shewairy, DOE's assistant manager for administration in Oak Ridge, said over the past five years, DOE's water use has ranged from 1.9 billion gallons in 2011 to 1.4 billion gallons last year.

"DOE, like any other ratepayer, contributes to the costs for the operation of the water treatment plant," Shewairy said. That includes, but is not limited to, routine maintenance of the water treatment plant, labor costs, utilities, and supplies, he said.

ORNL and Y-12 have their own water line systems, he said, so DOE's contribution toward maintenance of the system are "limited to improvements at the water treatment plant."

Cleanup contract extended with Fluor-BWXT

Chillicothe Gazette

March 29, 2016

[LINK](#)

PIKETON - The U.S. Department of Energy announced late Monday that it is exercising its option to extend its contract another 30 months with Fluor-BWXT Portsmouth LLC as lead contractor for the cleanup at the former Portsmouth Gaseous Diffusion Plant.

An initial five-year base contract with Fluor-BWXT had been entered into in March of 2011 and was set to expire Monday night. The value of the option period is about \$750 million.

Fluor-BWXT is responsible for overseeing demolition and disposal of all gaseous diffusion plant facilities, process equipment, related process buildings and other ancillary facilities. According to a release from DOE, the department felt that executing the option on the contract was the most cost-effective approach that would allow present work to continue uninterrupted.

State proposes overhaul of LANL cleanup agreement with DOE

ABQ Journal

March 31, 2016

[LINK](#)

SANTA FE – The New Mexico Environment Department on Wednesday unveiled a proposed “complete overhaul” of its legal agreement with the federal Department of Energy over how and when to clean up decades of hazardous waste left over from decades of nuclear weapons work at Los Alamos National Laboratory.

State Environment Secretary Ryan Flynn described the draft plan as a way to move forward and away from the delays and muddled progress experienced under a previous, 11-year-old “consent order” whose missed deadlines for waste cleanup ran out in December. He said the draft agreement with DOE is intended to accelerate waste removal or remediation and help secure more federal dollars for the work.

Flynn said the old consent order from 2005, which ended a court fight between New Mexico and the feds and was supposed to have required cleanup of the lab’s entire 40-square-mile site by last year, was “focused on the long term” without enforceable near-term goals.

As a result, he said, the work got bogged down and took place in piecemeal fashion. And DOE’s admission about three years ago that it couldn’t meet the deadlines has made obtaining cleanup funding from Congress more difficult. “What I kept hearing was that we needed a clear plan going forward,” Flynn said.

The new proposal calls for a series of discrete “campaigns” aimed at specific cleanup issues or areas, using three-year plans that will be updated annually. Flynn said the focus will be on short-term goals that can actually be met; cleanup over continued investigation of waste sites; and providing ways for the public to review how much progress has been made every year.

Flynn noted that the feds have budgeted \$189 million for LANL clean up in the current budget and said he wants to that amount to go up to \$255 million a year.

Jay Coghlan, executive director of Nuclear Watch New Mexico, said Wednesday he found too many loopholes in the draft agreement. He said it essentially holds cleanup hostage to DOE funding and that “if DOE finds cleanup impractical” or technically unfeasible, “they can get out of it.”

Under the draft plan, milestones required of the DOE would be enforced using penalties. Coghlan commented that Flynn “said the current consent order doesn’t work. The reason it didn’t work is because he eviscerated the consent order with more than 150 milestone extensions.”

Coghlan also said again that there hasn’t been enough public participation in the consent order changes and they should have faced a formal process under which interested parties could request hearings to resolve disagreements.

Flynn has said that would have caused unnecessary delays. The draft agreement still needs the consent of DOE, which said in a statement Wednesday it’s committed to cleanup at LANL and looks forward to reviewing the state’s proposal. A public comment period runs through May 16.

New report details INL radiation leak

Post-Register

March 30, 2016

[LINK](#)

A radiation leak that exposed workers at an Idaho National Laboratory research facility in 2014 was caused by compromised equipment and air monitors that failed to detect the radioactive material, a new report says.

The 43-page internal report, completed in December and released to the Post Register last week, details what went wrong in late August 2014, when radioactive material escaped undetected from a sealed glove box over the course of several days. Former INL Director John Grossenbacher said last year the leak was the result of materials behaving in unforeseen ways.

The release of material — which occurred inside a room at the Fuel Manufacturing Facility, located at INL's Materials and Fuels Complex west of Idaho Falls — was not discovered by employees until routine testing of air filters about a month later.

Nine workers in the room during the release were later found to have been internally exposed to the radioactive material. The report said their dose levels were well below yearly regulatory limits.

The room and glove box where the incident occurred reopened to normal operations Jan. 4, 2016.

At the high-security facility where the leak occurred, research and development work is conducted on nuclear fuels made up of materials such as plutonium, uranium and americium. Workers stand outside sealed-off "glove boxes," sticking their arms into gloves mounted on the sides of the transparent boxes to safely work with tools and the radioactive materials located inside.

The facility includes two rooms equipped with glove boxes. According to the report, the radiation leak occurred in one of the rooms from Aug. 26 to 28, with another "minor" release Sept. 3.

During the release, work had been underway heating nuclear fuel using a tool called an “arc melter,” so it could be cast into a tube for testing, INL officials told the Post Register on a tour of the facility last October.

According to the report, the radioactive material americium had managed to escape through several small holes later discovered in the glove box equipment. It was able to escape “particularly when arc melting activities” were underway, the report said.

Air monitor alarms intended to alert workers of such a dangerous event didn’t pick up on the americium.

On Sept. 24, however, officials conducted routine tests on filters taken from the air monitors, and found the americium. Workers evacuated. Air monitor data indicated the leak was limited to only a few days, the report said.

Biological assay samples were collected from 15 workers who had been working in the room over that time period, and nine were found to have received internal doses ranging from 2 millirem to 85 millirem, according to the report.

“Under federal law, (biological assay) monitoring is not required for individuals expected to receive less than 100 millirem per year on the job,” a report summary said.

Despite the leak not being discovered for nearly a month, INL officials told the Post Register they were able to estimate the worker dose levels at the time of the leak by measuring radioactivity in the workers’ urine and fecal samples, then using mathematical models from the International Commission on Radiological Protection.

The room was sealed off for months after the incident. Workers entered wearing special suits to conduct tests on the equipment to see how the leak

occurred. Tests using helium pinpointed several leak points, which were fixed, according to the report.

Several steps will be taken to ensure another similar incident doesn't occur, the report said. An annual helium leak test will take place, and certain glove box components will be replaced every three years.

Other glove boxes at INL and elsewhere under the management of INL contractor Battelle Energy Alliance are also being examined to see if similar leaks potentially could occur, according to the report.

In addition, the air monitors were not set up to correctly identify americium. A software update and other changes to make the monitors more sensitive to different types and levels of contamination were made, the report said. Changes were shared with other facilities.

Details of the incident and exposure of employees were first reported by the Post Register in September, a year after the incident. The lab began releasing information on the leak and exposure of employees following inquiries from Utah resident Jack Stanton, who then alerted reporters to the event.

Jack Stanton is the brother of Ralph Stanton, a former INL employee at the center of a 2011 accident where plutonium powder spilled out of an old fuel plate, went airborne, and exposed 16 employees. That accident occurred next door to the Fuel Manufacturing Facility, at the Zero Power Physics Reactor Facility.

Some information on the incident was first posted on a DOE online incident reporting system in October 2014. The event also was briefly mentioned in a DOE Idaho operations summary distributed publicly in April 2015, however the summary did not mention several workers had received radiation doses.

[INL AFCI Glovebox Report](#)

Manhattan Project National Historical Park at Hanford Expands 2016 Tour Season

DOE Richland Operations Office

March 31, 2016

RICHLAND, Wash. – In partnership with the National Park Service (NPS), the U.S. Department of Energy (DOE) will open registration for the Manhattan Project National Historical Park's 2016 public tour season at the Hanford, Wash., sites on Monday, April 4, at 8:00 a.m. PDT.

Hanford is one of the three primary Manhattan Project locations created during World War II for the top-secret mission to beat the Germans in the race to develop a nuclear weapon. More than 50,000 people came to Hanford to design, engineer, construct and operate a massive industrial complex to produce plutonium in nuclear reactors for the nation's defense. The Park, which also has sites at Oak Ridge, Tenn., and Los Alamos, N.M., preserves and interprets the complex story of the Manhattan Project and the dawn of the atomic age. The Manhattan Project National Historical Park was authorized December 19, 2014 as part of the National Defense Authorization Act and was established November 10, 2015. You can learn more about the park at <http://www.nps.gov/mapr>.

There will be two tour programs that provide access to the park sites at Hanford in 2016. Both are free and open to visitors of all ages and nationalities. Cameras, cell phones, and other recording devices are welcome on the tours. Additional capacity has been added for 2016, with tours running from Monday through Saturday from April 18 through November 19. A total of about 14,000 seats will be available during the season.

One tour will focus on Hanford's B Reactor National Historic Landmark and offers visitors the chance to stand face to face with the world's first full scale nuclear production reactor. Built in just 11 months, the B Reactor started operations in September 1944 and produced the plutonium used in the Trinity Test in July 1945 and the "Fat Man" atomic weapon dropped on

Nagasaki, Japan, to help bring an end to the war in the Pacific, with Japan surrendering on August 14, 1945. The tour, which lasts about four hours, includes transportation to and from the B Reactor and a walking tour of the facility.

B Reactor Tour Dates for 2016:

- April 18-23, and 25-30
- May 2-7, 9-14, 16-21, 23-26 and 31
- June 1-4, 6-11, 13-18, 20-25, and 27-30
- July 6-9, 11-16, 18-23, and 25-30
- August 1-6, 8-13, 15-20, 22-27, and 29-31
- September 6-10, 12-17, 19-24, and 26-30
- October 1, 3-8, 10-15, 17-22, 24-29, and 31
- November 1-5, 7-12, and 14-19

Registration for this tour will open at 8 a.m. on Monday, April 4. Visitors will be able to reserve up to six seats per registration. To register for a tour and learn more about requirements and safety considerations, please visit the tour website, at <http://manhattanprojectbreactor.hanford.gov/>. You may also register or inquire about tours for schools or large groups by calling the tour office, at (509) 376-1647.

The second tour explores the history of the mid-Columbia Basin area of Eastern Washington prior to the eviction of homeowners and tribes in 1943 and furthers visitors' understanding of the development of successful agricultural operations along the Hanford Reach. The tour lasts about four hours and includes bus transportation, interpretation and a short walking tour at the following Manhattan Project National Historical Park resources:

- Bruggemann Warehouse, the last remaining building from an irrigated farm, orchard, and fruit packing/shipping facility operated from about 1900 through 1943.
- Hanford High School, which was built in 1916 and served two generations of Hanford students. The school was one of the most

significant public buildings in the Hanford/White Bluffs area and was also used for administrative and storage purposes during the Manhattan Project.

- The First Bank of White Bluffs, which is the last remaining building in the historic pre-war Town of White Bluffs, Washington. Constructed around 1907-1909, it served as the only financial institution for the pre-War towns of White Bluffs and Hanford.
- A view of the 1908 Hanford Irrigation District (Allard) Pump House and its adjacent irrigation canal headwall, which fundamentally changed the landscape and created opportunity for new producers and support industries in the towns of Hanford and White Bluffs

Pre-War Historic Sites Tours for 2016:

- April 21, 22, 23, 28, 29, and 30
- May 5, 6, 7, 12, 13, 14, 19, 20, 21 and 26
- June 2, 3, 4, 9, 10, 11, 16, 17, 18, 23, 24, 25, and 30
- July 14, 15, 16, 21, 22, 23, 28, 29 and 30
- August 18, 19, 20, 25, 26, and 27
- September 8, 9, 10, 15, 16, 17, 22, 23, 24, 29 and 30
- October 1, 6, 7, 8, 13, 14, 15, 20, 21, 22, 27, 28 and 29
- November 2, 3, 4, and 5

Registration for this tour will open at 8 a.m. on Monday, April 4. Visitors will be able to reserve up to six seats per registration. To register for a tour, and learn more about requirements and safety considerations, please visit the tour website, at <http://tours.hanford.gov/historicTours/>. You may also register or inquire about tours for large groups by calling the tour office, at (509) 376-1647.

In November 2015 the National Park Service convened a forum of scholars and experts from across the country and from the cities of Hiroshima and Nagasaki that represent a wide range of expertise on the Manhattan Project story, including scientific, historical, political, social, environmental, and ethical perspectives. That report is available here

https://www.nps.gov/mapr/upload/MAPR_Scholars_Forum_Report-2-2.pdf. Both tours have begun to incorporate the themes identified in the forum, and tour docents at Hanford have received interpretive training from National Park Service staff that will continue to improve the visitor's experience.

