

23 JUN 17

Energy secretary defends proposed Hanford, PNNL cuts

BY ANNETTE CARY
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Energy Secretary Rick Perry took the hot seat at a Congressional hearing for the third day Thursday to defend budget cuts proposed for the Hanford nuclear reservation

and Pacific Northwest National Laboratory.

"Your site may be the biggest challenge the country has — Hanford," Perry told Sen. Maria Cantwell, D-Wash., at a budget hearing before the Senate Energy and Natural Resources Committee.

"No, Hanford is the largest nuclear waste cleanup site in the

world. That is why you cannot do it on the cheap," said Cantwell, the ranking member on the committee.

She said she was "incredibly disappointed" by the Trump administration's approach to Hanford cleanup.

SEE PERRY, 7A

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EVERY ENERGY SECRETARY COMES INTO THE OFFICE ... PRESSURED BY SOME OMB (OFFICE OF MANAGEMENT AND BUDGET) PERSON WHO KNOWS NOTHING ABOUT SCIENCE, TRYING TO DO IT ON THE CHEAP.

Sen. Maria Cantwell, D-Wash.

23 AUG 17

AIRCRAFT HELP BATTLE WILDFIRE AT HANFORD REACH

Up there in the sky, across the river — is it a jet? A helicopter? An airplane?

For Hanford and Franklin County firefighters, it was all three this week, as they battled a brush fire on the Hanford Reach National Monument.

Several aircraft responded to help firefighters, including a McDonnell Douglas DC-10 air tanker that swooped down to drop red fire retardant.

Videos posted to the Facebook pages of Franklin County Fire District 4 and the Hanford Fire Department also show at least three propeller-driven planes and a helicopter dumping water to fight the flames.

Franklin County wrote on its page that the fire likely started because of static sparking from high-voltage lines that cross the Hanford reservation.

“This only happens when the humidity, temperature and air movement are just perfect,” officials said on Facebook.

District officials believe the fire started about the time the solar eclipse reached its peak. The fire burned several hundred acres but no serious damage was reported.

30 JUN 17

**INITIAL REPORT
DUE TODAY ON
HANFORD TUNNELS**

The Department of Energy will release the results of an evaluation of the structural integrity of two tunnels storing radioactive waste at the Hanford nuclear reservation.

Doug Shoop, manager of the Richland Operations Office for DOE, and Alexandra Smith, manager of the nuclear program for the state Department of Ecology, plan to speak to the media at 10:30 a.m. today.

The oldest of the two processing plant tunnels partially collapsed May 9. The gaping 20-by-20-foot hole at the former Plutonium Uranium Extraction Facility drew state and national concern as just one symptom of the aging structures at the DOE site.

No airborne radioactive contamination was detected from the breach by either federal or state monitors.

**GRANDVIEW AREA
MOSQUITOES TEST
POSITIVE FOR
'WEST NILE VIR'**

Perry declares support for PNNL and Hanford

BY WENDY CULVERWELL
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In his first visit to the Tri-Cities, Energy Secretary Rick Perry offered enthusiastic support for the Hanford cleanup and Pacific Northwest National Laboratory, but gave no assurance he will advocate to maintain current funding.

Perry's first Northwest visit began with a tour of McNary Dam on Monday and continued Tuesday with stops at the national laboratory, the Volpentest HAMMER federal training center and the Hanford nuclear site.

With scientists, the former governor of Texas alternated between

self-effacing — reminding his audience he once competed on Dancing With the Stars — and serious. He was supportive of the lab's work and lavished praise on the work DOE-funded scientists are doing to keep the nation and its infrastructure safe.

PNNL is the fifth national laboratory he's visited in his five months on the job. Perry said he's been wowed by their work.

"I've referred to the national labs as the crown jewels, which they are, but it's the staff that's the real crown jewels," he told PNNL staffers.

Perry, who famously forgot the name of the Department of Energy as a candidate for the Republican presidential nomination, has apparently become its top cheerleader.

"Being governor of Texas is the best job I've ever had. Being energy secretary is the coolest job I've ever had," he said.

Perry tackled the elephant in the room — the sometimes tense exchanges he's had regarding Hanford funding with Sen. Maria Cantwell, D-Wash. — in his opening remarks. "Senator Cantwell was pretty direct with me," he recalled drawing nervous laughter.

Cantwell and U.S. Reps. Dan Newhouse and Greg Walden spent the morning touring the U.S. Department of Energy lab operated by Battelle in Richland.

Cantwell and the other three Northwest Democrat senators opposed Perry's confirmation.

Plutonium plant demolition to restart, safety steps expanded

12 AUG 17

BY WENDY CULVERWELL
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A day after a labor group ordered a stop to demolition work at the Plutonium Finishing Plant, leaders have worked out new safety protocols with contractors overseeing the Hanford project.

The Hanford Atomic Metal Trades Council, an umbrella group of about 15 unions working at Hanford,

issued a stop work order Thursday after low levels of airborne radiation were confirmed in samples collected at or near the site.

The order came two days after the state Department of Health reported the presence of very low levels of radioactive plutonium and americium were detected in the air near Highway 240 at Hanford.

The samples were collected June 8, a day after about

350 Hanford workers were ordered to take cover after monitors detected low levels of airborne radioactive contamination.

Open-air demolition involving heavy equipment was underway at PFP when the alarm sounded shortly before 7 a.m. June 7.

HAMTC and CH2M Hill Plateau Remediation Co., which is managing demolition at PFP, met Friday and agreed to a "path forward,"

according to a message to CHPRC employees from Ty Blackford, president and CEO.

"Before new demolition work will resume, the boundary around the demolition area will be expanded approximately another 150 feet beyond the current safety boundary," he said in a Friday update to its initial post.

Blackford thanked union leaders for raising concerns and expressed support for a site-wide policy that gives all Hanford employees the authority to stop work to ensure protection and safety of the Hanford workforce.

Blackford said the agreement will enhance safety of the Plutonium Finishing Plant project and employees as it enters the final phases of demolition primarily by expanding contamination

control zones through the final demolition.

"While this change does impact the project teams and their goals, I believe these changes as suggested by HAMTC leadership and worked through the project leadership are sound and worthwhile to assure improved safety and better isolation from hazards during demolition as we come into the final phases of this important project," he wrote.

HAMTC officials were not available to discuss the stop-work order, which was posted on its Facebook page.

HAMTC's safety representative issued the stop-work order over "concerns over events both inside and outside of the facility." It confirmed that the order was modified to allow demolition to proceed following

the meeting.

The Plutonium Finishing Plant produced two-thirds of the nation's Cold War-era plutonium, generating discs that were supplied for nuclear weapons production. The main processing facility operated between 1949 and 1989.

In late July, the Department of Energy's Richland Operations Office and CH2M marked demolition on the main processing facility, which contained two processing lines where workers handled plutonium buttons through a series of glove boxes.

Demolition began in November and is proceeding from the outside in.

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THE PLUTONIUM FINISHING PLANT PRODUCED TWO-THIRDS OF THE NATION'S COLD WAR-ERA PLUTONIUM, GENERATING DISCS THAT WERE SUPPLIED FOR NUCLEAR WEAPONS PRODUCTION. THE MAIN PROCESSING FACILITY OPERATED FROM 1949 TO 1989.

NEW HANFORD MANAGER NAMED

Glyn Trenchard has been picked as the Department of Energy's assistant manager



Glyn
Trenchard

of the Hanford tank farms effective Aug. 6.

He will oversee the storage, treatment and disposal of 5 million gallons of chemical and radioactive waste

held in underground tanks from the past production of plutonium.

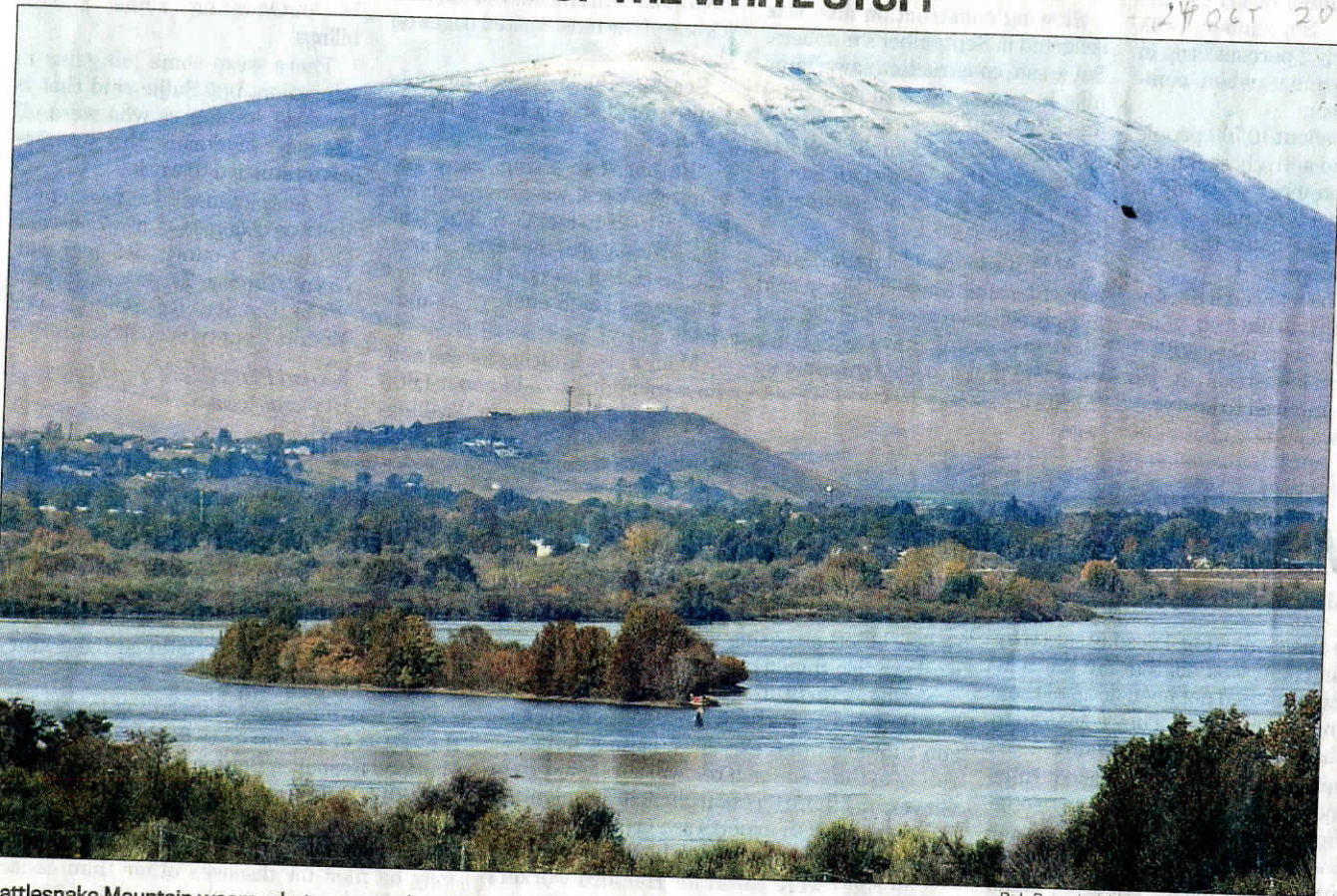
Trenchard joined the DOE Hanford Office of River Protection in 1998. He has more than 29 years experience in the nuclear field, including serving as the deputy assistant manager for the tank farms for the past five years.

He previously was director of the Tank Farms Programs and Projects Division and also was a project engineer for the DOE Hanford Richland Operations Office.

— TRI-CITY HERALD

A HINT OF THE WHITE STUFF

24 OCT 2012



attlesnake Mountain wears what appears the season's first coating of snow Tuesday morning near Hanford. The National Weather Service predicting a morning snow level of about 2,000 feet in the Cascades and overnight temperatures in the low 30s in the Tri-Cities.

Bob Brawdy | bbrawdy@tricityherald.com

HANFORD CHEMICAL VAPORS TRIAL DELAYED AGAIN

A federal judge has ordered the Richland trial on demands for better protection for Hanford workers delayed until June 11, 2018.

It is the third delay requested by plaintiffs and defendants in the trial as they continue to try to reach a settlement out of court through mediation. Most recently the trial had been set by U.S. Judge Thomas Rice for April 2018.

Additional mediation sessions have been scheduled for July 12, 14 and Aug

Hanford to get first park service manager

12 Sep 17
BY ANNETTE CARY
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The Hanford portion of the Manhattan Project National Historical Park should have its first park service manager on site this fall.

Becky Burghart has been named site manager for the Hanford portion of the park and could be in the Tri-Cities as soon as Sept. 24.

Burghart now is the chief of interpretation at White Sands National Monument in Alamogordo, N.M., which

gives her some familiarity with Hanford.

The monument is adjacent to the White Sands Missile Range, where plutonium produced at the Hanford nuclear reservation's B Reactor was used in the world's first atomic explosion in July 1945, as the United States raced to produce an atomic bomb during World War II.

Burghart said the new position provides her "with a unique opportunity to draw on my interpretive background and community collaboration experience in the early development of one of the newest units of the Na-

tional Park Service."

She will be working with the team responsible for guiding the planning to tell the story of Hanford's role in the WWII Manhattan Project.

"Becky comes to the (project) with a breadth of experience facilitating complicated dialogue and interpreting complex histories," said Kris Kirby, superintendent of the Manhattan Project National Historical Park, which tells the story of the Manhattan Project at park sites at Hanford, New Mexico and Tennessee.

Burghart is expected to

work closely with the Tri-Cities community as interpretive information for the park is developed and expanded.

B Reactor and other historical areas at Hanford became part of the national park system in November 2015.

Burghart was awarded the park service's Intermountain Region Freeman Tilden Award for Excellence in Interpretation for management of the White Sands visitor center exhibits and orientation film project in 2011.

She also has worked at Mesa Verde National Park in Colorado, Grand Teton National Park in Wyoming and Chamizal National Memorial in Texas.

She will be based at the visitor center for the Tri-Cities-area park at 2000 Logston Blvd., Richland.

Workers at Hanford report suspicious odor

BY ANNETTE CARY
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Five Hanford workers received medical evaluations as a precaution after they and other workers reported suspicious odors that could indicate the presence of chemical vapors Tuesday morning at the nuclear reservation.

Among the workers was an industrial hygienist who was able to collect air samples immediately, according to Hanford officials. Often after workers evacuate an area a crew is sent in to collect air samples, which can allow time for vapors to disperse.

None of the air samples showed chemical contaminants above background levels, according to Washington River Protection Solutions, the Hanford tank farm contractor.

All workers were medically cleared to return to work.

Three of the workers experienced symptoms and

were sent for medical evaluations in the morning. Although symptoms are not released to maintain workers' medical privacy, typical symptoms linked to chemical vapor exposure are coughing, headaches and shortness of breath.

Another five workers smelled suspicious odors but had no symptoms. Later in the day two of those workers also had medical checks, but the others declined medical evaluations.

The workers were outside the nuclear reservation's A Tank Farm in central Hanford doing work at a new water and air service building.

Because the workers were outside the boundary of a tank farm, supplied air respirators were not required as protection against chemical vapors. The chemical vapors are associated with waste held in underground tanks.

No work that would have disturbed waste, which can increase the chance of

chemical vapors being released, was being done in the vicinity, according to Hanford officials.

Employees were told to leave the area and access was restricted until the area was determined by Hanford officials to be safe later in the day.

By the Herald's count, the incident Tuesday brought the number of Hanford workers receiving medical evaluations for possible chemical vapor exposure to seven since the beginning of the year.

All were outside tank farms where supplied air respirators would have been required. Additional workers have reported suspicious odors but declined medical evaluations.

Hanford workers are concerned that inhaling chemical vapors could lead to serious neurological and respiratory illnesses.

The Department of Energy and its tank farm contractor are being sued in federal court by the state of

Washington, Hanford Challenge and union Local 598 for better protection of Hanford workers from chemical vapors.

More than 50 workers received medical checks in 2016 because of potential exposure to chemical vapors and were cleared by the site's occupational health provider to return to work.

Most of the incidents occurred before Washington River Protection Solutions began requiring supplied air respirators for most work inside tank farms in response to a stop-work order issued by the Hanford Atomic Metal Trades Council.

"Today's reports of tank vapor exposures are yet another illustration of why I filed a lawsuit against the federal government to protect Washington workers at Hanford," Attorney General Bob Ferguson said in a statement. "The federal government should stop resisting our lawsuit, acknowledge the seriousness of this problem, and focus on protecting workers."

Both the state and the defendants have asked for multiple delays in the trial.

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1834 - 17 LIGHTNING STARTS HANFORD FIRE NEAR HISTORIC BUILDING

Lightning started a brush fire early Saturday morning at the Hanford nuclear reservation, but no radiologically contaminated areas were burned.

The Hanford Fire Department responded to a fire at 4 a.m. burning not far from the old Hanford High School, which is part of the Manhattan Project National Historical Park, according to Mission Support Alliance, the Department of Energy contractor in charge of fire fighting services.

The fire did not reach the high school.

The high school, built in 1916, served two generations of students until the towns of Hanford and White Bluffs were taken over by the federal government as part of a secret project to produce plutonium for the Manhattan Project during World War II.

Firefighters contained the fire at 14.3 acres and were mopping up by 3:30 a.m., according to Mission Support Alliance.

The firefighters union Local I-24 reported multiple lightning strikes early Saturday morning, including on land north of the Columbia River that is part of the Hanford Reach National Monument.



Courtesy DOE

HANFORD STACK COMES CRASHING DOWN

18 JUL 17
The 200-foot-high concrete exhaust stack at Hanford's Plutonium Finishing Plant crashed to the ground Saturday after a small controlled explosion, allowing gravity to bring it down. The Department of Energy has a legal deadline in September to dismantle the Cold War-era plant. **See a video at tricityherald.com/video.**

Options for second Hanford waste tunnel outlined by DOE

BY ANNETTE CARY

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Federal officials explained their options Thursday for stabilizing a second radioactive waste storage tunnel in danger of collapse at Hanford.

The Department of Energy and Washington State Department of Ecology laid out the issue for the public at an evening meeting in Richland. About 50 people attended the session while more were listening online.

On May 9, a gaping hole was discovered on top of one of two waste storage tunnels built at the Hanford nuclear reservation's PUREX plant.

The breach has since been filled with sand and dirt and the length of the tunnel covered with a layer of heavy plastic, with plans being made to fill the tunnel with grout.

The tunnel, built mostly of timbers in 1956, holds eight railcars with equipment from PUREX that is highly radioactively contaminated. No radiation releases have been detected.

The second tunnel at PUREX was built of steel and concrete in 1964, but in late June federal officials announced that tunnel also is at serious risk of a cave-in, which could potentially release contaminants.

Options to temporarily stabilize the tunnel include

covering it with heavy plastic, installing a tent over it, constructing a building over it, filling it with expanding foam or causing a controlled collapse of the tunnel to prevent an unintended collapse.

It also could be filled with grout, the solution picked for Tunnel 1 to stabilize waste until a final decision could be made.

Additionally, DOE is looking at the option of immediately implementing a permanent solution, removing the waste from the tunnel for disposal elsewhere.

DOE has until Aug. 1 to give the state its proposed plan to stabilize the second tunnel.

Ka-boom: Saturday blast to topple Hanford vent stack

BY ANNETTE CARY
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The 200-foot-tall ventilation stack at Hanford's Plutonium Finishing Plant is scheduled to crash to the ground Saturday after explosives are detonated.

It's the next step toward getting the high-risk plant at the nuclear reservation torn down to the ground by the end of September.

The plant was used during the Cold War to convert plutonium that came into the plant in a liquid solution to metal buttons the size of hockey pucks or a powder, to be shipped to the nation's nuclear weapons production facilities.

DOE officials have called it the most hazardous demolition project at the nuclear reservation.

Workers have spent several weeks preparing for the stack to come down.

Most recently, part of the base of the plant's ventilation stack has been cut out, much like a logger would cut a wedge in a tree trunk, to control where it will fall onto a gravel pad laid for the demolition.

"This will allow it to be a fairly cushioned landing for it and allow it to break evenly when it comes down," said Kelly Wooley, Plutonium Finishing Plant deputy project manager for CH2M Hill Plateau Remediation Co.

The concrete stack should pancake when it hits the ground, said Tom Teynor, DOE project manager for the plant.

The crumbled pieces can then be loaded into containers to be hauled to a lined landfill for low-level radio-

active waste in central Hanford. The stack is about 18 inches in diameter at the bottom and about 14.5 inches at the top.

Air went through a series of filters before it was sent up the stack, but it still has low-level radioactive contamination.

Before the ventilation system fans were disconnected, they were used to blow fixative up the stack to glue any low-level radioactive contamination in place, until the blue fixative could be seen coming out the top of the stack.

The mostly underground ventilation building, housing powerful exhaust fans to serve all of the Plutonium Finishing Plant and its laboratories, has been demolished to make way for the explosive demolition of the stack.

The building, also called

State waives Hanford fine in return for waste storage improvements

BY ANNETTE CARY
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The state of Washington has agreed to waive a \$50,000 penalty if a Hanford contractor will make improvements in its handling of waste stored at the nuclear reservation's historic T Plant.

In August 2016, the state Department of Ecology issued the penalty after determining that CH2M Hill Plateau Remediation Co.

had not met regulations on five containers of waste that included leaking batteries, paint chips and concrete pieces, or grease.

Some of the waste came from floor scrapings that had the potential to include low levels of radioactive contamination.

CH2M and the Department of Energy, which was also named in the state order in 2016, were ordered to obtain detailed analysis of waste before storing it and to maintain records proper-

ly.

State officials said then that if Hanford officials were not following the rules on simple wastes, like batteries, it could have more serious issues when it handles more hazardous and complex issues.

Waste is required to be analyzed and correctly labeled before it is stored — indicating if it is corrosive or can easily catch fire, for example — to keep workers safe from hazards and make sure waste is stored correctly.

DOE said it was storing the waste properly and had identified and designated waste in the containers, but there might have been a miscommunication.

Ecology said it asked for records several times and based the order on the records it received. It had

\$50,000

penalty from 2016 that has been waived

\$25,000

maximum penalty if terms of settlement agreement are not met

found similar issues in four previous inspections before issuing the penalty, it said.

CH2M appealed the order and penalty, leading to a settlement agreement reached through court mediation, according to information from the state released on Friday.

CH2M agreed to establish a temporary holding area at T Plant for waste that has

SEE WASTE STORAGE, 4A

INTERIOR SECRETARY CONFIRMS NO CHANGES TO HANFORD REACH NATIONAL MONUMENT

The nation's interior secretary confirmed on Thursday that he will recommend no modification to the Hanford Reach National Monument.

Interior Secretary Ryan Zinke said he plans no further review of the national monument north of Richland or the Craters of the Moon National Monument in southern Idaho.

"Sportsmen and women from all over the country go to Hanford Reach for some of the best fishing and bird hunting around," Zinke said. "It's also home to some of the most well-preserved remnants of human history in the area."

Washington's two senators, Patty Murray and Maria Cantwell, said on Wednesday that Zinke planned to drop the review. Rep. Dan Newhouse, R-Wash., said he also had urged Zinke not to make changes to the monument established in 2000.

"The Hanford Reach is an irreplaceable natural and cultural treasure in central Washington, and it should be protected for future generations to enjoy," Newhouse said.

Newhouse will continue to press the U.S. Fish and Wildlife Service to allow some public access to the summit of Rattlesnake Mountain, he said. The mountain is on part of the nearly 200,000-acre monument that is closed to the public.

MANHATTAN PROJECT PARK VISITOR CENTER OPENS THIS WEEK

The Port of Benton will dedicate the Manhattan Project National Park Interim Visitor Center at the Tri-Cities Enterprise Center in north Richland this week.

Festivities are scheduled for 1 to 2 p.m. Tuesday at 2000 Logston Blvd., off Highway 240 near Horn Rapids.

The event is coordinated with the U.S. Department of Energy and the National Park Service. Refreshments will be served.

World's largest radioactive waste melter at Hanford

Completed assembly is construction milestone, could be in use in 2022

BY ANNETTE CARY
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Hanford workers have finished assembling what will be the world's largest radioactive waste melter when it begins operating at the nuclear reservation's vitrification plant.

"This is a large, technically complex piece of equipment," said Bill Hamel, the Department of Energy project director for the plant. "I really can't emphasize that enough. This is a significant accomplishment for the project."

Contractor Bechtel National earned \$4.275 million, as outlined in its contract, for getting the first melter that will be used at the

plant's Low Activity Waste Facility assembled.

The facility will have a second melter, and Bechtel may earn another \$4.275 million by finishing its assembly in September. DOE has set a goal to start processing low-activity radioactive waste at the plant as soon as 2022, turning it into a stable glass form for disposal.

The glass melters are at the heart of the process, Hamel said.

Concentrated low-activity radioactive waste will be mixed with glass-forming materials, including silica, and then heated to 2,100

30 TONS

amount of glass the Low Activity Waste Facility could produce daily

degrees Fahrenheit in the two melters. The mixture will be poured into stainless steel containers to harden for permanent disposal at Hanford.

The low-activity waste, which makes up the majority of the 56-million gallons now held in underground tanks at Hanford, is left from the past production of plutonium for the nation's nuclear weapons program during World War II and the Cold War.

Work on the melters started in about 2002 with the initial design, followed by construction of a prototype and a particular focus on the refractory, or liner, that will contain the molten glass mixture.

The glass mixture will be so hot that metal would melt, so the refractory was assembled from specially manufactured interlocking

SEE WASTE MELTER, 10A

Bill assists injured Hanford workers

BY ANNETTE CARY
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Resource center would help those exposed to chemical vapors

The Department of Energy would be required to establish a resource center to help Hanford workers exposed to chemical vapors, under proposed federal legislation.

Sens. Patty Murray and Maria Cantwell, both D-Wash., inserted the requirement into the appropriations bill that would set the budget for the Hanford nuclear reservation for the next fiscal year.

The bill, which also would re-

quire continued work to protect workers, has passed out of the Senate Appropriations Committee and now moves to the full Senate.

The proposed new center would provide education and advocacy to current and former Hanford employees on all available federal and state compensation programs to support workers who are injured on the job.

"While continued progress at Hanford is important, it should

never come at the expense of workers' health and safety," Murray said. "I will fight to make sure the Trump administration does everything in its power to put safety first and provide Hanford workers the health care and benefits they deserve."

DOE would be required to work with its contractors, labor unions and the state of Washington on the resource center.

Murray and Cantwell called on

the DOE Office of Inspector General this spring to look into complaints that worker compensation claims in Hanford's self-insured program were being dismissed on arbitrary grounds.

Hanford workers told Washington state Legislature committees this year that claims for illnesses they believe are tied to chemical vapor exposures at Hanford are routinely denied. The state Department of Labor and Industries makes final claim decisions for the Hanford self-insured program.

Proving which chemicals they were exposed to is difficult, workers said. The vapors are associated with waste that includes a mix of hundreds of chemicals in Hanford's underground waste tanks.

"Instead of getting the care and treatment they deserve, they have to battle their way through a worker compensation system that consistently fails them," said Tom

SEE HANFORD, 6A

SILVER DOLLAR FIRE

Wildfire burns onto Hanford reservation

BY ANNETTE CARY

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A wildfire that spread onto the Hanford nuclear reservation, called the Silver Dollar Fire, burned an estimated 20,000 acres in Yakima and Benton counties by Monday afternoon, mostly to the west of Hanford.

The fire was reported about 35 miles east of Yakima at noon

Sunday and spread toward the east, driven by the wind.

It crossed onto the Hanford Reach National Monument south of the Vernita Bridge in the McGee Ranch area and then crossed Highway 24 onto the production portion of Hanford.

The Hanford Fire Department had it contained on the nuclear reservation at 6 a.m., with no structures or contaminated areas burned, said Rae Moss of Department of Energy contractor Mission

Support Alliance.

Firefighters cut a disk line around the fire at Hanford, Moss said. Flames were still visible within the disk line Monday morning, but by late afternoon firefighters were doing mop up and surveillance. No estimate of the acreage burned at Hanford was available Monday.

The fire continued to burn Monday afternoon on the Hanford

SEE WILDFIRE, 9A

22 JUL 17

No easy answers for stabilizing Hanford radioactive waste tunnel

BY ANNETTE CARY
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The Department of Energy has come up with a range of options to protect the public and environment from the threat of collapse of another Hanford waste tunnel. But none of them is perfect. DOE discussed the options with

about 50 people attending a public meeting and more listening on the internet Thursday night in Richland. It is required to tell the state Department of Ecology which it proposes to pursue by Aug. 1.

The concern was triggered by the partial collapse of a storage tunnel at the nuclear reservation's PUREX processing plant discovered May 9. It holds eight

rail cars with old equipment contaminated with highly radioactive material.

The state ordered DOE to assess the structural integrity of a second, longer PUREX waste storage tunnel built a few years later in 1964. It holds 28 rail cars holding radioactive waste.

The results of the assessment were not good.

Tunnel No. 2 was built with materials that included corrugated sheets of steel, concrete girders and steel I-beams, rather than the timbers that were the primary building material of Tunnel No. 1.

But it still is at serious risk of collapse, the assessment found.

DOE now is considering options to either prevent a collapse of the second tunnel or protect people and the environment from a release of airborne radioactive particles in the event of a collapse.

Factors being weighed for differ-

Hanford Reach monument will be left as is, state senators say

13 JUL 17
BY ANNETTE CARY
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The nation's interior secretary has made a commitment not to change the status of the Hanford Reach National Monument, according to Washington state's two Democratic senators.

Sen. Patty Murray and Sen. Maria Cantwell spoke to Secretary Ryan Zinke in a joint phone call on Wednesday, according to their staffs.

"Today, the Department of Interior confirmed what so many Washingtonians have known all along — that the Hanford Reach, designated after years of collaboration in the Tri-Cities community, is worthy of protection for generations to come," Murray said.

Murray led efforts in the 1990s to establish the national monument from nearly 200,000 acres of land that had remained undeveloped, and some of it largely untouched, since it was set aside as a security perimeter

around the Hanford nuclear reservation in 1943.

Cantwell, the ranking member of the Senate Energy and Natural Resources Committee, said, "An attack on one of our national monuments is an attack on all of them."

"Now that Secretary Zinke agrees that the protection of the Hanford Reach National Monument should not be changed, the Trump administration should abandon this review and the ill-advised effort to undermine national monuments

altogether," Cantwell said.

In April, President Donald Trump signed an executive order directing the Department of Interior to review all national monuments created in the past 21 years, which included the Hanford Reach National Monument and 20 others in the West.

Trump said the designations amounted to "a massive federal land grab" that should be reconsidered.

Critics of the review said it could lead to reducing the size of national monuments or removing national monument designations signed into law by past presidents under the Antiquities Act.

SEE MONUMENT, 5A

FIRE BURNS ABOUT 9 ACRES AT HANFORD

A Saturday fire burned 9.3 acres in the vicinity of H Reactor in the Hanford 100 Area. Officials don't yet know the cause.

Hanford Fire responded and put the fire out. A Mission Support Alliance spokesman said it never threatened any facilities.

The 100 Area is along the banks of the Columbia River and is home to nine former plutonium production reactors constructed between 1943-65, according to the Department of Energy

ARTS CENTER TASK FORCE TO SHARE VISTA FIELD PROJECT VISION

The Arts Center Task Force will share a conceptual design for the Vista Arts Center theater and community art space it wants to develop at the Port of Kennewick's Vista Field urban village project.

The board will unveil the conceptual design during an event from 10 to 11 a.m. Aug. 22 at the Tri-Cities Business & Visitor Center, Bechtel Board Room, 7130 W. Grandridge Blvd., Kennewick.

The task force wants to construct an 800-seat theater, community room and art gallery at the center of the port's urban village for the former Vista Field air-

port. The unveiling includes walking tours to the site as well as images of the floor plan, lobby, gallery and community room.

COLD WAR PATRIOTS HOLD TOWN HALL MEETINGS FOR HANFORD WORKERS

An advocacy group helping nuclear weapons and uranium workers will hold a series of town hall meetings in the Tri-Cities this week.

Cold War Patriots will help current and former nuclear weapons workers and their survivors learn about the Energy Employee Occupational Illness Compensation Program Act and the Radiation Exposure Compensation Act.

Sessions will be held:

- 10 a.m. and 6 p.m., Tuesday, at the Hampton Inn, 486 Bradley Blvd., Richland;

- 11 a.m., Wednesday, at the Red Lion Columbia Center, 1101 N. Columbia Center Blvd., Kennewick

- and 11 a.m., Thursday, at Yakima's Hilton Garden Inn, 401 E. Yakima Ave.

Sessions are for those who have never applied for benefits, those who have been denied and those who have pending applications. Go to coldwarpatriots.org for information.

— TRI-CITY HERALD

Top Hanford official to leave in September

25 AUG 17

BY ANNETTE CARY

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One of Hanford's two top local officials will be leaving at the end of September.

Kevin Smith, manager of the Department of Energy Hanford Office of River Protection, has told employees he plans to retire after almost five years in the position. He notified Energy Secretary Rick Perry of his decision when Perry visited Hanford Aug. 15.

Ben Harp, now the deputy manager of the Office of River Protection, will serve as acting manager after Sept. 30, according to DOE.

Smith told employees that the Office of River Protection is a "strong, well-performing organization," mak-



Kevin Smith



Ben Harp

ing the time right for him to retire from federal service.

The Office of River Protection is responsible for 56 million gallons of radioactive and hazardous chemical waste stored in underground tanks. It also is responsible for the Hanford vitrification plant under construction at a cost expected to exceed \$17 billion to turn the waste into a stable glass form for disposal. The waste is left from the past production of about two-thirds of the nation's plutonium for its nuclear

weapons program from World War II through the Cold War.

Both the vitrification plant and tank farms are on a good path forward, Smith said.

Construction on parts of the vitrification plant were stopped in 2012 because of technical issues related to high level radioactive waste, but those issues could be resolved as soon as December, he said.

The plant also is working toward Smith's goal of starting glassification of low-activity radioactive waste as soon as 2022, while construction and commissioning continues elsewhere on the plant.

Bringing in a new manager now would allow that person to gain a thorough understanding of the tank farms and vit plant before the plant begins operating, he said.

Leaving the position has been a difficult decision, he said, but he looks forward to having more free time to

help his aging parents.

He told workers when he became manager that he wanted them to no longer measure their tenure by the number of managers they survived, but rather see his eventual departure as the normal transition of a stable, mission-focused organization.

"I hope all of you feel that I have kept that promise and leave you in a place where the next manager can seamlessly pick up where I left off," he told employees.

The office had been marked by manager turnover, with at least seven since it was formed to focus on Hanford tank waste in 1998. The remainder of Hanford activities are managed by the DOE Hanford Richland Operations Office, led by Doug Shoop, the other top local DOE official at Hanford.

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30 JUL 17 HOUSE PASSES BETTER HANFORD BUDGET THAN TRUMP ADMINISTRATION WANTED

The U.S. House passed a package of appropriation bills that included a budget for the Hanford nuclear reservation for the next fiscal year before members scattered for a five-week summer recess.

"Reversing the cuts in the president's budget was the right thing to do to fulfill the federal government's obligation to clean up Hanford," said Rep. Dan Newhouse, R-Wash.

Newhouse and other Hanford supporters in the House got \$54 million added to the Trump administration's proposal for Hanford spending in fiscal 2018.

The House version of the Hanford budget would still leave Hanford spending next year about \$60 million below current spending of about \$2.4 billion.

The Senate's Hanford budget proposal would add \$196 million to the Trump administration's proposal, largely thanks to the effort of Sen. Patty Murray, D-Wash. The full Senate has yet to consider the spending bill.

The Tri-City Development Council has estimated that the administration's budget proposal would cost 700 jobs at Hanford and 1,000 jobs at Pacific Northwest National Laboratory.

Newhouse said the spending package approved by the House also would provide "a down payment on congressional support for PNNL to continue its scientific contributions in service of the nation."

KENNEWICK TEEN ARRESTED ON SUSPICION OF ARMED ROBBERY

A 15-year-old from Kennewick has been arrested on suspicion of armed robbery.

The alleged incident happened about 12:50 a.m. Saturday on the 4800 block of West Clearwater Avenue.

"A male displayed a handgun and demanded the victim's money and property," said a report from Kennewick police. The victim complied.

Officers identified the teen as the suspect and made the arrest about 6:15 a.m. without incident, police said.

The teen was booked into the juvenile justice center on suspicion of first-degree robbery.

30 JUL 17 MONKS WILL NOT BRING PEACE WALK TO HANFORD

Buddhist monks from Bainbridge Island will not lead a peace walk out from Richland to the 300 Area gate of the Hanford nuclear reservation to pray for peace this summer.

The monks and other participants in the Pacific Northwest Interfaith Peace Walk have other commitments and will only be walking through coastal cities of Washington and Oregon.

For more than a decade, they also have come across the Cascade Mountains to Hanford, where plutonium was produced for the atomic bomb dropped on Nagasaki, Japan.

This year they will participate in the Hiroshima Day lantern ceremony on Green Lake in Seattle and in actions linked to the Nagasaki bombing anniversary near the Trident nuclear submarine base at Bangor, Wash.

No Hanford contracting plan yet; DOE seeks companies

BY ANNETTE CARY

acary@tricityherald.com

The Department of Energy has yet to release its master plan for new Hanford contracts, but is continuing to ask for information from businesses interested in performing work at the nuclear reservation.

Late last week it put out a request for information from companies interested in performing part or all of a new management and services contract for the Hanford 222-S Laboratory. The last time the lab contract was awarded it was valued at \$44.6 million over five years.

DOE to seek bids for major Hanford contract this month

BY ANNETTE CARY
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The Department of Energy plans to issue a request for bids for a sitewide services contract for the Hanford nuclear reservation by the end of August.

That would replace the contract held by Mission Support Alliance, which expires May 25, 2019. Mission Support Alliance employs about 1,900 people and holds a 10-year contract valued at about \$3 billion.

The new contract would include security and emergency services, land management, information tech-

nology, management of the HAMMER training center, and infrastructure maintenance and upgrades, including for electric service, water and roads.

It also would include building infrastructure to support operation of the Hanford Waste Treatment and Immobilization Plant, also called the vitrification plant.

The contract would be expanded to include assistance to DOE in the solicitation and administration of small business contracts awarded by DOE. Current small business contracts include occupational health services and work at the

Hanford 222-S Laboratory.

The contract covers DOE goals "to continue its strong focus on infrastructure to ensure its reliability and continuity during critical waste management and environmental cleanup efforts," DOE said in an announcement.

"With this proposed contract, DOE plans to initiate and complete a number of infrastructure upgrades, support the critical start-up of the high level Waste Treatment and Immobilization Plant, and maintain the Hanford Site infrastructure to support the next 50 years of operations and cleanup," DOE said.

DOE tentatively plans a conference, Hanford tours and one-on-one meetings with those interested in bidding in September.

The announcement that a request for bids will be made soon comes before DOE releases an overall contracting strategy for Hanford. It initially said the strategy would be available in January.

The strategy was expected to indicate how DOE planned to divide up work among new contracts that replace those expiring in the next few years. Expiring contracts also include the Hanford tank farm contract and the central Hanford environmental cleanup contract.

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After 19 years, DOE close to draining 16 Hanford tanks

11 AUG 17
BY ANNETTE CARY
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Nineteen years after work began to empty the thick, radioactive sludge in Hanford's C Farm tanks, the end may be in sight.

Work was expected to resume Thursday night for a final campaign to remove the remaining sludge in the last of the 16 tanks in the group called C Farm.

If work goes as planned, Tank C-105 could be emptied by the end of the year.

"This has been a very challenging one," said Doug Greenwell, manager of single-shell tank retrieval for Department of Energy contractor Washington River

Protection Solutions.

C Farm was the first group of leak-prone tanks tackled, with a goal of declaring all 16 emptied to regulatory standards by 2006.

That did not happen.

As the first tank farm where Hanford workers attempted to empty all tanks, C Farm is considered a demonstration project.

Lessons learned are to be used to retrieve waste from the remaining 132 single-shell waste storage tanks at Hanford, and there have been plenty of lessons.

But in the past 19 years, progress has been made to develop better equipment for moving the waste out of the enclosed underground tanks and to do the work more

efficiently.

Tank C-105 was the first to use a new technology, a robust robotic arm called MARS, for Mobile Arm Retrieval System, equipped with a vacuum system.

Because the tank may have leaked before pumpable liquids were removed more than a decade ago, Hanford officials have wanted to avoid technologies that would use significant amounts of water or other liquid to break up the waste and move it toward a central pump.

In 2014 and 2015 MARS sucked up 92,000 gallons of the waste from the tank, which has a capacity of 530,000 gallons.

"At the end of the day it

broke of old age," Greenwell said. The hose on its vacuum end gave out after operating in the highly radioactive environment for 16,000 hours.

With an estimated 30,375 gallons of waste left in the tank, a decision was made to pull out the major components of the MARS vacuum system and try technology that has worked well at some other tanks.

Two extended reach sluicers have been installed in the tank. They are more compact than the MARS system, which required a hole to be cut in the top of the tank to insert it.

The sluicers spray liquid waste on sludge to break it up and move it toward a pump for removal from the tank. Unlike the sluicers first used in C Farm tanks, they are more flexible and can reach more areas within a

SEE HANFORD TANKS, 6A

Hanford national park visitor center opens

26 JUL 17

BY ANNETTE CARY
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The Stars and Stripes was raised over the Richland visitor center for the Manhattan Project National Historical Park in Richland at a dedication ceremony Tuesday.

The center that has served as a gateway for tours of Hanford's historic B Reactor since 2009 has had \$127,000 of improvements made by the Port of Benton.

It stepped up and took a chance on a young national park, said Colleen French, DOE's national park program manager at Hanford.

It may not be the visitor center long term. The National Park Service is required to conduct a study

and prepare a Visitor Access and Use Plan that will pick a permanent location.

In the meantime, visitors and employees will have a better experience at the interim visitor center at 2000 Logston Blvd., off Highway 240.

"This is probably the most developed tour operation of the three parks," Kris Kirby, superintendent of the Manhattan Project National Historical Park, said at the dedication.

The park tells the story of the race against the Nazis to develop the world's first atomic weapons at three sites - Los Alamos, N.M.; Oak Ridge, Tenn., and Hanford. At Hanford workers built the world's first production-scale reactor to produce plutonium.



BOB BRAWDY Tri-City Herald

Bob Trethewey, left, and Brian Conklin raise the flag Tuesday at the Manhattan Project National Historical Park.

The park only dates to 2015, but public tours of historic B Reactor have brought 70,000 people to the reactor since 2009. They have come from all 50 states and more than 80 countries.

"The Manhattan Project is controversial and complex, but it is also incredibly com-

PELLING," Kirby said.

It was a time in history when ordinary people came together, no questions asked, "as Americans to preserve our way of life and move forward," she said.

Now bus tours leave from the visitors center, heading

SEE VISITOR CENTER, 5A

HANFORD TUNNEL 13 JUL 17 **MEETING SET JULY 20**

The public can learn more about the structural soundness of the second PUREX waste storage tunnel at the Hanford nuclear reservation at a meeting July 20 in Richland.

The Department of Energy and state Department of Ecology promised a public meeting when the structural evaluation was released June 30.

The study showed the tunnel was at serious risk of a cave-in, after the first PUREX waste storage tunnel was discovered partially collapsed in May.

Information will be provided and questions answered at the meeting, but no formal comment period is planned.

The meeting is scheduled for 6 p.m. at the Courtyard by Marriott, 480 Columbia Point Drive. To listen to the meeting on the internet, go to hanford.gov and click on July 20 on the events calendar for instructions.

— TRI-CITY HERALD

28 JUNE 17

End is finally in sight for plutonium center cleanup as Z Plant starts to fall

BY ANNETTE CARY

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The main processing facility of Hanford's Plutonium Finishing Plant started to fall this week, putting the end in sight for cleanup of the plant after two decades of work.

The main part of the plant is nicknamed "Z Plant" because it was the last stop for plutonium

production at Hanford.

During the Cold War about two-thirds of the nation's plutonium for its nuclear weapons program came off of Z Plant's two production lines.

Plutonium in a liquid solution was turned into buttons the size of hockey pucks and oxide powder there for shipment to a nuclear weapons manufacturing plant from 1949 to 1989.

Work has been underway since

the '90s, including stabilizing plutonium left at the plant when it shut down.

Then extensive work was done on the highly contaminated equipment within the plant before demolition using heavy equipment began in November.

Workers removed about 200 pieces of processing equipment, including glove boxes. They also removed 1.5 miles of ventilation piping and process lines contam-

inated with plutonium.
DOE said that some of the work, such as removing two highly contaminated glove boxes, was among the most hazardous work conducted across the nationwide DOE complex.

Now the appearance of the Plutonium Finishing Plant is changing daily, said Kelly Wooley, deputy vice president for the project for contractor CH2M Hill Plateau Remediation Co.

Already the plant's ventilation building and its McCluskey Room — heavily contaminated after a 1976 explosion that injured worker Harold McCluskey — have been demolished. The 200-foot ventila-

SEE HANFORD, 12A

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5 JUL 17 Senator questions Hanford vit plant subcontracting

BY ANNETTE CARY
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A U.S. senator is questioning the new subcontracting arrangement at the Hanford nuclear reservation's vitrification plant.

Bechtel National announced in January that it and its primary subcontractor were forming a new company that would do the construction, start up and commissioning of the massive plant as a Bechtel subcontractor.

Bechtel National holds the Department of Energy contract to build and commission the plant. Its primary subcontractor is AECOM, the second owner of the new subcontractor.

Sen. Claire McCaskill, ranking member of the Senate Homeland Security and Governmental Affairs Committee, late last week asked Energy Secretary Rick Perry to brief her staff on the subcontracting arrangement by July 21.

McCaskill questioned whether DOE's oversight of construction and commis-

sioning would be diminished under the new arrangement.

Transparency and accountability for the vitrification plant work are needed in the wake of a \$125 million settlement that Bechtel and AECOM agreed to pay in November, McCaskill, D-Mo., said.

"We know that these companies have fallen short on nuclear safety standards and used taxpayer dollars for lobbying," she said.

The federal court agreement resolved allegations that the two companies charged DOE for materials and work that did not meet the exacting standards required for nuclear facilities. It also resolved allegations that Bechtel illegally used taxpayer dollars to lobby Congress for money for Bechtel's work at the vitrification plant.

"I also have questions about the impact of this subcontract on performance and costs," including any incentive pay arrangements between Bechtel and the new company, Waste Treatment Completion Co., McCaskill wrote in the letter

to Perry.

She reminded Perry of the increasing cost estimates for the vit plant. In 2000 the project, then planned to be treated less waste, was expected to cost \$4.3 billion and be completed in 2011, she said. The latest estimates show the plant likely will cost more than \$17 billion and will not be fully operating until 2036, with some low-activity radioactive waste treatment starting in 2022 or 2023.

Construction on the plant began in 2002 to turn up to 56 million gallons of radioactive waste into a stable glass form for disposal. The waste is left from the past production of plutonium for the nation's nuclear weapons program.

"(Waste Treatment Completion Co.) adds no additional costs to taxpayers and earns no additional fee," said Fred deSousa, Bechtel spokesman.

Bechtel is working with DOE to provide answers to McCaskill's questions, he said.

The contract structure between Bechtel

remains unchanged and Bechtel will be responsible for Waste Treatment Completion Co.'s performance, he said.

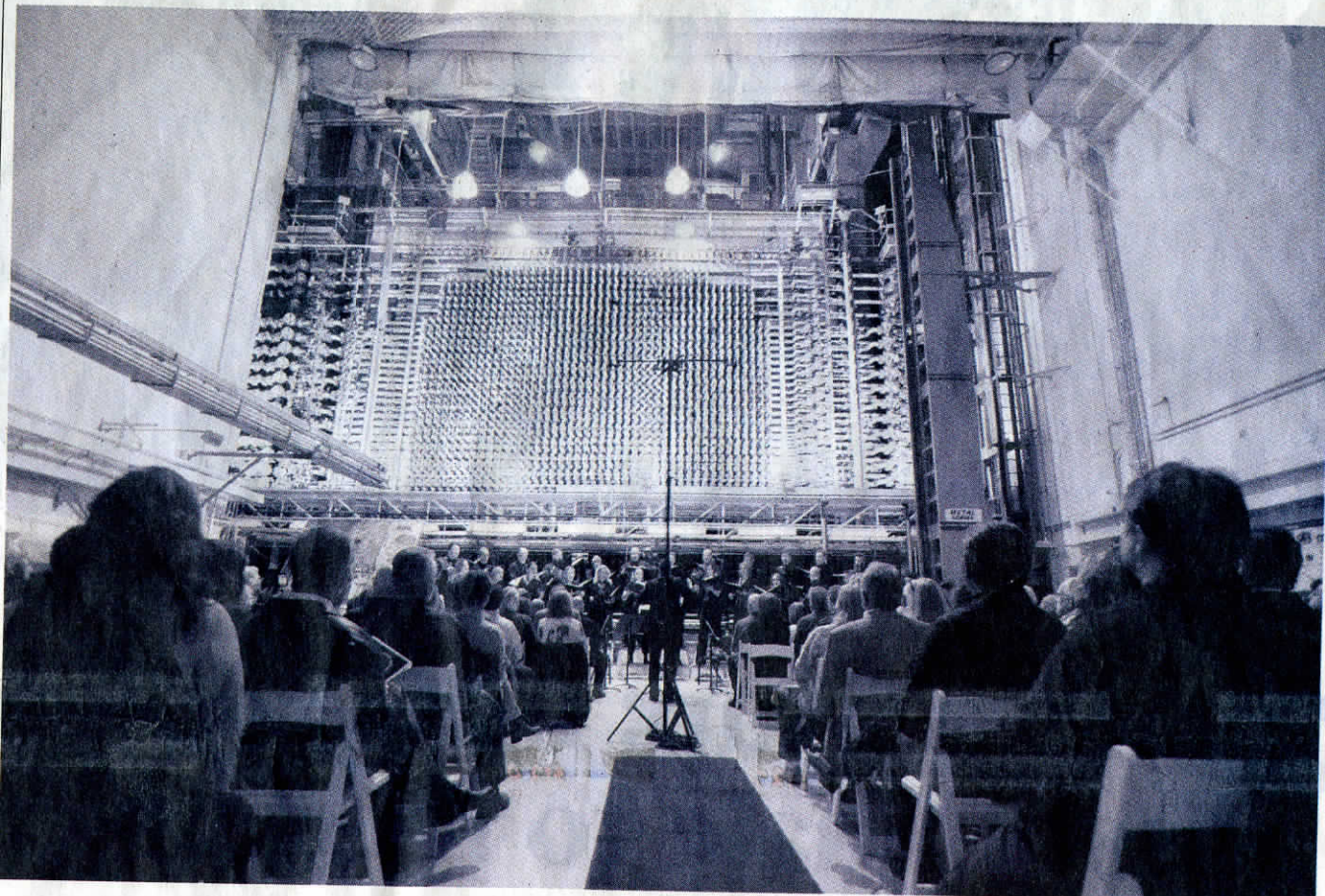
Having a single subcontract for the on-site work of construction and commissioning is intended to safely manage job site activities after plans for the plant changed, Bechtel said in January.

Initially, construction of the entire plant was expected to be completed before it started up. Now plans call for starting up parts of the plant treating low-activity radioactive waste while work continues on the facilities that will handle high-level radioactive waste. Technical issues have delayed construction of those parts of the plant.

The change to a single company for on-site employees helps address the complexities of managing environmental, safety and health risks associated with concurrent construction, start-up and commissioning activities, deSousa said.

About 1,370 of the approximately 3,000 workers on the vit plant project were assigned to Waste Treatment Completion Co., Bechtel said in January.

Annette Cary



Mid-Columbia Mastersingers will perform Sept. 8-10 at Hanford's historic B reactor.

COURTESY OF CASIE DAVIDSON

Inside a once-secret nuclear reactor, music of war and hope

BY SARA SCHILLING
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Mid-Columbia Mastersingers gave a groundbreaking set of performances last fall at Hanford's historic B reactor. In a couple of weeks, the acclaimed choral group will be at it again.

This time, the Mastersingers will perform *Annelies* by composer James Whitbourn.

The cantata is based on the writings of Anne Frank, the Jewish girl whose chronicle of her time spent hiding from the Nazis has touched millions. *Annelies* was Anne's given name.

Performances are at 7:30 p.m. Sept. 8-9 and 3 p.m. Sept. 10 at the B reactor. Tickets are on sale now.

The piece is powerful, evocative, melancholy, challenging and beautiful, said Justin Raffa, artistic director. The music's text comes from Anne's diary, kept during the two years the

“

WE'RE REMINDING PEOPLE, THIS IS WHAT ACTUALLY HAPPENED. HERE ARE THE FACTS. THIS IS WHAT WENT ON. ... WE CHALLENGE PEOPLE TO DECIDE ON THEIR OWN, WHAT DOES THAT MEAN FOR US TODAY?

Justin Raffa, artistic director for Mid-Columbia Mastersingers

teen hid with her parents, sister and four others in a “secret annex” in Nazi-occupied Holland.

Anne and the others eventually were discovered and sent to concentration camps. Only Anne's father survived.

Raffa chose the piece for the concert months ago, but it's become especially timely now, he said.

“We're reminding people, this is what actually happened. Here are the facts. This is what went on. We challenge people to decide on

their own, what does that mean for us today? What is our responsibility in 2017, when these kinds of Charlottesville marches happen?” he said, referring to the recent white supremacist rally in Charlottesville, Va.

It challenges us to ask, “What is our obligation as a community? What is our obligation as individuals?” Raffa said.

The choir will be joined by a chamber orchestra and guest soloist Renee Heitmann, a soprano from New

York City.

Concertgoers should be prepared for a moving time in a striking, unique setting.

The B reactor was the world's first full-scale nuclear reactor. It produced plutonium for the Trinity Test, which was the first-ever nuclear detonation, and for the atomic bomb dropped on Nagasaki, Japan, that helped end World War II. Now decommissioned, it's part of the Manhattan Project National Historical Park, which has sites at Hanford and in New Mexico and Tennessee.

The Mastersingers' shows last year were the first-ever full concerts inside the B reactor, and were believed to be first-ever choral concerts in such a space anywhere in the world.

Tickets went quickly, and the shows earned rave reviews. Raffa said it was “a transformative kind of experience.”

“I think it's really extraor-

SEE MASTERSINGERS, 4A

Faulk, top EPA official at Hanford, retires

11/1 P 17

BY ANNETTE CARY
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The Tri-Cities' top federal regulatory official for the Hanford nuclear reservation has retired after more than eight years in the job.

Dennis Faulk, the Hanford project manager for the Environmental Protection Agency in Richland, had worked for EPA at Hanford since 1991, the early years of environmental cleanup when decisions were beginning to be made on how the highly contaminated, 586-square-mile site would be cleaned up.

Craig Cameron, an EPA environmental scientist in Richland, has been named acting project manager.

"We'll miss your wise counsel, your straightforward, always-honest answers to even the most difficult questions, and your

steadfast dedication to a safe, reasonable and thorough cleanup at Hanford," Alex Smith wrote in a letter to Faulk. Smith is the nuclear waste program manager of Hanford's other key regulator, the Washington State Department of Ecology.

Part of Faulk's legacy was his successful opposition to the Department of Energy's plan not to dig up waste burial grounds along the Columbia River at Hanford.

Instead, DOE wanted to put earthen caps over them to keep precipitation from driving contamination deeper into the ground.

"You argued successfully that the long-term costs would be just as much as or more than digging them up," Smith said.

Faulk's stand was proven right when hundreds of pieces of highly radioactive, irradiated uranium fuel were discovered buried near the

river, she said.

Faulk also considers his work with the state and DOE to come up with the plan to clean up the 220-square-miles along the Columbia River a highlight of his career.

After 25 years of cleanup, most of the work there has been completed. The land included hundreds of buildings and waste sites, plus research and production reactors that have either been temporarily sealed up or torn down.

Faulk was among the officials who helped established the Hanford Advisory Board.

"Who would have thought they would have been such a force in Hanford cleanup?" Faulk asked.

The board — made up of members representing interests such as Hanford workers, environmental groups, labor, business and tribes — has influenced Hanford regulators, serving as a gauge of what is important to the public, Faulk said.

Smith also praised Faulk's role in the cleanup decision

that led to the creation of the 200 West Pump and Treat Facility at Hanford, a sophisticated plant to clean multiple contaminants from contaminated groundwater in central Hanford.

"You did a major share of the work to protect 200 West groundwater" with that decision, Smith said.

Faulk said it was a single line wrote in the decision document — requiring Hanford to reduce its carbon tetrachloride plume — that led to construction of the plant.

Faulk was an agriculture teacher in Toppenish in 1985 when he took what he thought would be a three-month job at Hanford. He would join EPA six years later, bringing hands-on experience working at N Reactor and the Plutonium Finishing Plant.

Faulk, who lives in Grandview, raises cattle, goats and pigs, and plans to return to his roots in education, working as a substitute teacher.

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House bill boosts Hanford cleanup

Appropriation measure nears passage that gives \$1.8 billion for Hanford cleanup activities

**LES BLUMENTHAL
AND ANNETTE CARY**

HERALD STAFF

WASHINGTON — The House edged toward passage Wednesday of a defense authorization bill for 2008 that provides \$1.8 billion to continue cleanup of the Hanford nuclear reservation.

Language attached to the bill supports construction of replacement lab and office space for Pacific Northwest National Laboratory and pushes the Department of Energy to meet legally binding cleanup deadlines at Hanford.

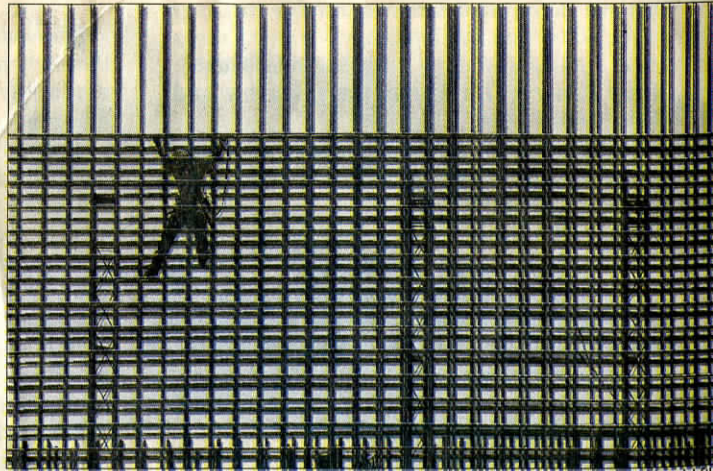
Other provisions in the bill include

boosting the authority of the ombudsman's office to help ill workers at Hanford and other nuclear sites who may qualify for the Energy Employees Occupational Illness Compensation Program.

The legislation also includes \$29 million to update a training facility at the Yakima Training Center to better prepare Stryker units based at Fort Lewis for urban combat.

The Senate has yet to act on its version of the bill. The House bill authorizes a total of \$503 billion for the Departments of Defense and Energy. Appropriations committees in both chambers will have to approve the actual money, but the authorization bill provides a spending outline.

See **HANFORD** | Page B2



Herald file

An iron worker climbs on steel rebar for a wall at the pre-treatment building at the vitrification plant at Hanford. The House edged toward passage Wednesday of a defense authorization bill that provides \$1.8 billion in funding to continue Hanford cleanup.

Second radioactive waste tunnel at risk, DOE says

BY ANNETTE CARY
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A second tunnel storing highly radioactive waste at Hanford is at serious risk of a cave-in.

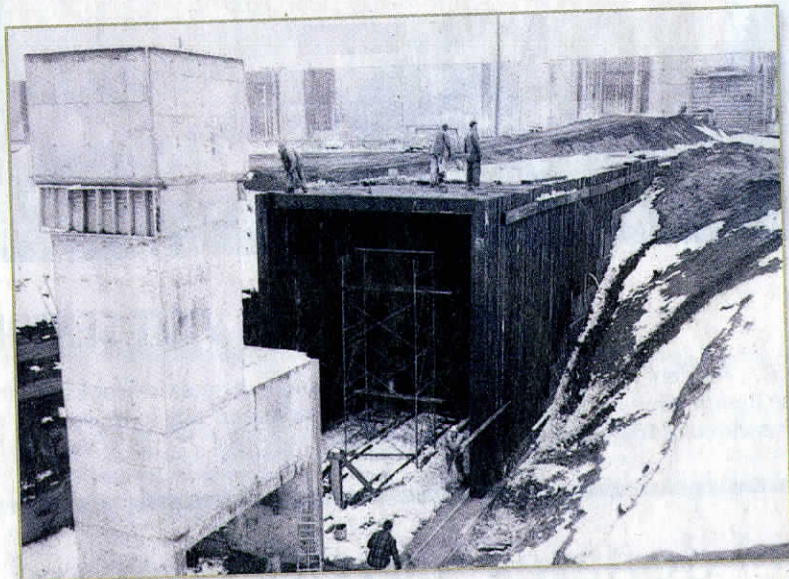
The Department of Energy made the announcement Friday morning following a review of the sturdiness of the two tunnels at the former Plutonium Uranium Extraction Facility (PUREX).

The smaller of the two waste storage tunnels was discovered to be partially collapsed on May 9, leading to the declaration of a sitewide emergency at the nuclear reservation. Thousands of workers took cover indoors for hours.

The state of Washington, a regulator on the project, immediately ordered a review of the structural soundness of both tunnels by Saturday.

The DOE review, released a day early, showed neither tunnel meets current codes for structural integrity.

While temporary measures have been taken to stabilize the first tunnel, the second, longer tunnel also may not be able to bear the weight of the eight feet of soil



Courtesy DOE

The first tunnel at the Hanford PUREX plant was built in the 1950s of Douglas fir timbers coated with creosote and has a flat roof, which partially collapsed May 9.

The tunnel has a “high potential for localized collapse,” according to a DOE statement.

At a news conference Friday, the state said the second tunnel — made of metal and concrete — is “structurally deficient by almost every measure.”

“This makes it clear that the

second tunnel may also pose a risk to human health and the environment,” said Alex Smith, nuclear waste program manager for the state Department of Ecology.

“We took quick action in response to the Tunnel No. 1 collapse because of the potential for additional structural failures,” he

House budget would reduce proposed Hanford cuts

By ANNETTE CARY
anette.cary@tricityherald.com

The House budget proposal for the Hanford nuclear reservation next year would add almost \$54 million to the amount requested by the Trump administration.

The additional money is the result of work by Rep. Dan Newhouse, R-Wash., along with two other Hanford supporters on the House Appropriations Energy and Water Subcommittee Chairman Mike Simpson of Idaho and Rep. Jaime Herrera Beutler, R-Wash., who represents the district downriver from the nuclear reservation.

"This legislation has rejected the president's proposed cuts to the Richland Operations Office and was a top priority of mine to support funding for continued Hanford cleanup," Newhouse said.

"Additionally, ensuring the Office of River Protection received strong funding was critical to continue progress in the tank farms at the Waste Treatment Plant."

The proposal would still leave the budget for fiscal 2018 below current spending of about \$2.4 billion,

including money for safeguards and security, by about \$60 million.

The Trump administration proposed a budget of \$2.3 billion, including safeguards and securities. The Tri-City Development Council estimated that funding level would cost about 700 jobs at Hanford.

The House budget proposal would increase spending at the Office of River Protection, which is responsible for 56 million gallons of waste held in underground tanks and the massive vitrification plant being built to treat the waste for disposal.

Current annual spending is just short of \$1.5 billion. The Trump administration proposed increasing spending by about \$5 million, but the House proposal would add another \$14 million for construction at the vitrification plant.

The plant has been planned at a steady budget of \$690 million annually, but the House budget would increase that to about \$704 million to help make sure construction continues at a pace adequate to meet deadlines. The Department of Energy has legal deadlines to start treating some waste in 2023 and have the plant fully operating in 2036.

TRIDEC had recommended the funding for vitrification plant construction be set at \$850 million in fiscal 2018.

Department of Energy Hanford officials said at a public meeting that the president's budget request to Congress for the Office of River Protection would be enough to meet legal requirements in fiscal 2018, but that a budget increase would be needed in fiscal 2019 for its work.

The House budget proposal for the Hanford Richland Operations Office would increase by a little less than \$40 million, bringing its budget to almost \$838 million. Current spending is roughly \$75 million more.

The administration's request of about \$800 million, including safeguards and security, might not be enough to meet deadlines in the legally binding Tri-Party Agreement, according to the Washington State Department of Ecology, a Hanford regulator.

TRIDEC had recommended a \$1 billion budget for the Richland Operations Office to meet legal obligations.

The Richland Operations Office is responsible for remaining environmental cleanup along the Columbia River, all central Hanford

cleanup not related to waste storage tanks, groundwater cleanup and overall operation of the nuclear reservation.

The money added in the House budget is intended to keep work on track for cleanup at the Hanford 324 Building, which sits above a spill of highly radioactive waste near the Columbia River and just north of Richland. It is so radioactive that it would be lethal within two minutes of contact, according to Hanford officials.

The House proposal also would provide some budget flexibility as officials address the PUREX tunnels, which are more than 50 years old and are used for long-term storage of equipment with highly radioactive contamination. The oldest of the two tunnels was discovered partially collapsed in May and the second tunnel has been determined to be at risk of a collapse.

The restored funding proposed in the House budget for Hanford would fulfill the federal government's duty to prioritize Hanford cleanup, Newhouse said.

"By responsibly funding these cleanup activities, we can prevent costly delays and ultimately save significantly more money in the long run," he said.

The House Appropriations Committee will consider the Department of Energy appropriations bill Wednesday.

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PARTIES ASK FOR DELAY IN HANFORD VAPORS SUIT

Another delay has been requested for a Richland federal court trial on demands made in 2015 for better protection for Hanford nuclear reservation workers.

It is the fourth delay requested by plaintiffs and defendants in the trial as they continue to try to reach a settlement out of court.

They have asked Judge Thomas Rice to delay the trial, now set for June 11, 2018, to July 25, 2018.

Progress was made in the last two rounds of mediation, held July 13-14 and

More space available for Hanford's radioactive waste

BY ANNETTE CARY
acary@tricityherald.com

Hanford workers have freed up enough tank space in the nuclear reservation's sturdiest underground tanks for 525,000 gallons of radioactive waste.

The work to evaporate liquid waste makes valuable space available to continue emptying waste from older, leak-prone single-shell tanks into the 27 double shell tanks in service at the site.

The newly available space is equivalent to about half of a double-shell tank.

Contractor Washington River Protection Solutions used Hanford's 242-A Evap-

orator to reduce the volume of waste by 210,000 gallons in the first two weeks of July. An evaporator campaign that ended Friday freed up 315,000 gallons of space.

The evaporator heats liquid waste under vacuum pressure to boiling. The vapor from the waste is captured, condensed, filtered and sent to Hanford's Effluent Treatment Facility for treatment and disposal. The remaining concentrated waste is returned to a double-shell tank.

Monitoring was done during operation of the evaporator facility to check for chemical vapors associated with tank waste, with

no levels of concern detected, said Mark Lindholm, president of Washington River Protection Solutions, in a message to employees.

A new 242-A Evaporator exhaust stack was installed before the evaporator operated this summer to help protect workers from vapor exposure. It raises the discharge point by 48 feet to a height of 111 feet.

The leadership of the Hanford Atomic Metal Trades Council worked with the contractor to develop the industrial hygiene strategy to protect workers from chemical vapors during operation of the evaporator.



Courtesy Bechtel National

No estimated Hanford lifecycle cost report will be released until an update is prepared on the cost of emptying radioactive waste from tanks and treating much of the waste at the vitrification plant. Construction is continuing on the plant.

DOE gets another pass on estimating Hanford cleanup costs

BY ANNETTE CARY
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No new estimate of the multibillion-dollar cost to finish Hanford cleanup will be released until Jan. 31, 2019.

The Department of Energy is being allowed by its regulators to skip a second year of an annual report usually required by the Tri-Party Agreement. It is called the Hanford Lifecycle Scope, Schedule and Cost Report.

The last estimate made public in a lifecycle report

put the remaining cost of environmental cleanup of the nuclear reservation at \$107.7 billion. The estimate released in early 2016 covered cleanup to be largely completed by 2060, plus some post-cleanup oversight.

It did not include revised plans for the Hanford vitrification plant, which are expected to raise the cost of the plant by at least \$4.5 billion.

Every three years DOE is required to prepare a new estimate of costs related to 56 million gallons of tank waste in underground tanks.

The costs include emptying the tanks and treating the waste for disposal, with treatment of much of the waste expected to be done at the vitrification plant.

The next three-year report is due in Oct. 31, 2017, too late for scope, cost and schedule to be updated by the January 2018 lifecycle report deadline.

DOE and its regulators — the Environmental Protection Agency and the Washington State Department of Ecology — agreed that resources should be focused on preparing the report due a year later.

Hanford, which covers 580 square miles, is contaminated from the production of plutonium for the nation's nuclear weapons program from World War II through the Cold War. A little more than \$2 billion is spent most years on cleanup of the site.

